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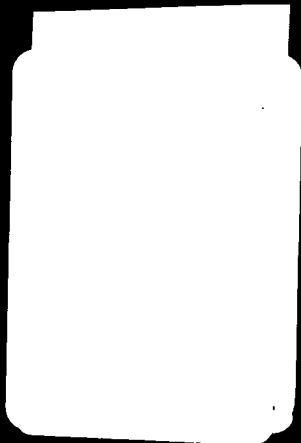
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ABSTRACT

The aim of the third National Education Goal is for all U.S. students to be competent in academic subject matter. The aim of the fifth National Education Goal is for U.S. students to perform at world-class levels in mathematics and science. The purpose of this report is to summarize the amount of progress that each state has made in raising student academic achievement in mathematics and science since the National Education Goals were established in 1990. The report contains four pages of information for the United States, each state, the District of Columbia, and five U.S. territories. The first three pages in each set measure progress toward Goal 3, using data from the National Assessment of Educational Progress (NAEP). The fourth page in each set shows how close each state is to achieving Goal 5. It is concluded that the majority of states participating in the NAE have made progress toward Goal 3. (ASK)

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Mathematics and Science Achievement State by State, 1998



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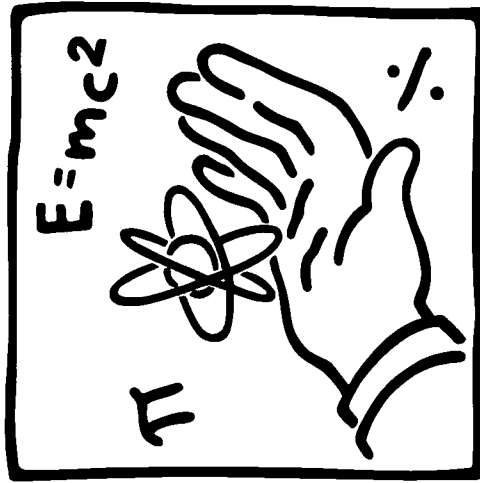
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Goal 3: Student Achievement and Citizenship

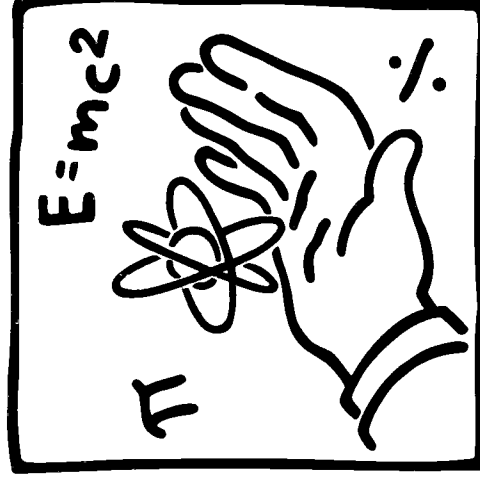


Goal 5: Mathematics and Science

Mathematics and Science Achievement State by State, 1998



Goal 3: Student Achievement and Citizenship



Goal 5: Mathematics and Science

The National Education Goals Panel

National Education Goals Panel

The National Education Goals Panel (NEGP) is a unique bipartisan and intergovernmental body of federal and state officials created in July 1990 to assess and report state and national progress toward achieving the National Education Goals. In 1994, the Goals Panel became a fully independent federal agency charged with monitoring and speeding progress toward the eight National Education Goals. Under the legislation, the Panel is charged with a variety of responsibilities to support systemwide reform, including:

- Reporting on national and state progress toward the Goals over a 10-year period;
- Working to establish a system of high academic standards and assessments;
- Identifying actions for federal, state, and local governments to take; and
- Building a nationwide, bipartisan consensus to achieve the Goals.

Panel members include eight Governors, four members of Congress, four state legislators, and two members appointed by the President.

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On behalf of the National Education Goals Panel, I am pleased to present *Mathematics and Science Achievement State by State, 1998*. This report summarizes progress each state has made toward Goal 3, the student achievement and citizenship goal, and Goal 5, the mathematics and science goal.

State progress is based on results from the National Assessment of Educational Progress (NAEP). Since 1990, NAEP has offered states the option of participating voluntarily in comparable state-level assessments. Policymakers now have a valuable and much-needed tool they can use to monitor:

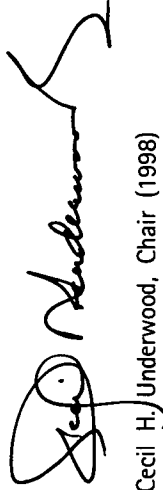
- educational progress over time;
- whether their students are performing as well as others; and
- the extent to which all groups of students in their state are achieving at high levels.

The aim of the third National Education Goal is that all students will be competent in academic subject matter, while the aim of the fifth National Education Goal is that U.S. students will perform at world-class levels in mathematics and science. We know that these Goals will be harder for some states to achieve than for others, because states began their journey at different starting points. We also know that it is not easy for states to show improvement on NAEP. It is a challenging test, and the Goals

Panel has set its performance standard for what is "good enough" at a very high level of difficulty. Furthermore, student scores will not improve overnight. Raising student achievement is a highly ambitious goal, and we must allow sufficient time for education programs and policies to show results.

But states have risen to these challenges. This report shows that the majority of states participating in NAEP assessments have made progress toward Goal 3 in mathematics. In addition, a new research study that uses NAEP scores to predict how states would perform internationally reveals that in 14 states, only one nation – Singapore – would be expected to score higher than our 8th graders in science. The Goals Panel applauds these accomplishments, and awards gold stars in this report to the 28 states that have successfully raised student achievement in mathematics, and to the 14 states that would be expected to perform at world-class levels of performance in science. With continued state effort and commitment, we can report even greater gains in the years ahead.

Very sincerely,



Cecil H. Underwood, Chair (1998)
National Education Goals Panel, and Governor of West Virginia

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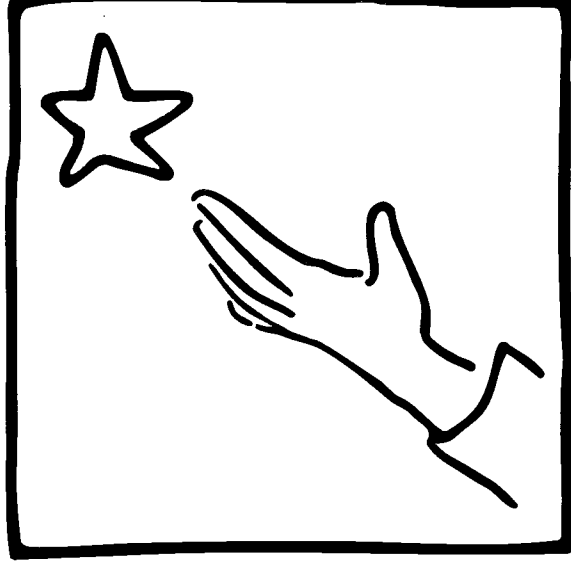
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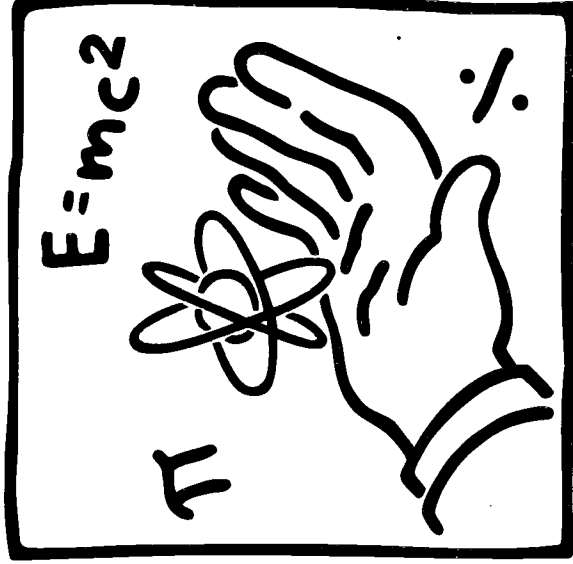
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By the year 2000, all students will leave grades 4, 8, and 12 having demonstrated competency over challenging subject matter including English, mathematics, science, foreign languages, civics and government, economics, arts, history, and geography, and every school in America will ensure that all students learn to use their minds well, so they may be prepared for responsible citizenship, further learning, and productive employment in our Nation's modern economy.



Objectives:

- The academic performance of all students at the elementary and secondary level will increase significantly in every quartile, and the distribution of minority students in each quartile will more closely reflect the student population as a whole.
- The percentage of all students who demonstrate the ability to reason, solve problems, apply knowledge, and write and communicate effectively will increase substantially.
- All students will be involved in activities that promote and demonstrate good citizenship, good health, community service, and personal responsibility.
- All students will have access to physical education and health education to ensure they are healthy and fit.
- The percentage of all students who are competent in more than one language will substantially increase.
- All students will be knowledgeable about the diverse cultural heritage of this Nation and about the world community.



By the year 2000, United States students will be first in the world in mathematics and science achievement.

Objectives:

- Mathematics and science education, including the metric system of measurement, will be strengthened throughout the system, especially in the early grades.
- The number of teachers with a substantive background in mathematics and science, including the metric system of measurement, will increase by 50 percent.
- The number of United States undergraduate and graduate students, especially women and minorities, who complete degrees in mathematics, science, and engineering will increase significantly.

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The aim of the third National Education Goal is that all students will be competent in academic subject matter. State-level results from the National Assessment of Educational Progress, or NAEP, indicate that most states have made progress toward this Goal in mathematics.

The aim of the fifth National Education Goal is that U.S. students will achieve world-class levels of performance in mathematics and science achievement. Based on their NAEP scores, 14 states would be expected to achieve this level of performance in science.

- The percentage of students who met the Goals Panel's performance standard (that is, a score at the two highest levels of achievement on NAEP) increased significantly during the 1990s:
 - ◆ nationally and in 7 states in 4th grade mathematics; and
 - ◆ nationally and in 27 states in 8th grade mathematics.

- The majority of states that participated in NAEP assessments during the 1990s have improved in at least one grade in mathematics. Twenty-eight states have earned at least one star (out of a possible two) for improvement over time:

1. Arizona	11. Kentucky	21. North Dakota
2. Arkansas	12. Maryland	22. Oregon
3. California	13. Michigan	23. Rhode Island
4. Colorado	14. Minnesota	24. Tennessee
5. Connecticut	15. Montana	25. Texas
6. Delaware	16. Nebraska	26. West Virginia
7. Florida	17. New Hampshire	27. Wisconsin
8. Hawaii	18. New Mexico	28. Wyoming
9. Indiana	19. New York	
10. Iowa	20. North Carolina	

- Six of these states have earned two stars (out of a possible two) for improvement over time:

1. Colorado	3. Indiana	5. Texas
2. Connecticut	4. North Carolina	6. West Virginia

- Seven states that made significant gains in mathematics were also among the highest-performing states in the nation:

1. Connecticut	4. Montana	6. North Dakota
2. Iowa	5. Nebraska	7. Wisconsin
3. Minnesota		

- A recent research study used NAEP mathematics and science scores to predict how states would perform relative to the 41 nations that participated in the Third International Mathematics and Science Study (TIMSS). The National Education Goals Panel has awarded an additional gold star to 14 states that would be expected to reach world-class levels of performance. In these states, only one nation – Singapore – would be expected to outperform U.S. students in 8th grade science:

1. Colorado	6. Minnesota	11. Utah
2. Connecticut	7. Montana	12. Vermont
3. Iowa	8. Nebraska	13. Wisconsin
4. Maine	9. North Dakota	14. Wyoming
5. Massachusetts	10. Oregon	

- The states that earned the highest number of gold stars in this report are Colorado and Connecticut. Each earned two stars for significant improvement over time in 4th grade and 8th grade mathematics, and a third star for reaching world-class levels of performance in 8th grade science.

Although all of the National Education Goals are important, the two that focus on raising student academic achievement — Goals 3 and 5 — are considered by many to be the nation's highest education priorities. Goal 3 calls for all students to demonstrate competency over challenging subject matter, while Goal 5 calls for U.S. students to be first in the world in mathematics and science achievement.

State policymakers need good information to help them monitor their state's progress toward these Goals. First, policymakers need to know whether student achievement is increasing over time, so that they can determine whether educational programs and policies are having the desired effect. Second, policymakers need to be able to benchmark their state against other states and countries to see how their students' academic performance compares to the best in the nation and the best in the world. Third, policymakers need to know how different groups of students are performing academically, so that they can target educational services appropriately.

This report provides all three types of information. Its purpose is to summarize the amount of progress that each state has made in raising student academic achievement in mathematics and science since the National Education Goals were established in 1990.

Report format

This report contains four pages of information for the United States, each state, the District of Columbia, and five U.S. territories.¹ The first three pages in each set measure progress toward Goal 3, using student achievement data from the National Assessment of Educational Progress (NAEP). NAEP was authorized by Congress in 1969, and is the only nationally representative and ongoing assessment that measures what students know and are able to do in different subject areas. Congress expanded NAEP to

allow the reporting of comparable state-by-state results, beginning with the 1990 mathematics assessment. Participation in state-level NAEP is voluntary, and has increased from 40 states and territories in 1990 to 45 in 1996.

NAEP results are reported for the United States and for each participating state in mathematics (Grades 4 and 8) and science (Grade 8). Thus far, these are the only grades in which NAEP mathematics and science assessments have been administered at the state level. Since 1990, mathematics has been assessed twice at Grade 4 (in 1992 and 1996) and three times at Grade 8 (in 1990, 1992, and 1996). Science has been assessed once (in 1996).²

Each of the state pages in this report shows:

- how much progress the state has made over time;
- how the state's latest academic performance compares to that of the United States and other states; and
- how different subgroups of students in the state performed on the most recent NAEP assessment.

Gold stars are awarded to states that have shown a significant increase in the percentage of students in their state who meet the National Education Goals Panel's performance standard.³ The Goals Panel's performance standard is based on three achievement levels set by the National Assessment Governing Board to describe the quality of student achievement on NAEP: Basic, Proficient, and Advanced. The Basic level represents partial mastery of necessary knowledge and skills; the Proficient level represents solid academic performance; and the Advanced level represents superior performance.⁴ The Goals Panel has set its performance standard at the Proficient or Advanced levels on NAEP. The Goals Panel considers performance at these two highest levels as evidence that students have demonstrated competency over challenging subject matter.

¹ The term "state" is used hereafter in this report to refer to the 50 states, the District of Columbia, and the territories.

² See Appendix B for national and state-level NAEP administration schedules.

³ In this report, "significance" refers to statistical significance and indicates that the observed differences are not likely to have occurred by chance. All differences in this report that are termed "statistically significant" are measured at the 0.05 level.

⁴ Bourque, M.L., Champagne, A.B., & Crissman, S. (1997, October). *1996 Science performance standards: Achievement results for the nation and the states*. Washington, DC: National Assessment Governing Board.

The fourth page in each set of state pages in this report shows how close each state is to achieving Goal 5. Although Goal 5 calls for the United States — not each individual state — to be first in the world in mathematics and science, the majority of states must be at world-class levels of performance in mathematics and science if we expect the nation to attain first-in-the-world status. International comparisons of student achievement in 8th grade mathematics and science are presented, using data from a newly released research study.⁵ This study statistically links state results from the 1996 NAEP with country results from the 1995 Third International Mathematics and Science Study (TIMSS). TIMSS is the most comprehensive international study of mathematics and science achievement conducted to date. TIMSS tested half a million students in 41 countries in 30 different languages. Participating countries included the United States, as well as some of the United States' chief economic competitors and trading partners, such as Japan, Germany, Canada, Korea, Singapore, and Hong Kong.

Linking the two assessments allows us to predict how each state would have performed on TIMSS, relative to the 41 countries that actually participated in the international assessment, on the basis of each state's NAEP performance. The authors of the linking study caution that the technique used to link the two tests can provide only limited information, since NAEP and TIMSS cover different content and were taken by different groups of students at different times. Nevertheless, the technique can provide broad comparisons that tell states which countries' students would be expected to score significantly higher than, similar to, or significantly lower than their own students in mathematics and science on this international assessment. In this report, gold stars signifying "world-class performance" are awarded to those states that would be expected to score as well as, or better than, 40 or more of the 41 participating TIMSS nations in mathematics or science.

Value to states

This report shows three of the ways in which NAEP data can be a valuable source of information for states:

1. NAEP can be used to monitor educational progress over time. One of the most common uses of NAEP is to monitor trends in academic performance to see whether student achievement is improving over time. This is possible because NAEP is designed to repeat assessments in each subject area at least every four years. This feature enables policymakers to answer questions such as: Has student performance improved since my state established new statewide standards in science? Are more 8th graders in my state considered Proficient in mathematics since my state began requiring all 8th graders to take algebra?

Improvement Over Time is presented in Part 1 on the first three pages for each state in this report, beginning on p. 12. The percentages of students who scored at or above the Proficient level on NAEP mathematics and science assessments will be tracked over a ten-year period, from the establishment of the National Education Goals in 1990, until the year 2000.

2. NAEP can be used to benchmark state performance against the best in the nation and the best in the world.

Because NAEP scores are comparable across states, policymakers can use NAEP to answer questions such as: How does my state compare to neighboring states or to the highest-performing states in the country?⁶ It is also possible to use NAEP scores in a more limited way to predict relative performance on a related assessment such as TIMSS, so that states can benchmark their performance against top-performing nations in mathematics and science. Policymakers can use results from the NAEP/TIMSS linking study to answer questions such as: How many nations would be expected to outperform my state in 8th grade mathematics? How would my

5 Johnson, E.G., & Siegfendorf, A. (1998, May). *Linking the National Assessment of Educational Progress and the Third International Mathematics and Science Study: Eighth grade results*. Report prepared for the U.S. Department of Education, National Center for Education Statistics, NCEES 98-500. Washington, DC: U.S. Government Printing Office.

6 Although NAEP scores are comparable, the reader should bear in mind that many variables of interest to state policymakers can contribute to differences in state performance, such as available resources, curricula, educational practices, etc. The results presented in this report do not control for these variables.

state be expected to perform in comparison to the United States' major trading partners in 8th grade science?

State Comparisons are presented in Part 2 on the first three pages for each state in this report, beginning on p. 12. Each state's performance is compared to the nation and to other states on the most recent NAEP mathematics and science assessments.

International Comparisons are presented on the fourth page of each set of state pages. Each state's predicted performance on TIMSS is compared to the actual performance of the 41 participating TIMSS nations.⁷ Countries are clustered in alphabetical order in three groups: those that would be expected to perform significantly higher than, significantly lower than, or not significantly different from the particular state in 8th grade mathematics and science.

3. NAEP can be used to monitor whether all groups of students in a state are achieving at high levels.

Goal 3 specifies that all students will demonstrate competency over challenging subject matter. Because NAEP data can be broken out by subgroups, policymakers can use NAEP to answer questions such as: Are similar proportions of boys and girls in my state considered Proficient in mathematics and science? Do minority students score as well as White students? Do large achievement gaps exist between urban and non-urban students?

Subgroup Performance is presented in Part 3 on the first three pages for each state in this report, beginning on p. 12. This section shows how many students in different subgroups scored at or above the Proficient level on the most recent NAEP mathematics and science assessments. Results are presented by sex, race/ethnicity, parents' highest level of education, school location, and eligibility for free/reduced-price lunch programs.

Interpreting the results

NAEP is a large-scale assessment intended for monitoring trends in student performance and is not administered to every student. Instead, samples of students are selected to take the test. This enables states to use smaller, cost-efficient samples to predict how the entire student population would have performed on an assessment without testing all of them. This is similar to a public opinion poll that predicts, with a certain degree of confidence, how all individuals would have responded to a set of questions had they all been polled.

It is important to note that any estimate based on a sample, whether it is from a NAEP assessment or a public opinion poll, contains a small amount of error. The estimate would be slightly higher or slightly lower if a different sample were chosen. Public opinion polls account for this error when they caution that their results are "accurate within plus or minus two percentage points." In the same way, we must account for the uncertainty in NAEP results, whether we are comparing progress over time, performance among states, or performance among subgroups of students within a state.

We account for the uncertainty by using a formula to calculate a standard error for each estimate.⁸ The standard error tells us how precise the estimate is. The closer the standard error is to zero, the more precise the estimate. Although sample size is only one of several factors that influence the size of the standard error, as a general rule, larger samples yield more precise estimates and smaller standard errors.

If we want to examine differences between groups — for example, to determine whether one state performed at a higher level than another did — we must apply a statistical test to tell us whether there are likely to be differences in actual performance between groups in the entire population.⁹ The statistical test takes into account the size of the standard errors for each group's score, as well as the difference between the scores. If the test indicates that the groups

⁷ In 1995, a representative sample of 8th graders in Minnesota took the same mathematics and science assessments as the students in the 41 participating TIMSS nations. Results shown for Minnesota, therefore, are based on actual scores, not estimated scores. Missouri and Oregon also took the same TIMSS assessments in 1997, but their results have not yet been publicly released.

⁸ See Appendix A for formulas and more detailed technical information. See Appendix C for tables of standard errors.

⁹ See Appendix A for a discussion of the statistical procedures used to control the amount of error introduced when multiple comparisons are made. For more detailed information, see also the Technical Report of the NAEP 1996 State Assessment Program in Mathematics.

in the entire population are likely to perform differently, we say that the difference is statistically significant. This means that the differences are not likely to have occurred by chance — we can be confident that performance has changed over time or one group has outperformed another.

This should be kept in mind when reviewing the data on the state pages that follow. In Part 1, for example, it may appear that the percentage of students who scored at the Proficient level or higher on NAEP has gone up over time, but the change is reported as “not significant.” This occurs because even though there is a difference in scores, it is not statistically different. Because each percentage is an estimate which has some uncertainty associated with it, it is possible for a small gain to be significant in one case, while a larger percentage-point gain can fail to be significant in another.

The same caution must be exercised when interpreting the results in Parts 2 and 3. In Part 2, it would not be accurate to rank individual states strictly by the percentages of students who scored at or above Proficient. Instead of ranking individual states, it is more useful to talk about states’ performance in terms of clusters of states that performed significantly higher than, significantly lower than, or not significantly different from a particular state. On p. 21, for example, the percentage at or above Proficient in 8th grade mathematics for Alaska was 30% in 1996, while Colorado was 25% and Maryland was 24%. When accounting for error, however, Maryland (but not Colorado) is judged to have a similar achievement level to Alaska, even though the percentage for Colorado was larger than Maryland’s.

Similarly, in Part 3, it would not be accurate to conclude that one subgroup of students outperformed another based solely on the percentages listed on the graph. An observed difference of 3 percentage points between males and females, for example, may not be statistically significant when standard errors are taken into account. In order to keep the graphs in Part 3 as clear and as

readable as possible, we have not attempted to flag subgroup differences on the graphs themselves. Instead, statistically significant differences between subgroups are summarized in Appendix D.

Finally, readers should use caution when interpreting the results of the NAEP/TIMSS linking study in this report. The purpose of the linking study is to compare states to nations, not states to states or nations to nations. State-to-state comparisons, using comparable NAEP data, appear in Part 2 on the first three pages for each state. Nation-to-nation comparisons, using comparable TIMSS data, appear on the international comparisons page for the United States (see p. 15). Because the results of the NAEP/TIMSS linking study can offer only approximate comparisons of performance of individual states relative to the 41 participating TIMSS nations, nations and states are simply listed in alphabetical order and actual scores are not shown.¹⁰

Findings — Improvement Over Time

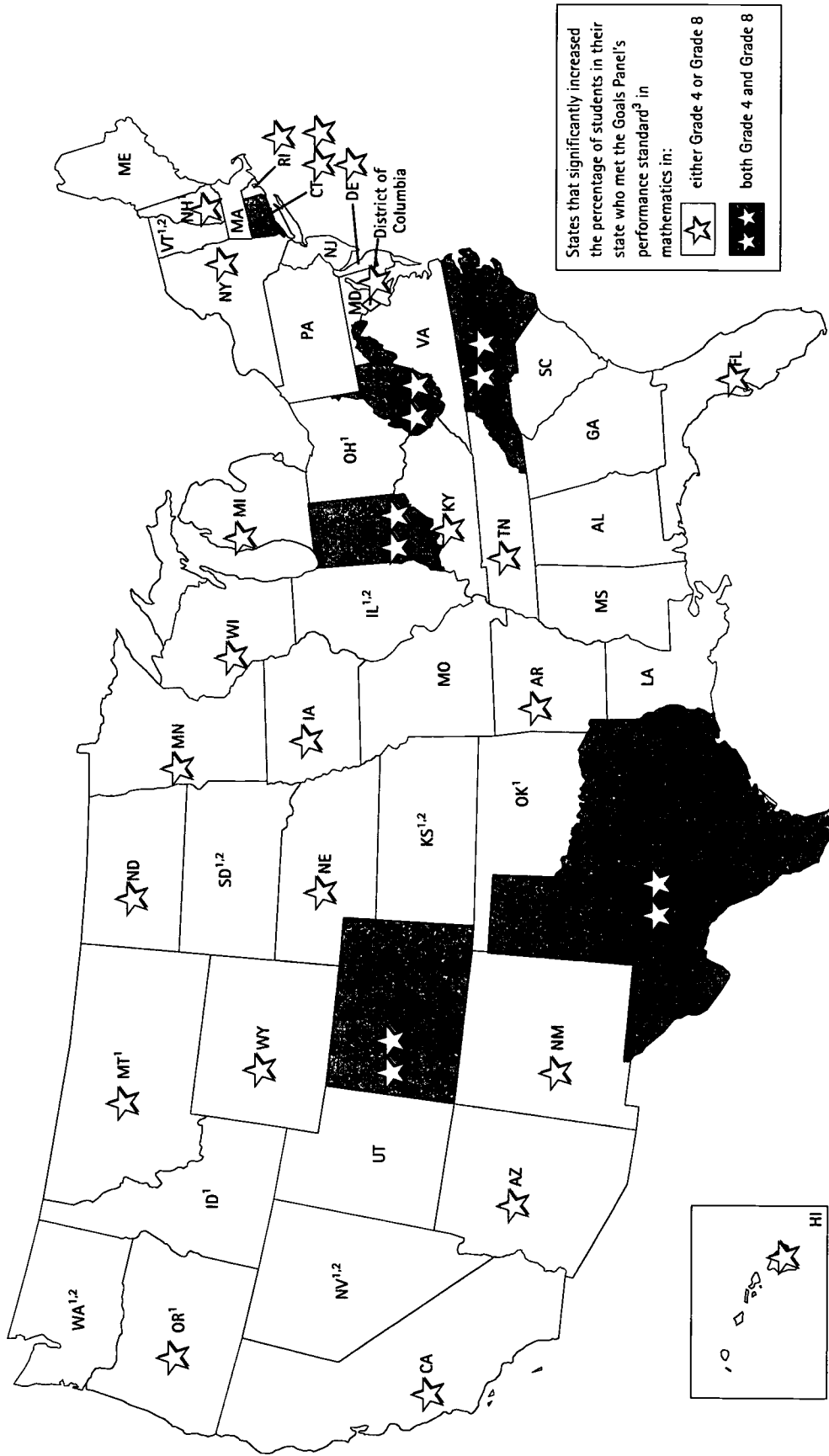
The percentage of students who met the Goals Panel’s performance standard (that is, a score at or above Proficient on NAEP) increased significantly during the 1990s:

- nationally and in 7 states in 4th grade mathematics; and
- nationally and in 27 states in 8th grade mathematics.


In no state has achievement declined by an amount that is statistically significant.

The 28 states that earned stars for improvement over time are shown on the map in Figure 1. At present, the maximum number of stars that a state can earn for improvement in student academic achievement is two (in 4th grade mathematics and in 8th grade mathematics). A star for improvement cannot yet be earned in 8th grade science, because NAEP has assessed science only once at the state level.


¹⁰ For more detailed technical information about the NAEP/TIMSS linking study, see the forthcoming report from the National Center for Education Statistics, *Linking the National Assessment of Educational Progress and the Third International Mathematics and Science Study at the eighth grade: A research report*.



1 Data not available for the 1992 and/or the 1996 NAEP mathematics assessment at Grade 4, so progress cannot be determined.
 2 Data not available for the 1990 and/or the 1996 NAEP mathematics assessment at Grade 8, so progress cannot be determined.
 3 The National Education Goals Panel uses the National Assessment of Educational Progress (NAEP) to measure improvement over time in student academic achievement. The Goals Panel's performance standard is a score at or above Proficient on NAEP. A star is awarded to states that show a significant increase in the percentage of students in their state who meet the Goals Panel's standard. At present, the maximum number of stars that a state can earn for improvement over time is two (in 4th grade mathematics and 8th grade mathematics). A star for improvement cannot yet be earned in 8th grade science, because NAEP has assessed science only once at the state level.

 *Twenty-eight states have earned at least one star (out of a possible two) for improvement over time in mathematics in either Grade 4 or Grade 8:*

- | | | |
|----------------|--------------------|-------------------|
| 1. Arizona | 11. Kentucky | 21. North Dakota |
| 2. Arkansas | 12. Maryland | 22. Oregon |
| 3. California | 13. Michigan | 23. Rhode Island |
| 4. Colorado | 14. Minnesota | 24. Tennessee |
| 5. Connecticut | 15. Montana | 25. Texas |
| 6. Delaware | 16. Nebraska | 26. West Virginia |
| 7. Florida | 17. New Hampshire | 27. Wisconsin |
| 8. Hawaii | 18. New Mexico | 28. Wyoming |
| 9. Indiana | 19. New York | |
| 10. Iowa | 20. North Carolina | |

 *Six of these states have earned two stars (out of a possible two) for improvement over time in mathematics in both Grade 4 and Grade 8:*

1. Colorado
 2. Connecticut
 3. Indiana
 4. North Carolina
 5. Texas
 6. West Virginia
- *Seven states that made significant gains in mathematics were also among the highest-performing states* in the nation:*

1. Connecticut
2. Iowa
3. Minnesota
4. Montana
5. Nebraska
6. North Dakota
7. Wisconsin

Findings — State Comparisons

Mathematics — Grade 4

National Performance

In 1996, 21% of U.S. 4th graders in public and nonpublic schools scored at the Proficient level or higher on the NAEP mathematics assessment.

State Performance

In 1996, the percentage of public school 4th graders who scored at the Proficient level or higher on the NAEP mathematics assessment ranged from 3% in the lowest-performing states to 31% in the highest-performing states.

Mathematics — Grade 8

National Performance

In 1996, 24% of U.S. 8th graders in public and nonpublic schools scored at the Proficient level or higher on the NAEP mathematics assessment.

State Performance

In 1996, the percentage of public school 8th graders who scored at the Proficient level or higher on the NAEP mathematics assessment ranged from 5% in the lowest-performing states to 34% in the highest-performing states.

Highest-performing* states

Connecticut	31%
Minnesota	29%
Maine	27%
Wisconsin	27%

Highest-performing* states

Minnesota	34%
North Dakota	33%
Montana	32%
Wisconsin	32%
Connecticut	31%
Iowa	31%
Maine	31%
Nebraska	31%
Alaska	30%

* Highest-performing states are defined as those in which the percentage of students who scored at or above Proficient on NAEP was significantly higher than the percentage of students who did so nationally.

Science — Grade 8

National Performance

In 1996, 29% of U.S. 8th graders in public and nonpublic schools scored at the Proficient level or higher on the NAEP science assessment.

State Performance

In 1996, the percentage of public school 8th graders who scored at the Proficient level or higher on the NAEP science assessment ranged from 5% in the lowest-performing states to 41% in the highest-performing states.

Highest-performing* states

Maine	41%
Montana	41%
North Dakota	41%
Wisconsin	39%
Massachusetts	37%
Minnesota	37%
Connecticut	36%
Iowa	36%
Nebraska	35%
Wyoming	34%

Findings — Subgroup Performance¹¹

Differences by Sex

- Nationally and in 9 out of 45 states, the percentage of male students who scored at or above Proficient in 4th grade mathematics was higher than the percentage of females who did so.
- In 6 out of 43 states, males outperformed females in 8th grade mathematics. There was no significant difference at the national level.
- In 19 out of 42 states, males outperformed females in 8th grade science. There was no significant difference at the national level.

Differences by Race/Ethnicity

- At the national level and in most of the states, there were no significant differences between the percentages of White

and Asian/Pacific Islander students who scored at the Proficient level or higher on NAEP.

- However, in the majority of cases at both the national and state levels, the percentages of White students who scored at the Proficient level or higher were significantly greater than the percentages of American Indian/Alaskan Native, Black, and Hispanic students who met this standard. This was true for 4th grade mathematics, 8th grade mathematics, and 8th grade science.

Differences by Parents' Highest Level of Education

- Nationally and in almost every case at the state level, students whose parents had some education beyond high school or whose parents were college graduates outperformed students who reported that neither of their parents had graduated from high school.

Differences by School Location

- At the national level, students who attended school in urban fringes/large towns outperformed those who attended school in central cities in 4th grade mathematics and 8th grade mathematics. This was also true in roughly one-third of the states.

Differences by Poverty

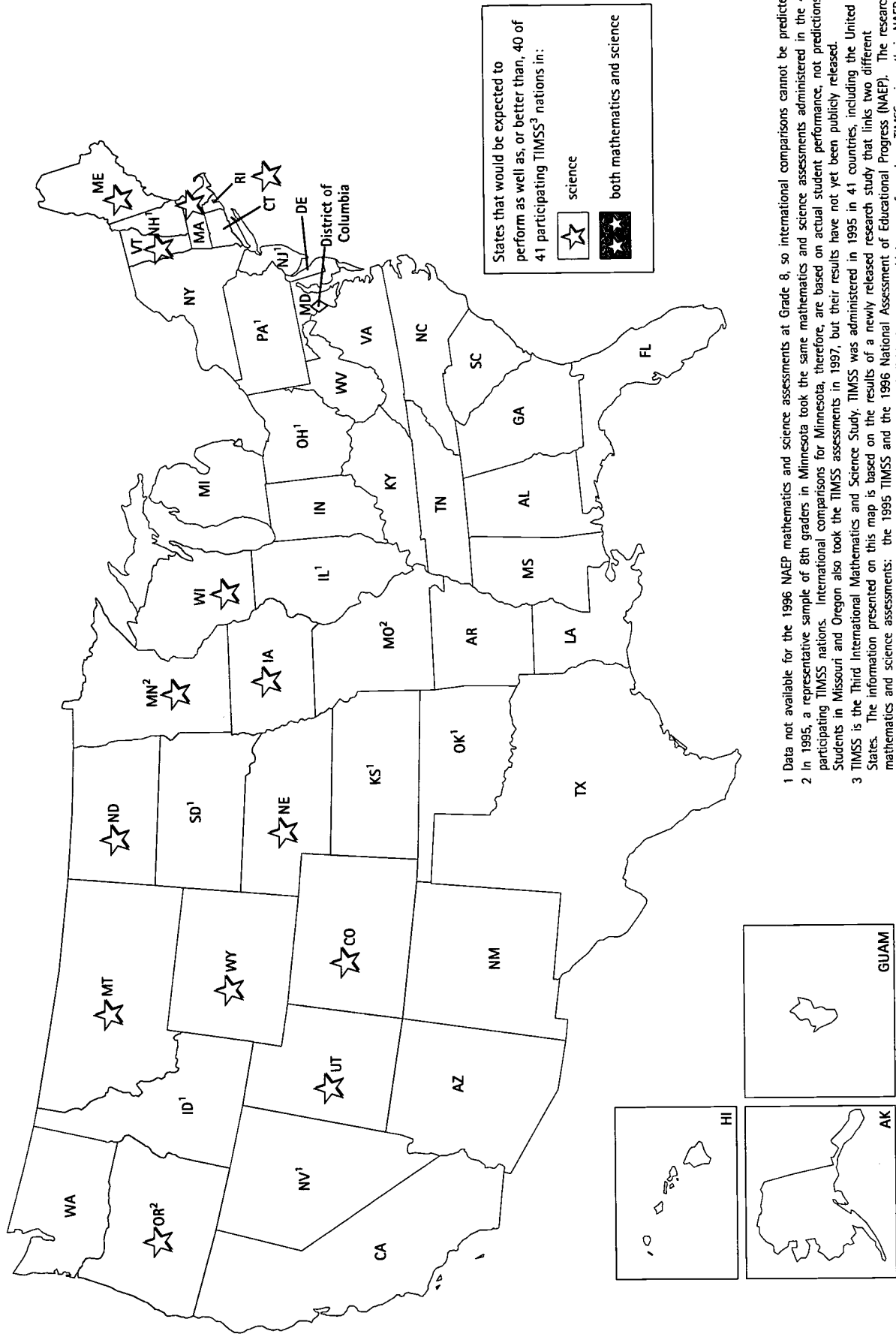
(as measured by eligibility for free/reduced-price lunch program)

- In all cases — nationally and in every state — students who were not eligible for the free/reduced-price lunch program outperformed students who were eligible for this program. This was true across all subjects and grades.

Findings — International Comparisons

In 8th grade mathematics, the United States scored higher than 7 countries, lower than 20, and not significantly different from 13. In 8th grade science, the United States scored higher than 15 countries, lower than 9, and not significantly different from 16.

* Highest-performing states are defined as those in which the percentage of students who scored at or above Proficient on NAEP was significantly higher than the percentage of students who did so nationally.
¹¹ The reader is cautioned to avoid interpreting subgroup differences in this section of the report and in Appendix D as causal relationships.



1 Data not available for the 1996 NAEP mathematics and science assessments at Grade 8, so international comparisons cannot be predicted.
 2 In 1995, a representative sample of 8th graders in Minnesota took the same mathematics and science assessments administered in the 41 participating TIMSS nations. International comparisons for Minnesota, therefore, are based on actual student performance, not predictions. Students in Missouri and Oregon also took the TIMSS assessments in 1997, but their results have not yet been publicly released.
 3 TIMSS is the Third International Mathematics and Science Study. TIMSS was administered in 1995 in 41 countries, including the United States. The information presented on this map is based on the results of a newly released research study that links two different mathematics and science assessments: the 1995 TIMSS and the 1996 National Assessment of Educational Progress (NAEP). The research study was designed to compare states to nations, and predicts how individual states would have performed on TIMSS, given their NAEP scores. At present, the maximum number of stars that a state can earn for world-class academic performance is two (in Grade 8 mathematics and Grade 8 science), although no state has earned a star in mathematics. For more information, see Appendix A.

When compared to our chief economic partners, the United States is in the bottom half in mathematics and around the middle in science.

The expected performance of individual states on the TIMSS mathematics and science assessments varied widely. In mathematics, the number of countries that would be expected to outperform a given state ranged from 6 to 38. In science, the number ranged from 1 to 38.

States that earned gold stars for "world-class performance" in mathematics and science are shown on the map in Figure 2. Stars were awarded to states that would be expected to score as well as, or better than, 40 or more of the 41 participating TIMSS nations in mathematics or science. The maximum number of stars that a state can earn for world-class performance is two (one in mathematics and one in science), although no state earned a star in mathematics.



In science, 14 states earned a star for world-class performance. Students in only one nation — Singapore — would be expected to outperform the 8th graders in these states in science:

1. Colorado
2. Connecticut
3. Iowa
4. Maine
5. Massachusetts
6. Minnesota
7. Montana
8. Nebraska
9. North Dakota
10. Oregon
11. Utah
12. Vermont
13. Wisconsin
14. Wyoming

Conclusions

Are states making progress toward Goal 3 of the National Education Goals by increasing student achievement in mathematics

and science? We cannot answer this question for science yet because NAEP has assessed science only once at the state level. However, in mathematics the answer is "yes." The majority of states that participated in NAEP assessments during the 1990s have shown significant improvements in student academic achievement in mathematics in at least one grade. Twenty-eight states have earned at least one star (out of a possible two) for improvement over time, and six states have earned two. From this perspective, the majority of states have moved closer to the Goal in mathematics.

How close are states to achieving the world-class levels of performance in mathematics and science indicated in Goal 5? Results of the NAEP/TIMSS linking study suggest that no state would likely place first in the world in mathematics. States with the highest NAEP scores in the nation would be expected to trail at least six countries if they were to take the TIMSS assessment. However, 14 states would be expected to achieve world-class levels of performance in 8th grade science. Of the 41 nations that participated in TIMSS, only Singapore would be expected to score significantly higher than the 8th graders in these states.

The challenge before us now is to keep this momentum going — to accelerate student academic progress in more states, in more subject areas, in more grades, and among all students. The National Education Goals Panel will continue to monitor state progress as new state-level NAEP assessments are administered in reading, writing, mathematics, and science between now and the end of the decade, and in 1999, when the international TIMSS mathematics and science assessments are scheduled to be repeated in approximately 40 countries. Future Goals Panel reports will describe educational programs and policies implemented by states that have made significant progress in raising student academic achievement. This information will be available on the Goals Panel's Web site, www.negp.gov, as part of a series of reports on promising state practices.

The National Education Goals Panel remains convinced that states want and need good information that will help them gauge the success of their education improvement efforts. This document shows three ways in which NAEP and TIMSS data can help state policymakers measure their state's progress toward Goals 3 and 5:

- by monitoring educational progress over time;
- by benchmarking their students' academic performance against the best in the nation and the best in the world; and
- by monitoring the extent to which all groups of students in their state are achieving at high levels.

The Goals Panel strongly encourages states to continue participating in NAEP assessments and to consider participating in the next administration of TIMSS, so that policymakers and the public can determine whether educational programs and policies are producing the desired results — students who are competent, knowledgeable, and capable.

Mathematics and Science Achievement State by State



1. Improvement Over Time

Have the nation's 4th graders improved in mathematics achievement?
 Yes. The percentage of 4th graders who met the Goals Panel's performance standard in mathematics increased from 13% in 1990, to 21% in 1996. 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.

1. Figures shown for the U.S. include both public and nonpublic school data.

2. State Comparisons[†]

How did the nation compare with states in 4th grade mathematics achievement in 1996?

4 states had significantly higher¹ percentages of students who were at or above Proficient on NAEP:

Connecticut	31%	Maine, Wisconsin	27%
Minnesota	29%		

23 states had similar¹ percentages of students who were at or above Proficient on NAEP:

New Jersey, Texas	25%	U.S.,* Alaska, North Carolina, Oregon,	21%
Indiana, Massachusetts, Nebraska,	24%	Washington	
North Dakota		Missouri, New York, Pennsylvania	20%
Michigan, Utah, Vermont	23%	Virginia, West Virginia, Wyoming	19%
Colorado, Iowa, Maryland, Montana	22%		

18 states had significantly lower¹ percentages of students who were at or above Proficient on NAEP:

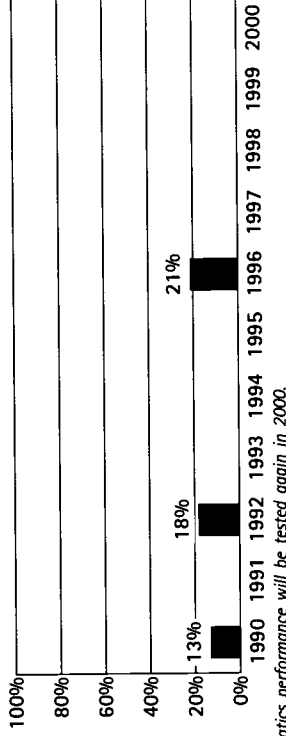
Rhode Island, Tennessee	17%	South Carolina	12%
Delaware, Hawaii, Kentucky	16%	Alabama, California	11%
Arizona, Florida	15%	Louisiana, Mississippi	8%
Nevada	14%	District of Columbia	5%
Arkansas, Georgia, New Mexico	13%	Guam	3%

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

¹ See explanation on pp. 3-4.

* Figure shown for the U.S. includes both public and nonpublic school data. Figures shown for states include public school data only.

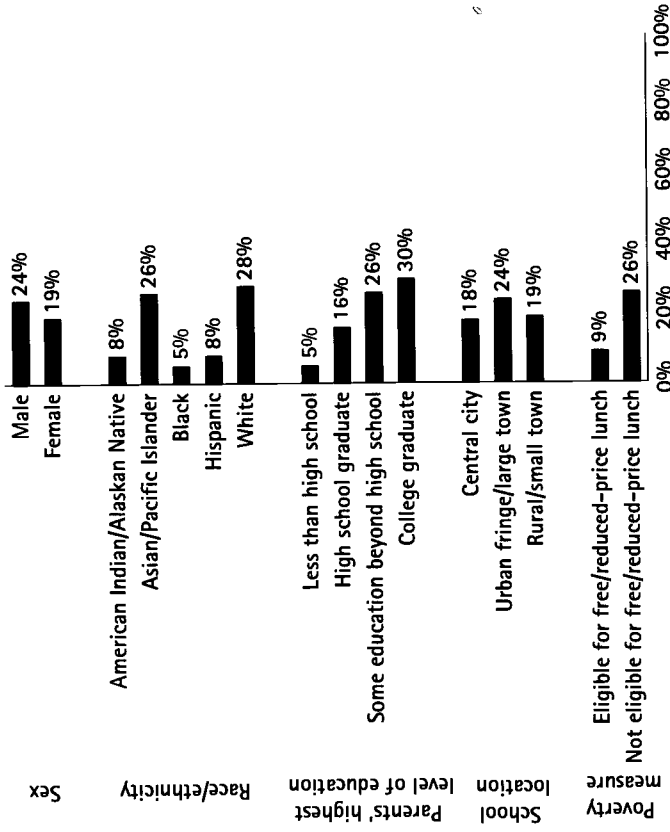
Percentage of public and nonpublic school 4th graders at or above Proficient on the NAEP mathematics assessment



Mathematics performance will be tested again in 2000.

3. Subgroup Performance

What percentages of 4th graders in different subgroups¹ in the nation² 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.

² Figures shown for the U.S. include both public and nonpublic school data.

1. Improvement Over Time



Have the nation's 8th graders improved in mathematics achievement?

Yes. The percentage of 8th graders who met the Goals Panel's performance standard in mathematics increased from 15% in 1990, to 24% in 1996.

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.

¹ Figures shown for the U.S. include both public and nonpublic school data.

2. State Comparisons[†]

How did the nation compare with states in 8th grade mathematics achievement in 1996?

9 states had significantly higher¹ percentages of students who were at or above Proficient on NAEP:

Minnesota	34%	Connecticut, Iowa, Maine, Nebraska	31%
North Dakota	33%	Alaska	30%
Montana, Wisconsin	32%		

14 states had similar¹ percentages of students who were at or above Proficient on NAEP:

Massachusetts, Michigan	28%	U.S., ² Indiana, Maryland, Utah	24%
Vermont	27%	Missouri, New York, Wyoming	22%
Oregon, Washington	26%	Texas, Virginia	21%
Colorado	25%		

19 states had significantly lower¹ percentages of students who were at or above Proficient on NAEP:

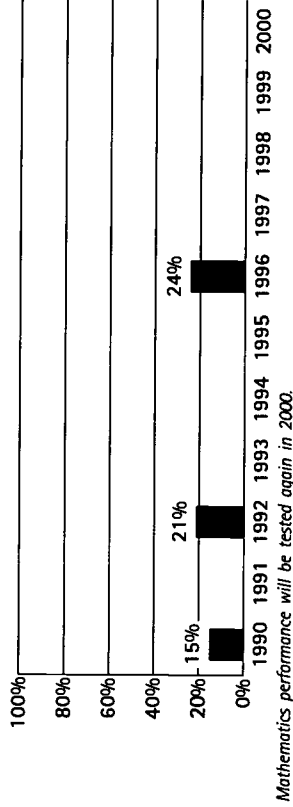
North Carolina, Rhode Island	20%	Arkansas	13%
Delaware	19%	Alabama	12%
Arizona	18%	Louisiana, Mississippi	7%
California, Florida	17%	Guam	6%
Georgia, Hawaii, Kentucky	16%	District of Columbia	5%
Tennessee	15%		
New Mexico, South Carolina, West Virginia	14%		

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

¹ See explanation on pp. 3-4.

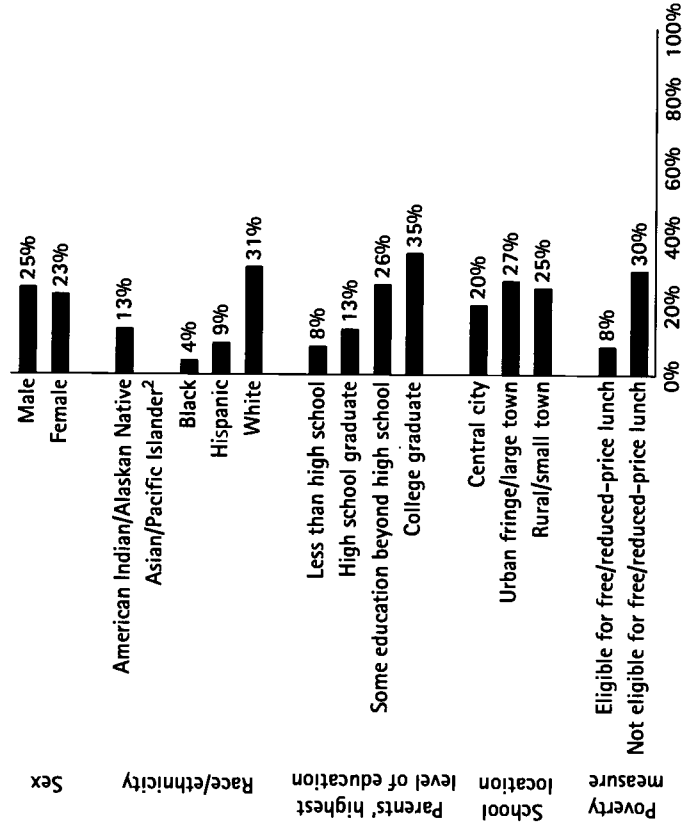
² Figure shown for the U.S. includes both public and nonpublic school data. Figures shown for states include public school data only.

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



3. Subgroup Performance

What percentages of 8th graders in different subgroups¹ in the nation³ 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.

² NAEP quality control activities involving state assessment data raised concerns about accuracy of national Grade 8 Asian/Pacific Islander data. As a result, they have not been included in this report.

³ Figures shown for the U.S. include both public and nonpublic school data.

1. Improvement Over Time

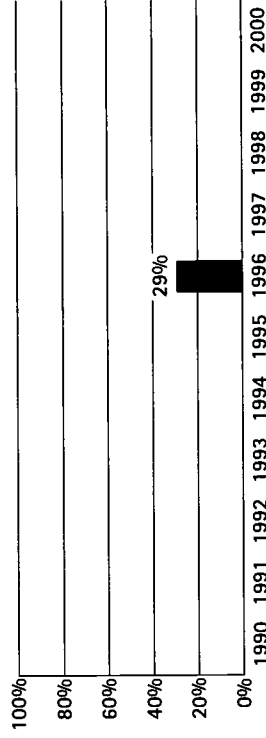
Have the nation's 8th graders improved in science achievement?

In 1996, 29% of the nation's 8th graders met the Goals Panel's performance standard in science. The Goals Panel will report whether science performance has improved over time when science is assessed again in 2000.

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.

¹ Figures shown for the U.S. include both public and nonpublic school data.

Percentage of public and nonpublic 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 the nation compare with states in 8th grade science achievement in 1996?

10 states had significantly higher¹ percentages of students who were at or above Proficient on NAEP:

Maine, Montana, North Dakota	41%	Connecticut, Iowa	36%
Wisconsin	39%	Nebraska	35%
Massachusetts, Minnesota	37%	Wyoming ²	34%

13 states had similar¹ percentages of students who were at or above Proficient on NAEP:

Vermont ²	34%	Missouri	28%
Colorado, Michigan, Oregon, Utah	32%	New York, Virginia, Washington	27%
Alaska	31%	Rhode Island	26%
Indiana	30%	Maryland	25%
U.S.*	29%		

19 states had significantly lower¹ percentages of students who were at or above Proficient on NAEP:

North Carolina	24%	Alabama	18%
Arizona, Kentucky, Texas	23%	South Carolina	17%
Arkansas, Tennessee	22%	Hawaii	15%
Delaware, Florida, Georgia,	21%	Louisiana	13%
West Virginia	20%	Mississippi	12%
California	19%	Guam	7%
New Mexico	19%	District of Columbia	5%

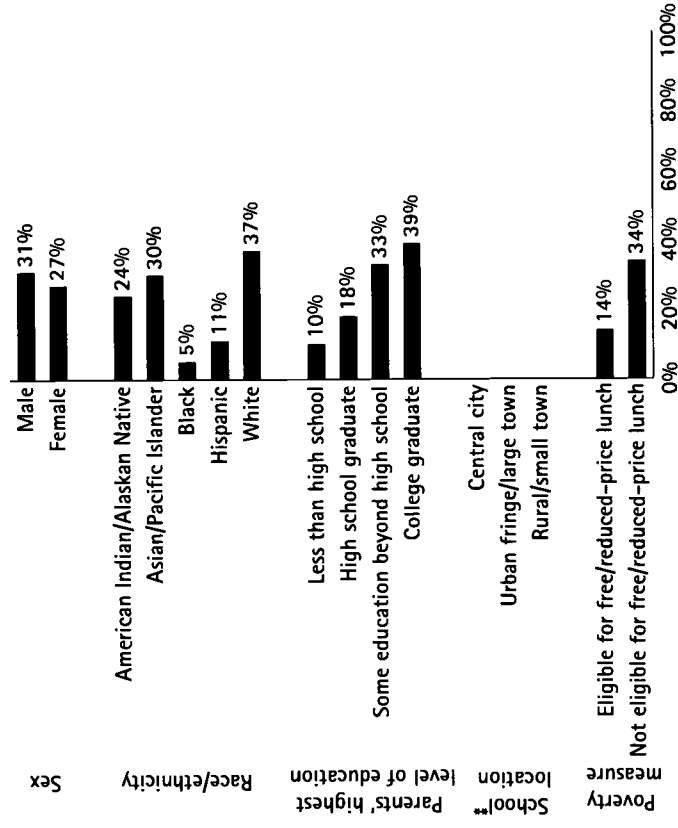
[†] The term "state" is used to refer to the 50 states, the District of Columbia, and the territories.

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.
* Figure shown for the U.S. includes both public and nonpublic school data. Figures shown for states include public school data only.

3. Subgroup Performance

What percentages of 8th graders in different subgroups¹ in the nation² were at or above Proficient on the 1996 NAEP science assessment?



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

² Figures shown for the U.S. include both public and nonpublic school data.

** No school location data for science in 1996.

International Comparisons

United States

Mathematics Grade 8

Forty-one nations[†] participated in the Third International Mathematics and Science Study (TIMSS) in 8th grade mathematics in 1995. How did U.S. 8th graders compare to students in the other participating countries?

20 nations[†] performed significantly higher:¹

(Australia)
(Austria)
Belgium – Flemish²
(Belgium – French)²
(Bulgaria)
Canada
Czech Republic
France
Hong Kong
Hungary
Ireland
Japan
Korea
(Netherlands)
Russian Federation
Singapore
Slovak Republic
(Slovenia)
Sweden
Switzerland

13 nations[†] performed similarly:¹

(Denmark)
England
(Germany)
(Greece)
Iceland
(Israel)
Latvia – LSS³
New Zealand
Norway
(Romania)
(Scotland)
Spain
(Thailand)
United States

7 nations[†] performed significantly lower:¹

(Colombia)
Cyprus
Iran, Islamic Republic
(Kuwait)
Lithuania
Portugal
(South Africa)

[†] The term "nation" is used to refer to nations, states, or jurisdictions. Performance for nations is based on both public and nonpublic school data. Nations not meeting international guidelines are shown in parentheses.
¹ See explanation on pp. 3–4.

² The Flemish and French educational systems in Belgium participated separately.

³ Latvia is designated LSS because only Latvian-speaking schools were tested, which represent less than 65% of the population.

Science Grade 8

Forty-one nations[†] participated in the Third International Mathematics and Science Study (TIMSS) in 8th grade science in 1995. How did U.S. 8th graders compare to students in the other participating countries?

9 nations[†] performed significantly higher:¹

(Austria)
(Bulgaria)
Czech Republic
Hungary
Japan
Korea
(Netherlands)
Singapore
(Slovenia)

16 nations[†] performed similarly:¹

(Australia)
Belgium – Flemish²
Canada
England
(Germany)
Hong Kong
Ireland
(Israel)
New Zealand
Norway
Russian Federation
(Scotland)
Slovak Republic
Sweden
Switzerland
(Thailand)
United States

15 nations[†] performed significantly lower:¹

(Belgium – French)²
(Colombia)
Cyprus
(Denmark)
France
(Greece)
Iceland
Iran, Islamic Republic
(Kuwait)
Latvia – LSS³
Lithuania
Portugal
(Romania)
(South Africa)
Spain

[†] The term "nation" is used to refer to nations, states, or jurisdictions. Performance for nations is based on both public and nonpublic school data. Nations not meeting international guidelines are shown in parentheses.
¹ See explanation on pp. 3–4.

² The Flemish and French educational systems in Belgium participated separately.

³ Latvia is designated LSS because only Latvian-speaking schools were tested, which represent less than 65% of the population.

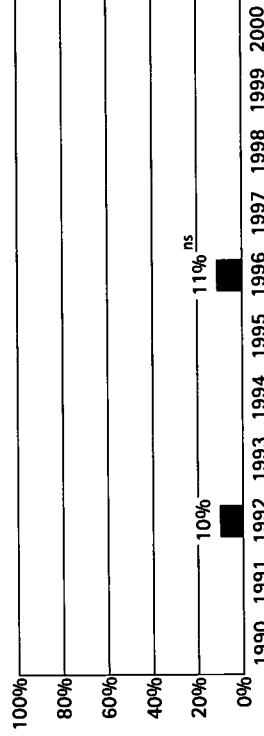
1. Improvement Over Time

Have Alabama'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 Alabama compare with other states in 4th grade mathematics achievement in public schools in 1996?

33 states had significantly higher¹ percentages of students who were at or above Proficient on NAEP:

Connecticut	31%	U.S. , Alaska, North Carolina, Oregon, 21%
Minnesota	29%	Washington
Maine, Wisconsin	27%	Missouri, New York, Pennsylvania
New Jersey, Texas	25%	Virginia, West Virginia, Wyoming
Indiana, Massachusetts, Nebraska, North Dakota	24%	Rhode Island, Tennessee
Michigan, Utah, Vermont	23%	Delaware, Hawaii, Kentucky
Colorado, Iowa, Maryland, Montana	22%	Florida ²

7 states had similar¹ percentages of students who were at or above Proficient on NAEP:

Arizona ²	15%	South Carolina	12%
Nevada	14%	Alabama , California	11%
Arkansas, Georgia, New Mexico	13%		

4 states had significantly lower¹ percentages of students who were at or above Proficient on NAEP:

Louisiana, Mississippi	8%	Guam	3%
District of Columbia	5%		

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

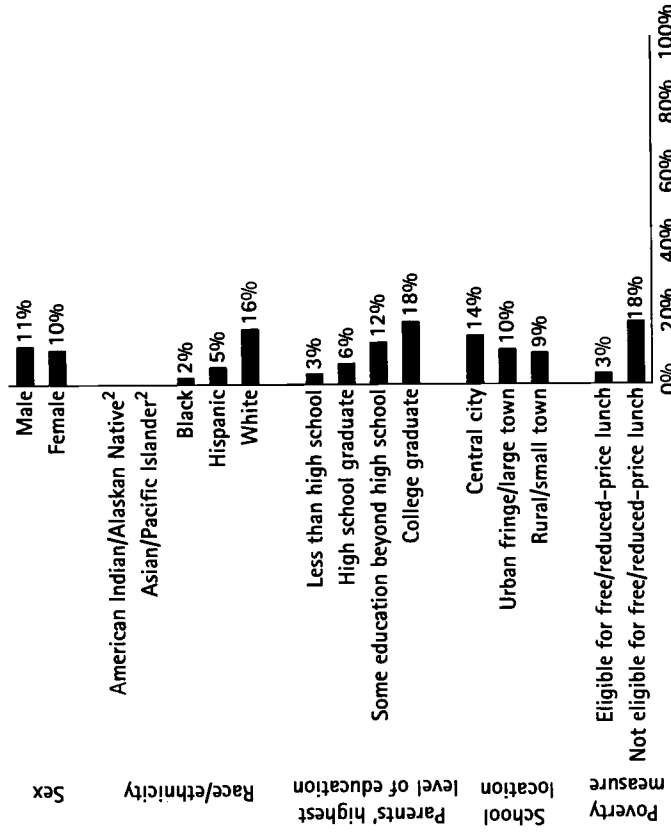
¹ See explanation on pp. 3-4.

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

* 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 subgroups¹ in Alabama 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.

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

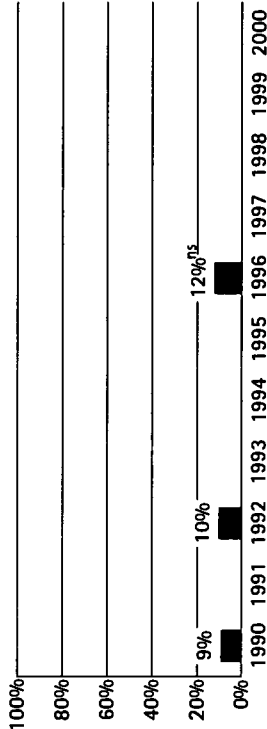
1. Improvement Over Time

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

Not yet. Between 1990 and 1996, 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 Alabama compare with other states in 8th grade mathematics achievement in public schools in 1996?

29 states had significantly higher¹ percentages of students who were at or above Proficient on NAEP:

Minnesota	34%	Colorado	25%
North Dakota	33%	U.S. , Indiana, Maryland, Utah	24%
Montana, Wisconsin	32%	Missouri, New York, Wyoming	22%
Connecticut, Iowa, Maine, Nebraska	31%	Texas, Virginia	21%
Alaska	30%	North Carolina, Rhode Island	20%
Massachusetts, Michigan	28%	Delaware	19%
Vermont	27%	Arizona	18%
Oregon, Washington	26%	California, Florida	17%

8 states had similar¹ percentages of students who were at or above Proficient on NAEP:

Georgia, Hawaii, Kentucky	16%	West Virginia	13%
Tennessee	15%	Arkansas	12%
New Mexico, South Carolina,	14%	Alabama	

4 states had significantly lower¹ percentages of students who were at or above Proficient on NAEP:

Louisiana, Mississippi	7%	District of Columbia	5%
Guam	6%		

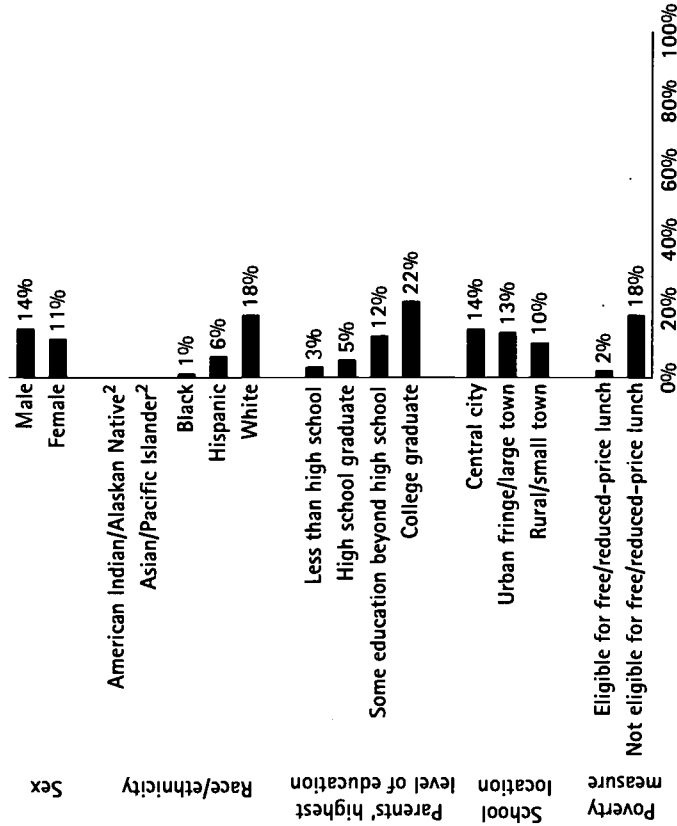
[†] The term "state" is used to refer to the 50 states, the District of Columbia, and the territories.

¹ See explanation on pp. 3-4.

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

3. Subgroup Performance

What percentages of public school 8th graders in different subgroups¹ in Alabama 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.

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

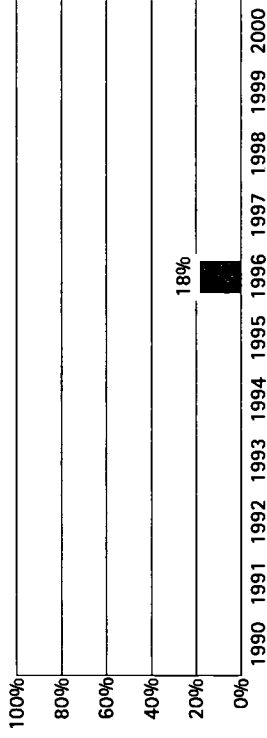
1. Improvement Over Time

Have Alabama's 8th graders improved in science achievement?

In 1996, 18% of Alabama's public school 8th graders met the Goals Panel's performance standard in science. The Goals Panel will report whether science performance has improved over time when science is assessed again in 2000.

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 science assessment



Science performance will be tested again in 2000.

2. State Comparisons[†]

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

27 states had significantly higher¹ percentages of students who were at or above Proficient on NAEP:

Maine, Montana, North Dakota	41%	Indiana	30%
Wisconsin	39%	U.S.*	29%
Massachusetts, Minnesota	37%	Missouri	28%
Connecticut, Iowa	36%	New York, Virginia, Washington	27%
Nebraska	35%	Rhode Island	26%
Vermont, Wyoming	34%	Maryland	25%
Colorado, Michigan, Oregon, Utah	32%	North Carolina	24%
Alaska	31%	Arizona, Kentucky, Texas	23%

10 states had similar¹ percentages of students who were at or above Proficient on NAEP:

Arkansas, Tennessee	22%	New Mexico	19%
Delaware, Florida, Georgia, West Virginia	21%	Alabama	18%
California	20%	South Carolina	17%
		Hawaii	15%

4 states had significantly lower¹ percentages of students who were at or above Proficient on NAEP:

Louisiana	13%	Guam	7%
Mississippi	12%	District of Columbia	5%

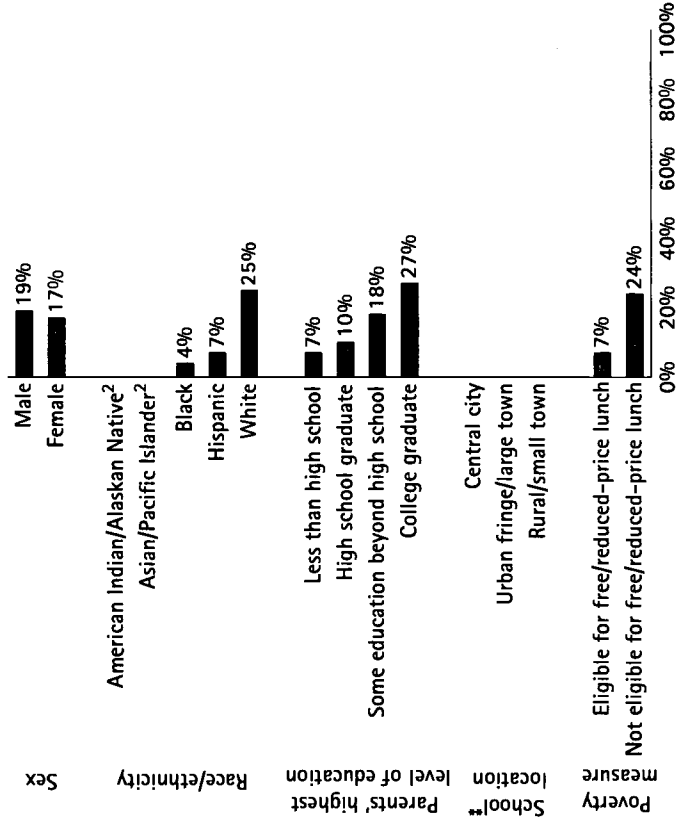
[†] The term "state" is used to refer to the 50 states, the District of Columbia, and the territories.

¹ See explanation on pp. 3-4.

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

3. Subgroup Performance

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



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

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

** No school location data for science in 1996.

International Comparisons

Alabama

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 Alabama participated in the TIMSS mathematics assessment, how would their average performance compare to that of students who took TIMSS in these nations?

30 nations[†] would be expected to perform significantly higher:¹

(Australia)
(Austria)
Belgium – Flemish²
(Belgium – French)²
(Bulgaria)
Canada
Czech Republic
(Denmark)
(England)
France
(Germany)
Hong Kong
Hungary
Ireland
(Israel)
Japan
Korea
(Latvia – LSS)³
(Netherlands)
New Zealand
Norway
Russian Federation
(Scotland)
Singapore
Slovak Republic
(Slovenia)
Sweden
(Switzerland)
(Thailand)
United States

7 nations[†] would be expected to perform similarly:¹

Alabama
Cyprus
(Greece)
Iceland
(Lithuania)
Portugal
(Romania)
Spain

4 nations[†] would be expected to perform significantly lower:¹

(Colombia)
Iran, Islamic Republic
(Kuwait)
(South Africa)

[†] The term "nation" is used to refer to nations, states, or jurisdictions. Performance for nations is based on public school data only. Nations not meeting international guidelines are shown in parentheses.
1 See explanation on pp. 3-4.
2 The Flemish and French educational systems in Belgium participated separately.
3 Latvia is designated LSS because only Latvian-speaking schools were tested, which represent less than 65% of the population.

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 Alabama participated in the TIMSS science assessment, how would their average performance compare to that of students who took TIMSS in these nations?

19 nations[†] would be expected to perform significantly higher:¹

(Australia)
(Austria)
Belgium – Flemish²
(Bulgaria)
Canada
Czech Republic
(England)
(Germany)
Hungary
Ireland
Japan
Korea
(Netherlands)
Russian Federation
Singapore
Slovak Republic
(Slovenia)
Sweden
United States

16 nations[†] would be expected to perform similarly:¹

Alabama
(Denmark)
France
(Greece)
Hong Kong
Iceland
(Israel)
(Latvia – LSS)³
(Lithuania)
New Zealand
Norway
Portugal
(Romania)
(Scotland)
Spain
(Switzerland)
(Thailand)

6 nations[†] would be expected to perform significantly lower:¹

(Belgium – French)²
(Colombia)
Cyprus
Iran, Islamic Republic
(Kuwait)
(South Africa)

[†] The term "nation" is used to refer to nations, states, or jurisdictions. Performance for nations is based on public school data only. Nations not meeting international guidelines are shown in parentheses.
1 See explanation on pp. 3-4.
2 The Flemish and French educational systems in Belgium participated separately.
3 Latvia is designated LSS because only Latvian-speaking schools were tested, which represent less than 65% of the population.

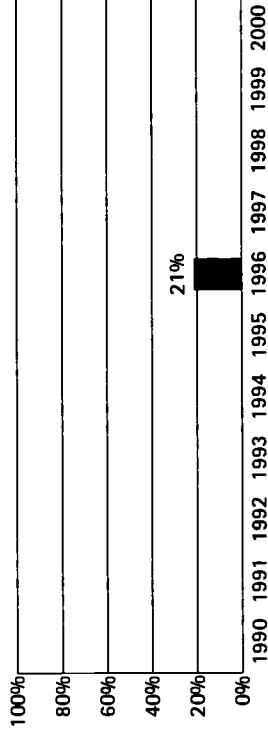
1. Improvement Over Time

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

In 1996, 21% of Alaska's public school 4th graders met the Goals Panel's performance standard in mathematics. The Goals Panel will report whether Alaska's mathematics performance has improved over time when mathematics is assessed again in 2000.

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



Mathematics performance will be tested again in 2000.

2. State Comparisons[†]

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

4 states had significantly higher¹ percentages of students who were at or above Proficient on NAEP:

Connecticut	31%	Maine, Wisconsin	27%
Minnesota	29%		

23 states had similar¹ percentages of students who were at or above Proficient on NAEP:

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

17 states had significantly lower¹ percentages of students who were at or above Proficient on NAEP:

Rhode Island ²	17%	South Carolina	12%
Delaware, Hawaii, Kentucky	16%	Alabama, California	11%
Arizona, Florida	15%	Louisiana, Mississippi	8%
Nevada	14%	District of Columbia	5%
Arkansas, Georgia, New Mexico	13%	Guam	3%

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

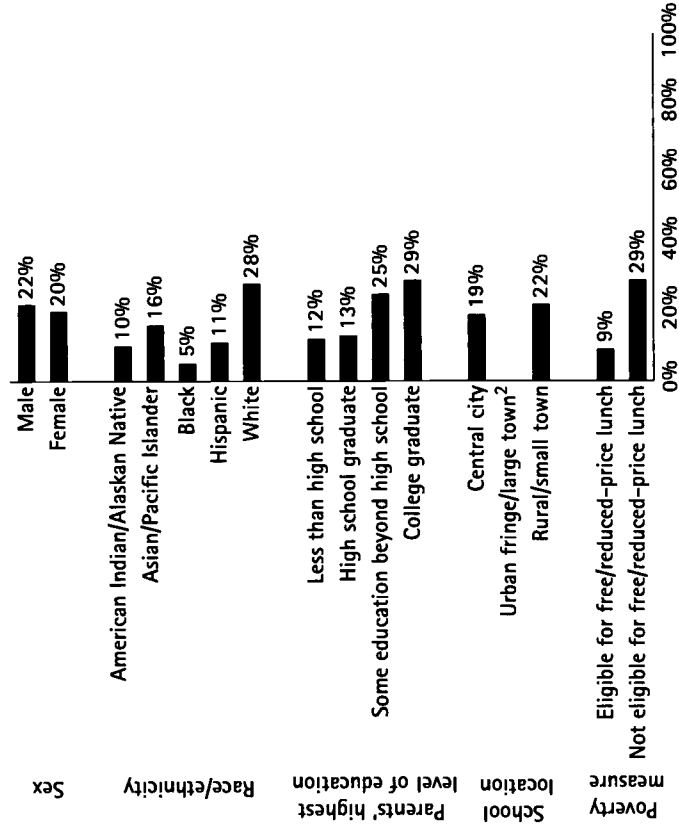
¹ See explanation on pp. 3-4.

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

^{*} 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 subgroups¹ in Alaska 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.

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

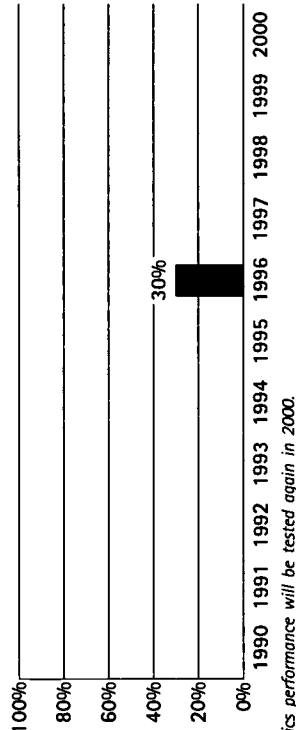
1. Improvement Over Time

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

In 1996, 30% of Alaska's public school 8th graders met the Goals Panel's performance standard in mathematics. The Goals Panel will report whether Alaska's mathematics performance has improved over time when mathematics is assessed again in 2000.

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



2. State Comparisons[†]

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

14 states had similar¹ percentages of students who were at or above Proficient on NAEP:

Minnesota	34%	Massachusetts, Michigan	28%
North Dakota	33%	Vermont	27%
Montana, Wisconsin	32%	Oregon, Washington	26%
Connecticut, Iowa, Maine, Nebraska	31%	Maryland ²	24%
Alaska	30%		

27 states had significantly lower¹ percentages of students who were at or above Proficient on NAEP:

Colorado ²	25%	Tennessee	15%
U.S.,* Indiana, ² Utah ²	24%	New Mexico, South Carolina,	14%
Missouri, New York, Wyoming	22%	West Virginia	13%
Texas, Virginia	21%	Arkansas	12%
North Carolina, Rhode Island	20%	Alabama	7%
Delaware	19%	Louisiana, Mississippi	6%
Arizona	18%	Guam	5%
California, Florida	17%	District of Columbia	
Georgia, Hawaii, Kentucky	16%		

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

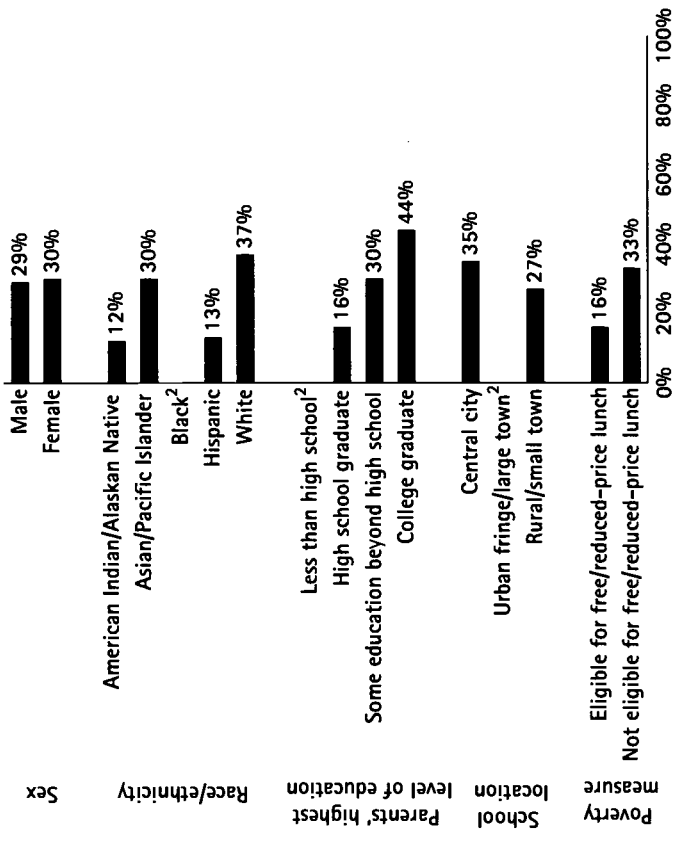
¹ See explanation on pp. 3-4.

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

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

3. Subgroup Performance

What percentages of public school 8th graders in different subgroups¹ in Alaska 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.

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

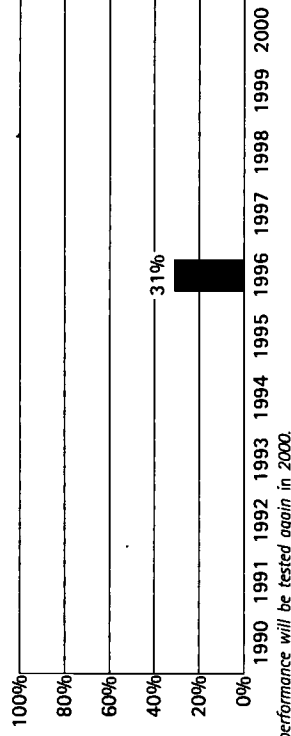
1. Improvement Over Time

Have Alaska's 8th graders improved in science achievement?

In 1996, 31% of Alaska's public school 8th graders met the Goals Panel's performance standard in science. The Goals Panel will report whether science performance has improved over time when science is assessed again in 2000.

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 science assessment



2. State Comparisons[†]

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

4 states had significantly higher¹ percentages of students who were at or above Proficient on NAEP:

Maine, Montana, North Dakota 41% Wisconsin 39%

16 states had similar¹ percentages of students who were at or above Proficient on NAEP:

Massachusetts, Minnesota 37% **Alaska** 31%
 Connecticut, Iowa 36% Indiana 30%
 Nebraska 35% **U.S.*** 29%
 Vermont, Wyoming 34% Missouri 28%
 Colorado, Michigan, Oregon, Utah 32% New York, Virginia, Washington 27%

21 states had significantly lower¹ percentages of students who were at or above Proficient on NAEP:

Rhode Island 26% New Mexico 19%
 Maryland 25% Alabama 18%
 North Carolina 24% South Carolina 17%
 Arizona, Kentucky, Texas 23% Hawaii 15%
 Arkansas, Tennessee 22% Louisiana 13%
 Delaware, Florida, Georgia, West Virginia 21% Mississippi 12%
 California 20% Guam 7%
 District of Columbia 5%

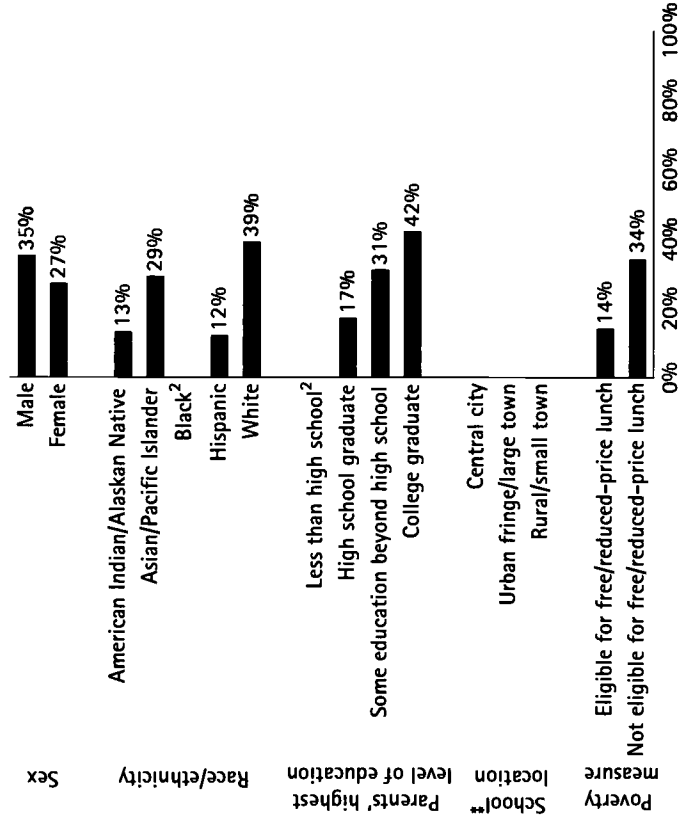
[†] The term "state" is used to refer to the 50 states, the District of Columbia, and the territories.

¹ See explanation on pp. 3-4.

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

3. Subgroup Performance

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



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

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

** No school location data for science in 1996.

International Comparisons

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 Alaska participated in the TIMSS mathematics assessment, how would their average performance compare to that of students who took TIMSS in these nations?

8 nations[†] would be expected to perform significantly higher:¹

Belgium – Flemish²
Czech Republic
Hong Kong
Japan
Korea
Singapore
Slovak Republic
(Switzerland)

23 nations[†] would be expected to perform similarly:¹

Alaska
(Australia)
(Austria)
(Belgium – French)²
(Bulgaria)
Canada
(Denmark)
(England)
France
(Germany)
Hungary
Iceland
Ireland
(Israel)
(Latvia – LSS)³
(Netherlands)
New Zealand
Norway
Russian Federation
(Scotland)
(Slovenia)
Sweden
(Thailand)
United States

10 nations[†] would be expected to perform significantly lower:¹

(Colombia)
Cyprus
(Greece)
Iran, Islamic Republic
(Kuwait)
(Lithuania)
Portugal
(Romania)
(South Africa)
Spain

[†] The term "nation" is used to refer to nations, states, or jurisdictions. Performance for nations is based on public school data only. Nations not meeting international guidelines are shown in parentheses.

¹ See explanation on pp. 3-4.

² The Flemish and French educational systems in Belgium participated separately.

³ Latvia is designated LSS because only Latvian-speaking schools were tested, which represent less than 65% of the population.

Alaska

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 Alaska participated in the TIMSS science assessment, how would their average performance compare to that of students who took TIMSS in these nations?

3 nations[†] would be expected to perform significantly higher:¹

Czech Republic
Japan
Singapore

22 nations[†] would be expected to perform similarly:¹

Alaska
(Australia)
(Austria)
Belgium – Flemish²
(Bulgaria)
Canada
(England)
(Germany)
Hong Kong
Hungary
Ireland
(Israel)
Korea
(Netherlands)
New Zealand
Norway
Russian Federation
Slovak Republic
(Slovenia)
Sweden
(Switzerland)
(Thailand)
United States

16 nations[†] would be expected to perform significantly lower:¹

(Belgium – French)²
(Colombia)
Cyprus
(Denmark)
France
(Greece)
Iceland
Iran, Islamic Republic
(Kuwait)
(Latvia – LSS)³
(Lithuania)
Portugal
(Romania)
(Scotland)
(South Africa)
Spain

[†] The term "nation" is used to refer to nations, states, or jurisdictions. Performance for nations is based on public school data only. Nations not meeting international guidelines are shown in parentheses.

¹ See explanation on pp. 3-4.

² The Flemish and French educational systems in Belgium participated separately.

³ Latvia is designated LSS because only Latvian-speaking schools were tested, which represent less than 65% of the population.

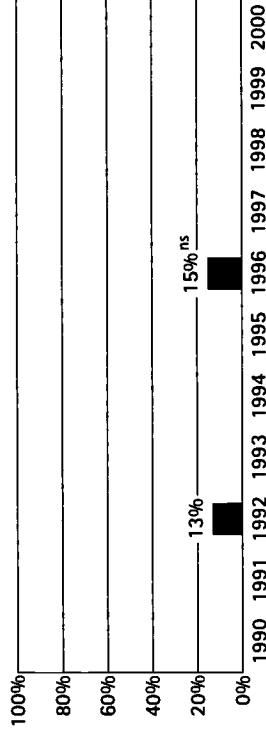
1. Improvement Over Time

Have Arizona'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 Arizona compare with other states in 4th grade mathematics achievement in public schools in 1996?

24 states had significantly higher¹ percentages of students who were at or above Proficient on NAEP:

Connecticut	31%	Michigan, Utah, Vermont	23%
Minnesota	29%	Colorado, Iowa, Maryland, Montana	22%
Maine, Wisconsin	27%	U.S.² , Alaska, North Carolina, Oregon, Washington	21%
New Jersey, Texas	25%	Missouri, New York, Pennsylvania	20%
Indiana, Massachusetts, Nebraska, North Dakota	24%		

15 states had similar¹ percentages of students who were at or above Proficient on NAEP:

Virginia, West Virginia, Wyoming	19%	Nevada	14%
Rhode Island, Tennessee	17%	Arkansas, Georgia, New Mexico	13%
Delaware, Hawaii, Kentucky	16%	South Carolina	12%
Arizona, Florida	15%	California ²	11%

5 states had significantly lower¹ percentages of students who were at or above Proficient on NAEP:

Alabama ²	11%	District of Columbia	5%
Louisiana, Mississippi	8%	Guam	3%

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

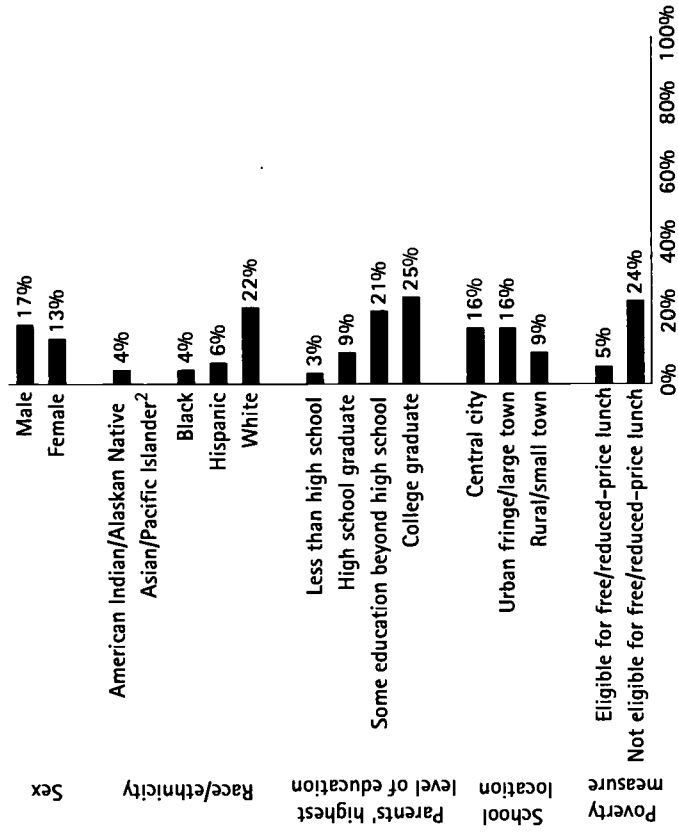
¹ See explanation on pp. 3-4.

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

^{*} 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 subgroups¹ in Arizona 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.

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

1. Improvement Over Time

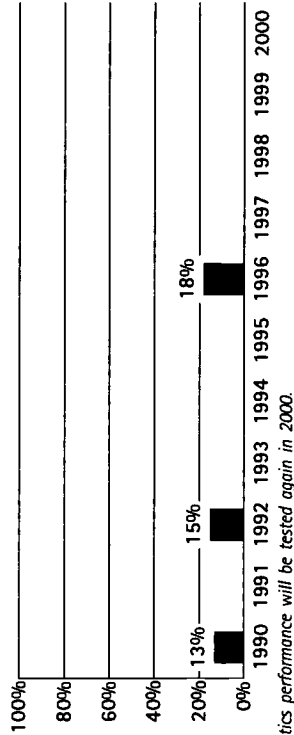


Have Arizona's 8th graders improved in mathematics achievement?

Yes. The percentage of Arizona's public school 8th graders who met the Goals Panel's performance standard in mathematics increased from 13% in 1990, to 18% in 1996.

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



Mathematics performance will be tested again in 2000.

2. State Comparisons[†]

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

18 states had significantly higher¹ percentages of students who were at or above Proficient on NAEP:

Minnesota	34%	Vermont	27%
North Dakota	33%	Oregon, Washington	26%
Montana, Wisconsin	32%	Colorado	25%
Connecticut, Iowa, Maine, Nebraska	31%	U.S.,² Indiana,² Utah²	24%
Alaska	30%	Wyoming ²	22%
Massachusetts, Michigan	28%		

14 states had similar¹ percentages of students who were at or above Proficient on NAEP:

Maryland ²	24%	Arizona	18%
Missouri, ² New York ²	22%	California, Florida	17%
Texas, Virginia	21%	Georgia, Hawaii, Kentucky	16%
North Carolina, Rhode Island	20%	Tennessee	15%
Delaware	19%		

9 states had significantly lower¹ percentages of students who were at or above Proficient on NAEP:

New Mexico, South Carolina, West Virginia	14%	Louisiana, Mississippi	7%
Arkansas	13%	Guam	6%
Alabama	12%	District of Columbia	5%

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

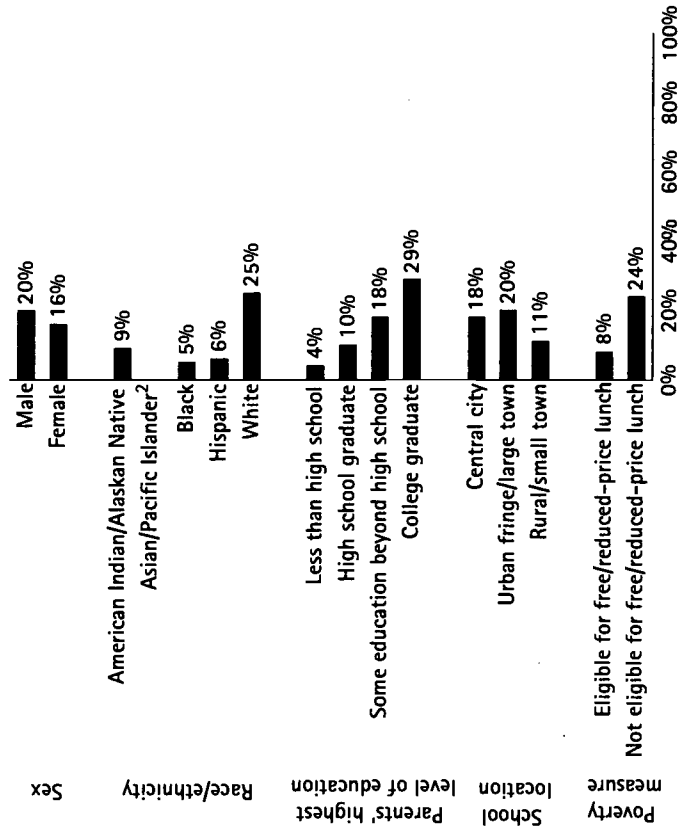
¹ See explanation on pp. 3-4.

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

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

3. Subgroup Performance

What percentages of public school 8th graders in different subgroups¹ in Arizona 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.

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

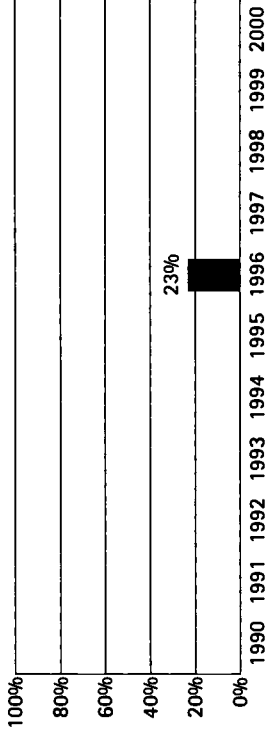
1. Improvement Over Time

Have Arizona's 8th graders improved in science achievement?

In 1996, 23% of Arizona's public school 8th graders met the Goals Panel's performance standard in science. The Goals Panel will report whether science performance has improved over time when science is assessed again in 2000.

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 science assessment



Science performance will be tested again in 2000.

2. State Comparisons[†]

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

18 states had significantly higher¹ percentages of students who were at or above Proficient on NAEP:

Maine, Montana, North Dakota	41%	Colorado, Michigan, Oregon, Utah	32%
Wisconsin	39%	Alaska	31%
Massachusetts, Minnesota	37%	Indiana	30%
Connecticut, Iowa	36%	U.S.*	29%
Nebraska	35%	Missouri	28%
Vermont, Wyoming	34%		

15 states had similar¹ percentages of students who were at or above Proficient on NAEP:

New York, Virginia, Washington	27%	Arkansas, Tennessee	22%
Rhode Island	26%	Delaware, Florida, Georgia,	21%
Maryland	25%	West Virginia	
North Carolina	24%	California	20%
Arizona , Kentucky, Texas	23%		

8 states had significantly lower¹ percentages of students who were at or above Proficient on NAEP:

New Mexico	19%	Louisiana	13%
Alabama	18%	Mississippi	12%
South Carolina	17%	Guam	7%
Hawaii	15%	District of Columbia	5%

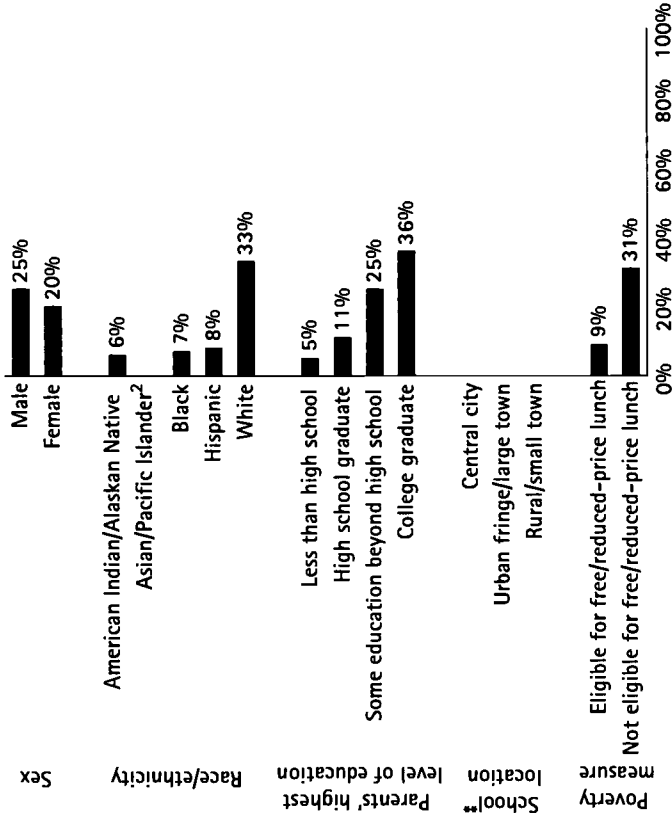
[†] The term "state" is used to refer to the 50 states, the District of Columbia, and the territories.

¹ See explanation on pp. 3-4.

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

3. Subgroup Performance

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



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

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

** No school location data for science in 1996.

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 Arizona participated in the TIMSS mathematics assessment, how would their average performance compare to that of students who took TIMSS in these nations?

21 nations[†] would be expected to perform significantly higher:¹

(Australia)
(Austria)
Belgium – Flemish²
(Belgium – French)²
(Bulgaria)
Canada
Czech Republic
France
Hong Kong
Hungary
Ireland
Japan
Korea
(Netherlands)
Russian Federation
Singapore
Slovak Republic
(Slovenia)
Sweden
(Switzerland)
(Thailand)

15 nations[†] would be expected to perform similarly:¹

Arizona
Cyprus
(Denmark)
(England)
(Germany)
(Greece)
Iceland
(Israel)
(Latvia – LSS)³
(Lithuania)
New Zealand
Norway
(Romania)
(Scotland)
Spain
United States

5 nations[†] would be expected to perform significantly lower:¹

(Colombia)
Iran, Islamic Republic
(Kuwait)
Portugal
(South Africa)

[†] The term "nation" is used to refer to nations, states, or jurisdictions. Performance for nations is based on public school data only. Nations not meeting international guidelines are shown in parentheses.

¹ See explanation on pp. 3-4.

² The Flemish and French educational systems in Belgium participated separately.

³ Latvia is designated LSS because only Latvian-speaking schools were tested, which represent less than 65% of the population.

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 Arizona participated in the TIMSS science assessment, how would their average performance compare to that of students who took TIMSS in these nations?

10 nations[†] would be expected to perform significantly higher:¹

(Austria)
(Bulgaria)
Czech Republic
(England)
Hungary
Japan
Korea
(Netherlands)
Singapore
(Slovenia)

20 nations[†] would be expected to perform similarly:¹

Arizona
(Australia)
Belgium – Flemish²
Canada
France
(Germany)
(Greece)
Hong Kong
Iceland
Ireland
(Israel)
New Zealand
Norway
Russian Federation
(Scotland)
Slovak Republic
Spain
Sweden
(Switzerland)
(Thailand)
United States

11 nations[†] would be expected to perform significantly lower:¹

(Belgium – French)²
(Colombia)
Cyprus
(Denmark)
Iran, Islamic Republic
(Kuwait)
(Latvia – LSS)³
(Lithuania)
Portugal
(Romania)
(South Africa)

[†] The term "nation" is used to refer to nations, states, or jurisdictions. Performance for nations is based on public school data only. Nations not meeting international guidelines are shown in parentheses.

¹ See explanation on pp. 3-4.

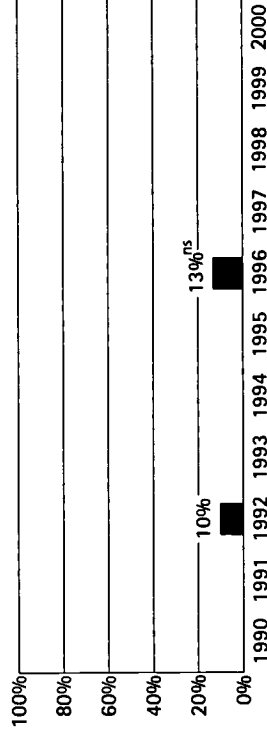
² The Flemish and French educational systems in Belgium participated separately.

³ Latvia is designated LSS because only Latvian-speaking schools were tested, which represent less than 65% of the population.

1. Improvement Over Time

Have Arkansas' 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 Arkansas compare with other states in 4th grade mathematics achievement in public schools in 1996?

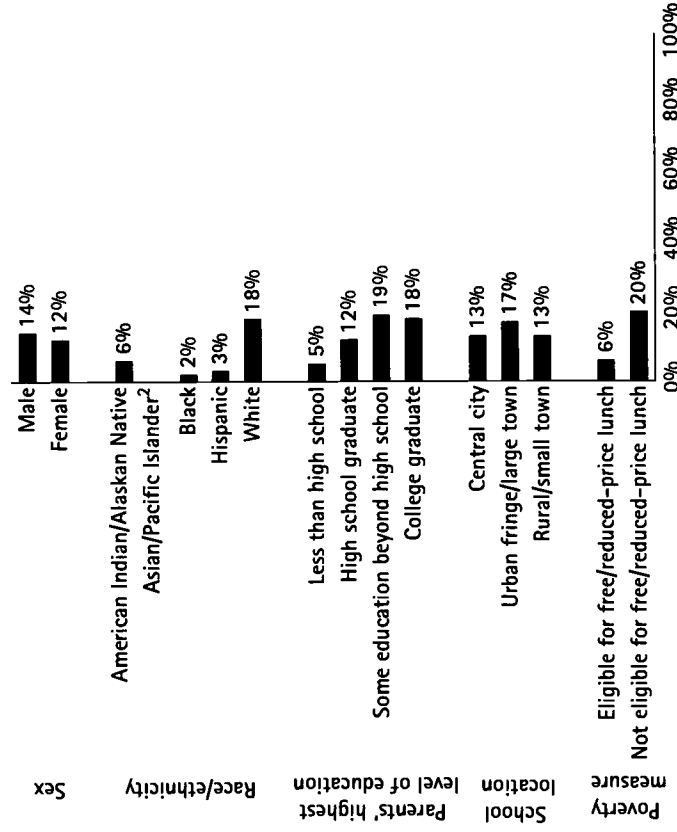
27 states had significantly higher ¹ percentages of students who were at or above Proficient on NAEP:	
Connecticut	31%
Minnesota	29%
Maine, Wisconsin	27%
New Jersey, Texas	25%
Indiana, Massachusetts, Nebraska, North Dakota	24%
Michigan, Utah, Vermont	23%
Colorado, Iowa, Maryland, Montana	22%
U.S., ² Alaska, North Carolina, Oregon, Washington	21%
Missouri, New York, Pennsylvania, Virginia, West Virginia, Wyoming	20%
13 states had similar ¹ percentages of students who were at or above Proficient on NAEP:	
Rhode Island, Tennessee	17%
Delaware, Hawaii, Kentucky	16%
Arizona, Florida	15%
Nevada	14%
Arkansas, Georgia, New Mexico	13%
South Carolina	12%
Alabama, California	11%

4 states had significantly lower ¹ percentages of students who were at or above Proficient on NAEP:	
Louisiana, Mississippi	8%
District of Columbia	5%
Guam	3%

[†] The term "state" is used to refer to the 50 states, the District of Columbia, and the territories.
¹ See explanation on pp. 3-4.
² 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 subgroups¹ in Arkansas 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.
² Characteristics of the sample do not permit a reliable estimate.

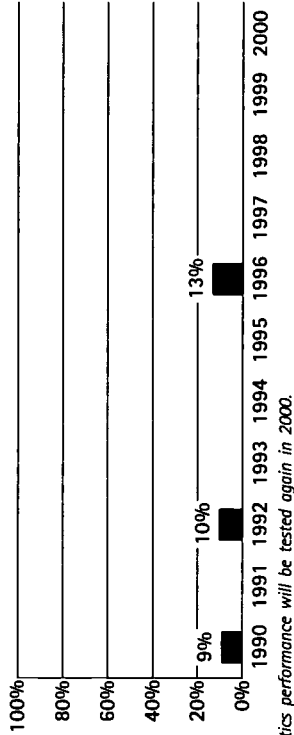
1. Improvement Over Time

Have Arkansas' 8th graders improved in mathematics achievement?

Yes. The percentage of Arkansas' public school 8th graders who met the Goals Panel's performance standard in mathematics increased from 9% in 1990, to 13% in 1996.

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



Mathematics performance will be tested again in 2000.

2. State Comparisons[†]

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

30 states had significantly higher¹ percentages of students who were at or above Proficient on NAEP:

Minnesota	34%	U.S.*	Indiana, Maryland, Utah	24%
North Dakota	33%		Missouri, New York, Wyoming	22%
Montana, Wisconsin	32%		Texas, Virginia	21%
Connecticut, Iowa, Maine, Nebraska	31%		North Carolina, Rhode Island	20%
Alaska	30%		Delaware	19%
Massachusetts, Michigan	28%		Arizona	18%
Vermont	27%		California, Florida	17%
Oregon, Washington	26%		Hawaii ²	16%
Colorado	25%			

7 states had similar¹ percentages of students who were at or above Proficient on NAEP:

Georgia, ² Kentucky ²	16%	Arkansas	13%
Tennessee	15%	Alabama	12%
New Mexico, South Carolina, West Virginia	14%		

4 states had significantly lower¹ percentages of students who were at or above Proficient on NAEP:

Louisiana, Mississippi	7%	District of Columbia	5%
Guam	6%		

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

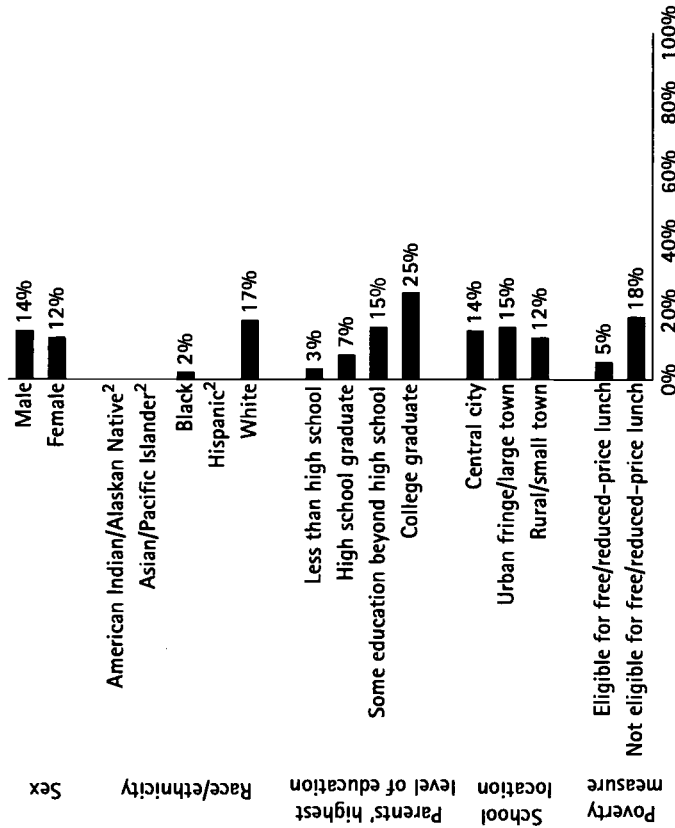
¹ See explanation on pp. 3-4.

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

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

3. Subgroup Performance

What percentages of public school 8th graders in different subgroups¹ in Arkansas 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.

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

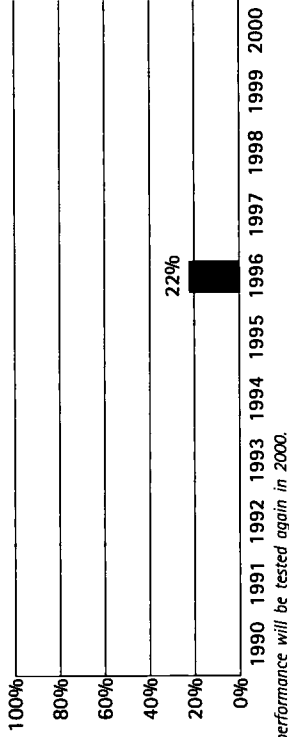
1. Improvement Over Time

Have Arkansas' 8th graders improved in science achievement?

In 1996, 22% of Arkansas' public school 8th graders met the Goals Panel's performance standard in science. The Goals Panel will report whether science performance has improved over time when science is assessed again in 2000.

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 science assessment



Science performance will be tested again in 2000.

2. State Comparisons[†]

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

19 states had significantly higher¹ percentages of students who were at or above Proficient on NAEP:

Maine, Montana, North Dakota	41%	Colorado, Michigan, Oregon, Utah	32%
Wisconsin	39%	Alaska	31%
Massachusetts, Minnesota	37%	Indiana	30%
Connecticut, Iowa	36%	U.S.*	29%
Nebraska	35%	Missouri	28%
Vermont, Wyoming	34%	Washington ²	27%

16 states had similar¹ percentages of students who were at or above Proficient on NAEP:

New York, ² Virginia ²	27%	Delaware, Florida, Georgia,	21%
Rhode Island	26%	West Virginia	20%
Maryland	25%	California	19%
North Carolina	24%	New Mexico	18%
Arizona, Kentucky, Texas	23%	Alabama	18%
Arkansas, Tennessee	22%		

6 states had significantly lower¹ percentages of students who were at or above Proficient on NAEP:

South Carolina	17%	Mississippi	12%
Hawaii	15%	Guam	7%
Louisiana	13%	District of Columbia	5%

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

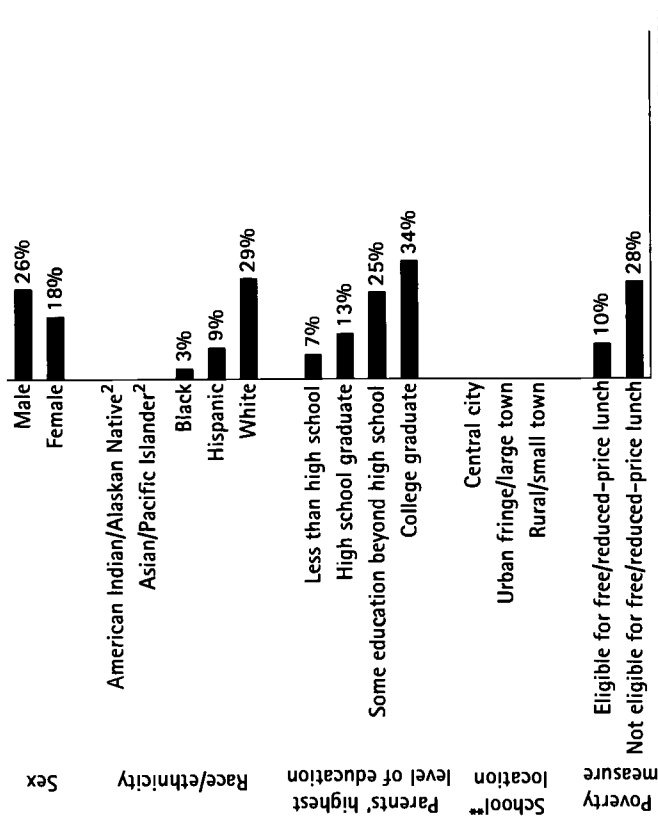
¹ See explanation on pp. 3-4.

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

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

3. Subgroup Performance

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



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

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

** No school location data for science in 1996.

International Comparisons

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 Arkansas participated in the TIMSS mathematics assessment, how would their average performance compare to that of students who took TIMSS in these nations?

27 nations[†] would be expected to perform significantly higher:¹

(Australia)
(Austria)
Belgium – Flemish²
(Belgium – French)²
(Bulgaria)
Canada
Czech Republic
(Denmark)
(England)
France
(Germany)
Hong Kong
Hungary
Ireland
(Israel)
Japan
Korea
(Netherlands)
New Zealand
Norway
Russian Federation
Singapore
Slovak Republic
(Slovenia)
Sweden
(Switzerland)
(Thailand)

10 nations[†] would be expected to perform similarly:¹

Arkansas
Cyprus
(Greece)
Iceland
(Latvia – LSS)³
(Lithuania)
Portugal
(Romania)
(Scotland)
Spain
United States

4 nations[†] would be expected to perform significantly lower:¹

(Colombia)
Iran, Islamic Republic
(Kuwait)
(South Africa)

[†] The term "nation" is used to refer to nations, states, or jurisdictions. Performance for nations is based on public school data only. Nations not meeting international guidelines are shown in parentheses.
1 See explanation on pp. 3–4.

2 The Flemish and French educational systems in Belgium participated separately.

3 Latvia is designated LSS because only Latvian-speaking schools were tested, which represent less than 65% of the population.

Arkansas

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 Arkansas participated in the TIMSS science assessment, how would their average performance compare to that of students who took TIMSS in these nations?

13 nations[†] would be expected to perform significantly higher:¹

(Australia)
(Austria)
Belgium – Flemish²
(Bulgaria)
Czech Republic
(England)
Hungary
Japan
Korea
(Netherlands)
Singapore
Slovak Republic
(Slovenia)

17 nations[†] would be expected to perform similarly:¹

Arkansas
Canada
France
(Germany)
(Greece)
Hong Kong
Iceland
Ireland
(Israel)
New Zealand
Norway
Russian Federation
(Scotland)
Spain
Sweden
(Switzerland)
(Thailand)
United States

11 nations[†] would be expected to perform significantly lower:¹

(Belgium – French)²
(Colombia)
Cyprus
(Denmark)
Iran, Islamic Republic
(Kuwait)
(Latvia – LSS)³
(Lithuania)
Portugal
(Romania)
(South Africa)

[†] The term "nation" is used to refer to nations, states, or jurisdictions. Performance for nations is based on public school data only. Nations not meeting international guidelines are shown in parentheses.
1 See explanation on pp. 3–4.

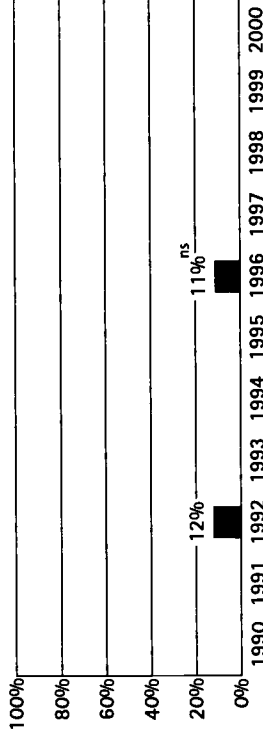
2 The Flemish and French educational systems in Belgium participated separately.

3 Latvia is designated LSS because only Latvian-speaking schools were tested, which represent less than 65% of the population.

1. Improvement Over Time

Have California'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 California compare with other states in 4th grade mathematics achievement in public schools in 1996?

33 states had significantly higher¹ percentages of students who were at or above Proficient on NAEP:

Connecticut	31%	U.S.²	Alaska, North Carolina, Oregon,	21%
Minnesota	29%	Washington		
Maine, Wisconsin	27%	Missouri, New York, Pennsylvania		20%
New Jersey, Texas	25%	Virginia, West Virginia, Wyoming		19%
Indiana, Massachusetts, Nebraska,	24%	Rhode Island, Tennessee		17%
North Dakota	23%	Delaware, Hawaii, Kentucky		16%
Michigan, Utah, Vermont	23%	Florida ³		15%
Colorado, Iowa, Maryland, Montana	22%			

9 states had similar¹ percentages of students who were at or above Proficient on NAEP:

Arizona ⁴	15%	South Carolina	12%
Nevada	14%	California , Alabama	11%
Arkansas, Georgia, New Mexico	13%	Louisiana, Mississippi	8%

2 states had significantly lower¹ percentages of students who were at or above Proficient on NAEP:

District of Columbia	5%	Guam	3%
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[†] The term "state" is used to refer to the 50 states, the District of Columbia, and the territories.

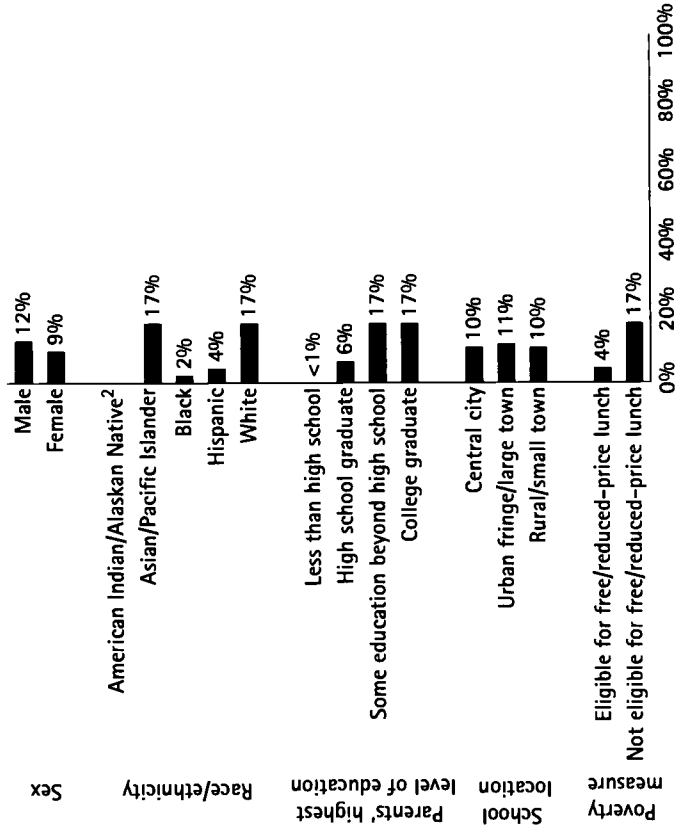
¹ See explanation on pp. 3-4.

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

³ 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 subgroups¹ in California 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.

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

1. Improvement Over Time

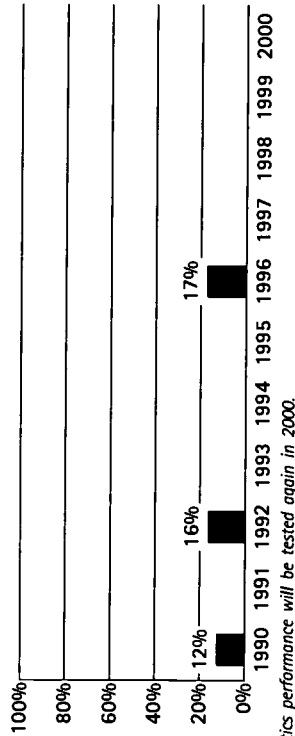


Have California's 8th graders improved in mathematics achievement?

Yes. The percentage of California's public school 8th graders who met the Goals Panel's performance standard in mathematics increased from 12% in 1990, to 17% in 1996.

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



2. State Comparisons[†]

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

21 states had significantly higher¹ percentages of students who were at or above Proficient on NAEP:

Minnesota	34%	Vermont	27%
North Dakota	33%	Oregon, Washington	26%
Montana, Wisconsin	32%	Colorado	25%
Connecticut, Iowa, Maine, Nebraska	31%	U.S. , [*] Indiana, Maryland, Utah	24%
Alaska	30%	Missouri, New York, Wyoming	22%
Massachusetts, Michigan	28%		

14 states had similar¹ percentages of students who were at or above Proficient on NAEP:

Texas, Virginia	21%	Georgia, Hawaii, Kentucky	16%
North Carolina, Rhode Island	20%	Tennessee	15%
Delaware	19%	New Mexico, South Carolina,	14%
Arizona	18%	West Virginia	
California, Florida	17%		

6 states had significantly lower¹ percentages of students who were at or above Proficient on NAEP:

Arkansas	13%	Guam	6%
Alabama	12%	District of Columbia	5%
Louisiana, Mississippi	7%		

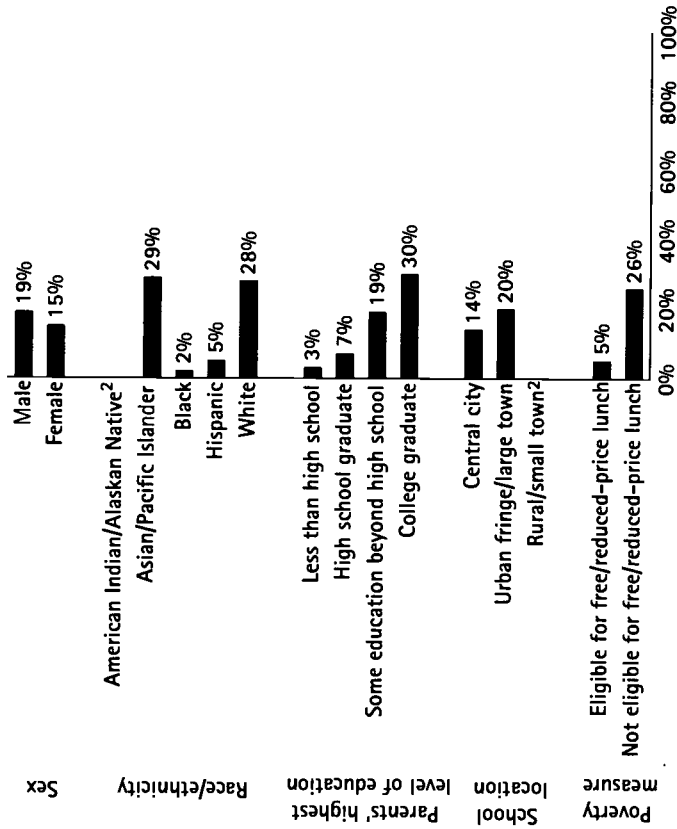
[†] The term "state" is used to refer to the 50 states, the District of Columbia, and the territories.

¹ See explanation on pp. 3-4.

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

3. Subgroup Performance

What percentages of public school 8th graders in different subgroups¹ in California 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.

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

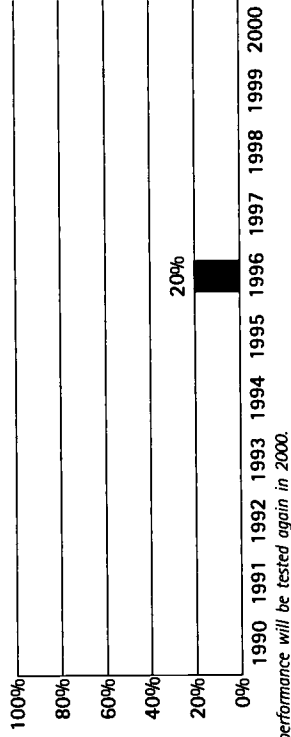
1. Improvement Over Time

Have California's 8th graders improved in science achievement?

In 1996, 20% of California's public school 8th graders met the Goals Panel's performance standard in science. The Goals Panel will report whether science performance has improved over time when science is assessed again in 2000.

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 science assessment



Science performance will be tested again in 2000.

2. State Comparisons[†]

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

22 states had significantly higher¹ percentages of students who were at or above Proficient on NAEP:

Maine, Montana, North Dakota	41%	Alaska	31%
Wisconsin	39%	Indiana	30%
Massachusetts, Minnesota	37%	U.S.*	29%
Connecticut, Iowa	36%	Missouri	28%
Nebraska	35%	New York, Virginia, Washington	27%
Vermont, Wyoming	34%	Rhode Island	26%
Colorado, Michigan, Oregon, Utah	32%		

14 states had similar¹ percentages of students who were at or above Proficient on NAEP:

Maryland	25%	California	20%
North Carolina	24%	New Mexico	19%
Arizona, Kentucky, Texas	23%	Alabama	18%
Arkansas, Tennessee	22%	South Carolina	17%
Delaware, Florida, Georgia, West Virginia	21%		

5 states had significantly lower¹ percentages of students who were at or above Proficient on NAEP:

Hawaii	15%	Guam	7%
Louisiana	13%	District of Columbia	5%
Mississippi	12%		

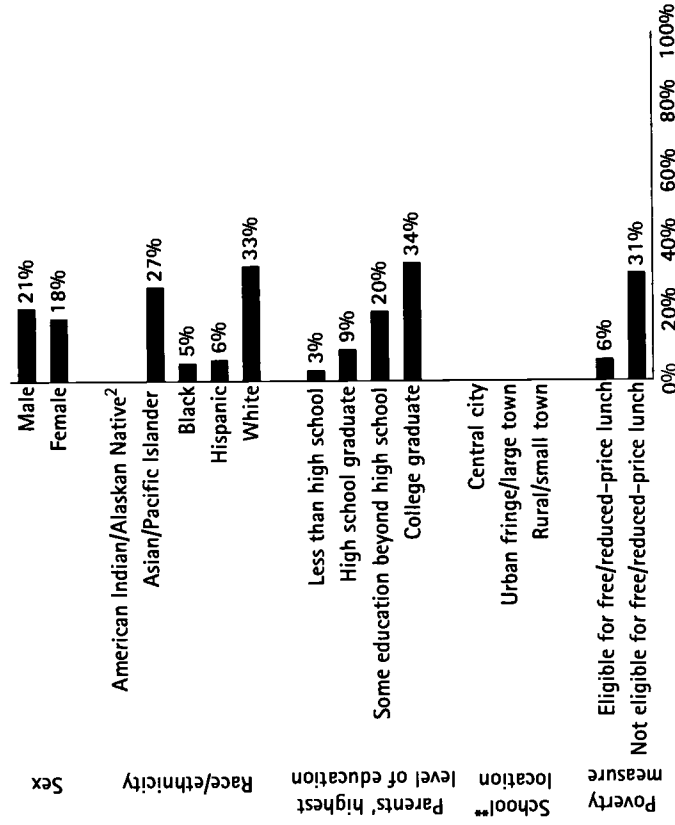
[†] The term "state" is used to refer to the 50 states, the District of Columbia, and the territories.

¹ See explanation on pp. 3-4.

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

3. Subgroup Performance

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



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

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

** No school location data for science in 1996.

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 California participated in the TIMSS mathematics assessment, how would their average performance compare to that of students who took TIMSS in these nations?

25 nations[†] would be expected to perform significantly higher:¹

(Australia)
(Austria)
Belgium – Flemish²
(Belgium – French)²
(Bulgaria)
Canada
Czech Republic
(England)
France
(Germany)
Hong Kong
Hungary
Ireland
(Israel)
Japan
Korea
(Netherlands)
New Zealand
Russian Federation
Singapore
Slovak Republic
(Slovenia)
Sweden
(Switzerland)
(Thailand)

12 nations[†] would be expected to perform similarly:¹

California
Cyprus
(Denmark)
(Greece)
Iceland
(Latvia – LSS)³
(Lithuania)
Norway
Portugal
(Romania)
(Scotland)
Spain
United States

4 nations[†] would be expected to perform significantly lower:¹

(Colombia)
Iran, Islamic Republic
(Kuwait)
(South Africa)

[†] The term "nation" is used to refer to nations, states, or jurisdictions. Performance for nations is based on public school data only. Nations not meeting international guidelines are shown in parentheses.

¹ See explanation on pp. 3-4.

² The Flemish and French educational systems in Belgium participated separately.

³ Latvia is designated LSS because only Latvian-speaking schools were tested, which represent less than 65% of the population.

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 California participated in the TIMSS science assessment, how would their average performance compare to that of students who took TIMSS in these nations?

20 nations[†] would be expected to perform significantly higher:¹

(Australia)
(Austria)
Belgium – Flemish²
(Bulgaria)
Canada
Czech Republic
(England)
(Germany)
Hungary
Ireland
Japan
Korea
(Netherlands)
Norway
Russian Federation
Singapore
Slovak Republic
(Slovenia)
Sweden
United States

15 nations[†] would be expected to perform similarly:¹

California
(Denmark)
France
(Greece)
Hong Kong
Iceland
(Israel)
(Latvia – LSS)³
(Lithuania)
New Zealand
Portugal
(Romania)
(Scotland)
Spain
(Switzerland)
(Thailand)

6 nations[†] would be expected to perform significantly lower:¹

(Belgium – French)²
(Colombia)
Cyprus
Iran, Islamic Republic
(Kuwait)
(South Africa)

[†] The term "nation" is used to refer to nations, states, or jurisdictions. Performance for nations is based on public school data only. Nations not meeting international guidelines are shown in parentheses.

¹ See explanation on pp. 3-4.

² The Flemish and French educational systems in Belgium participated separately.

³ Latvia is designated LSS because only Latvian-speaking schools were tested, which represent less than 65% of the population.

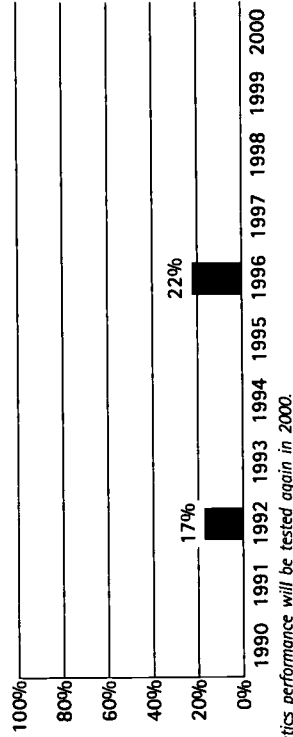


1. Improvement Over Time

Have Colorado's 4th graders improved in mathematics achievement?
 Yes. The percentage of Colorado's public school 4th graders who met the Goals Panel's performance standard in mathematics increased from 17% in 1992, to 22% in 1996.

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



2. State Comparisons[†]

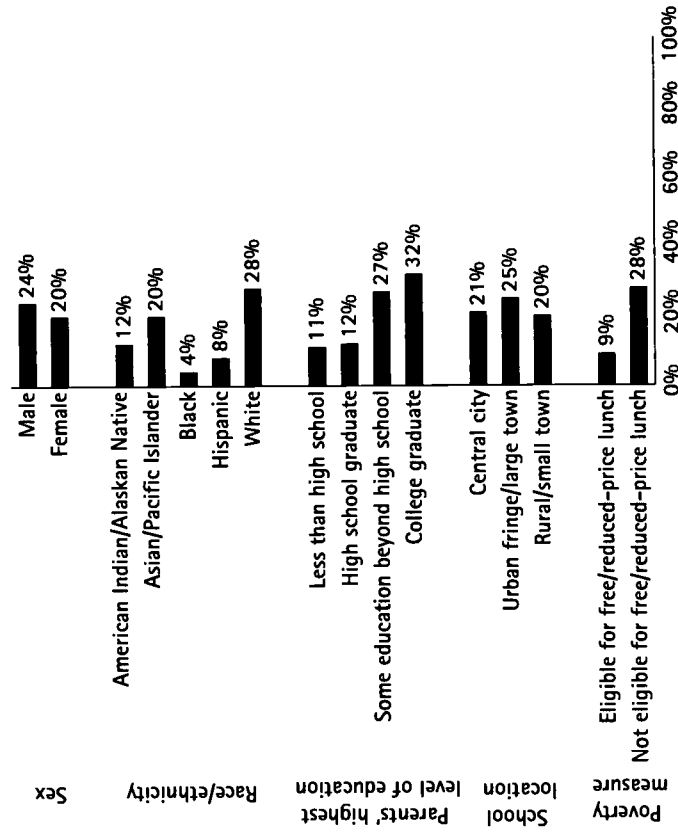
How did Colorado compare with other states in 4th grade mathematics achievement in public schools in 1996?

2 states had significantly higher¹ percentages of students who were at or above Proficient on NAEP:	
Connecticut	31%
Minnesota	29%
24 states had similar¹ percentages of students who were at or above Proficient on NAEP:	
Maine, Wisconsin	27%
New Jersey, Texas	25%
Indiana, Massachusetts, Nebraska, North Dakota	24%
Michigan, Utah, Vermont	23%
Colorado, Iowa, Maryland, Montana	22%
U.S.*	21%
Alabama, North Carolina, Oregon, Washington	20%
Missouri, New York, Pennsylvania	20%
Virginia, West Virginia, Wyoming	19%
18 states had significantly lower¹ percentages of students who were at or above Proficient on NAEP:	
Rhode Island, Tennessee	17%
Delaware, Hawaii, Kentucky	16%
Arizona, Florida	15%
Nevada	14%
Arkansas, Georgia, New Mexico	13%
South Carolina	12%
Alabama, California	11%
Louisiana, Mississippi	8%
District of Columbia	5%
Guam	3%

[†] The term "state" is used to refer to the 50 states, the District of Columbia, and the territories.
¹ See explanation on pp. 3-4.
 * 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 subgroups¹ in Colorado 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.

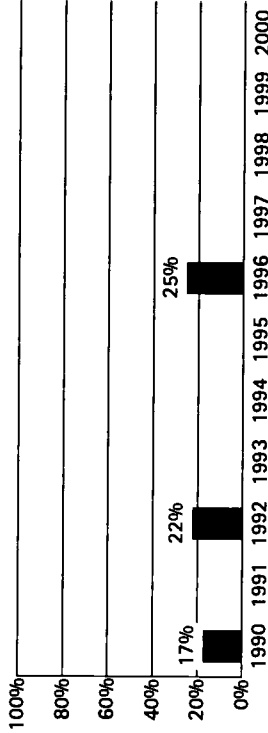
1. Improvement Over Time

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

Yes. The percentage of Colorado's public school 8th graders who met the Goals Panel's performance standard in mathematics increased from 17% in 1990, to 25% in 1996.

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



Mathematics performance will be tested again in 2000.

2. State Comparisons[†]

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

8 states had significantly higher¹ percentages of students who were at or above Proficient on NAEP:

Minnesota	34%	Montana, Wisconsin	32%
North Dakota	33%	Connecticut, Iowa, Maine, Nebraska	31%

13 states had similar¹ percentages of students who were at or above Proficient on NAEP:

Alaska	30%	Colorado	25%
Massachusetts, Michigan	28%	U.S., [*] Indiana, Maryland, Utah	24%
Vermont	27%	Missouri, New York, Wyoming	22%
Oregon, Washington	26%	Texas ²	21%

20 states had significantly lower¹ percentages of students who were at or above Proficient on NAEP:

Virginia [†]	21%	New Mexico, South Carolina,	14%
North Carolina, Rhode Island	20%	West Virginia	13%
Delaware	19%	Arkansas	12%
Arizona	18%	Alabama	7%
California, Florida	17%	Louisiana, Mississippi	6%
Georgia, Hawaii, Kentucky	16%	Guam	5%
Tennessee	15%	District of Columbia	5%

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

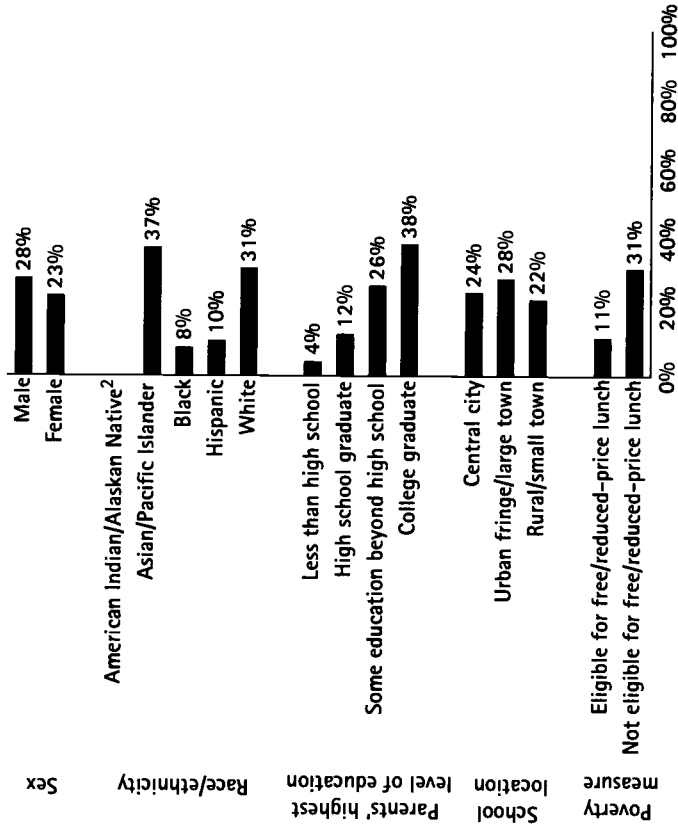
¹ See explanation on pp. 3-4.

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

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

3. Subgroup Performance

What percentages of public school 8th graders in different subgroups¹ in Colorado 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.

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

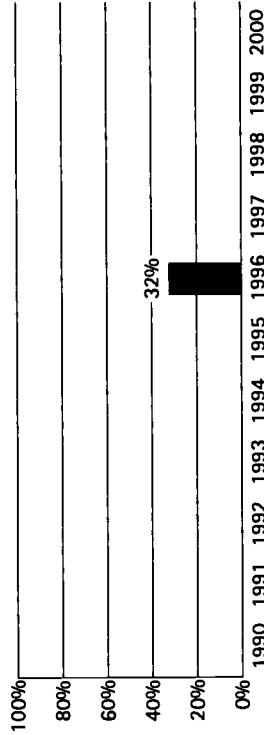
1. Improvement Over Time

Have Colorado's 8th graders improved in science achievement?

In 1996, 32% of Colorado's public school 8th graders met the Goals Panel's performance standard in science. The Goals Panel will report whether science performance has improved over time when science is assessed again in 2000.

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 science assessment



Science performance will be tested again in 2000.

2. State Comparisons[†]

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

4 states had significantly higher¹ percentages of students who were at or above Proficient on NAEP:

Maine, Montana, North Dakota	41%	Wisconsin	39%
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14 states had similar¹ percentages of students who were at or above Proficient on NAEP:

Massachusetts, Minnesota	37%	Alaska	31%
Connecticut, Iowa	36%	Indiana	30%
Nebraska	35%	U.S.*	29%
Vermont, Wyoming	34%	Missouri	28%
Colorado , Michigan, Oregon, Utah	32%	Virginia ²	27%

23 states had significantly lower¹ percentages of students who were at or above Proficient on NAEP:

New York, ² Washington ²	27%	New Mexico	19%
Rhode Island	26%	Alabama	18%
Maryland	25%	South Carolina	17%
North Carolina	24%	Hawaii	15%
Arizona, Kentucky, Texas	23%	Louisiana	13%
Arkansas, Tennessee	22%	Mississippi	12%
Delaware, Florida, Georgia,	21%	Guam	7%
West Virginia		District of Columbia	5%
California	20%		

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

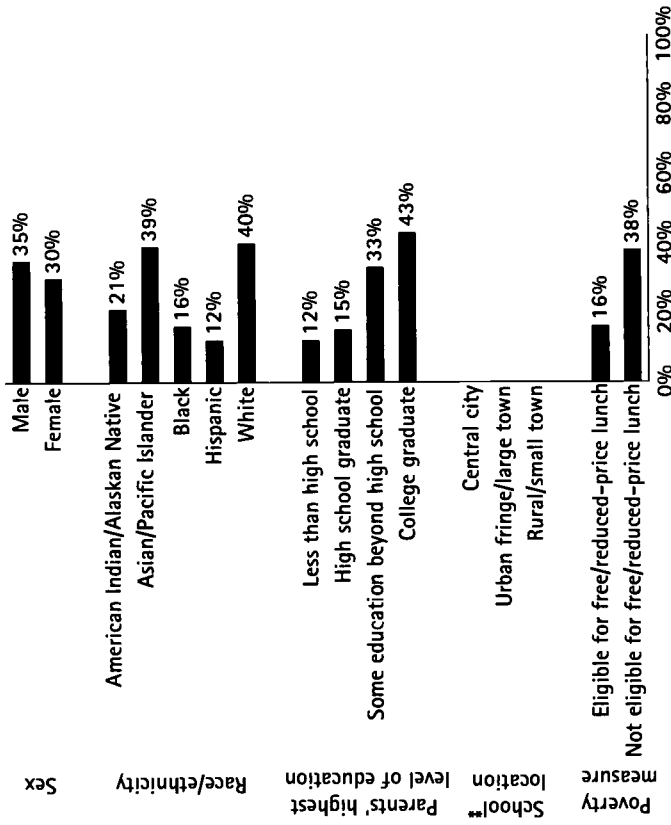
¹ See explanation on pp. 3-4.

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

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

3. Subgroup Performance

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



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

** No school location data for science in 1996.

International Comparisons

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 Colorado participated in the TIMSS mathematics assessment, how would their average performance compare to that of students who took TIMSS in these nations?

14 nations[†] would be expected to perform significantly higher:¹

(Austria)
Belgium – Flemish²
(Bulgaria)
Czech Republic
France
Hong Kong
Hungary
Japan
Korea
(Netherlands)
Singapore
Slovak Republic
(Slovenia)
(Switzerland)

17 nations[†] would be expected to perform similarly:¹

(Australia)
(Belgium – French)²
Canada
Colorado
(Denmark)
(England)
(Germany)
Iceland
Ireland
(Israel)
(Latvia – LSS)³
New Zealand
Norway
Russian Federation
(Scotland)
Sweden
(Thailand)
United States

10 nations[†] would be expected to perform significantly lower:¹

(Colombia)
Cyprus
(Greece)
Iran, Islamic Republic
(Kuwait)
(Lithuania)
Portugal
(Romania)
(South Africa)
Spain

[†] The term "nation" is used to refer to nations, states, or jurisdictions. Performance for nations is based on public school data only. Nations not meeting international guidelines are shown in parentheses.
¹ See explanation on pp. 3-4.

² The Flemish and French educational systems in Belgium participated separately.

³ Latvia is designated LSS because only Latvian-speaking schools were tested, which represent less than 65% of the population.

Colorado

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 Colorado participated in the TIMSS science assessment, how would their average performance compare to that of students who took TIMSS in these nations?

1 nation[†] would be expected to perform significantly higher:¹

Singapore

20 nations[†] would be expected to perform similarly:¹

(Australia)
(Austria)
Belgium – Flemish²
(Bulgaria)
Canada
Colorado
Czech Republic
(England)
(Germany)
Hungary
Ireland
(Israel)
Japan
Korea
(Netherlands)
New Zealand
Russian Federation
Slovak Republic
(Slovenia)
Sweden
United States

20 nations[†] would be expected to perform significantly lower:¹

(Belgium – French)²
(Colombia)
Cyprus
(Denmark)
France
(Greece)
Hong Kong
Iceland
Iran, Islamic Republic
(Kuwait)
(Latvia – LSS)³
(Lithuania)
Norway
Portugal
(Romania)
(Scotland)
(South Africa)
Spain
(Switzerland)
(Thailand)

[†] The term "nation" is used to refer to nations, states, or jurisdictions. Performance for nations is based on public school data only. Nations not meeting international guidelines are shown in parentheses.
¹ See explanation on pp. 3-4.

² The Flemish and French educational systems in Belgium participated separately.

³ Latvia is designated LSS because only Latvian-speaking schools were tested, which represent less than 65% of the population.

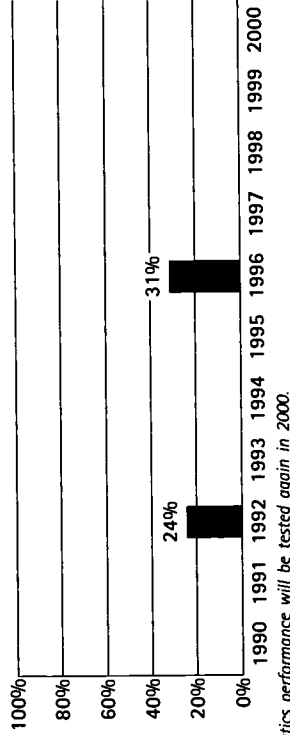
1. Improvement Over Time



Have Connecticut's 4th graders improved in mathematics achievement?
 Yes. The percentage of Connecticut's public school 4th graders who met the Goals Panel's performance standard in mathematics increased from 24% in 1992, to 31% in 1996.

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



2. State Comparisons[†]

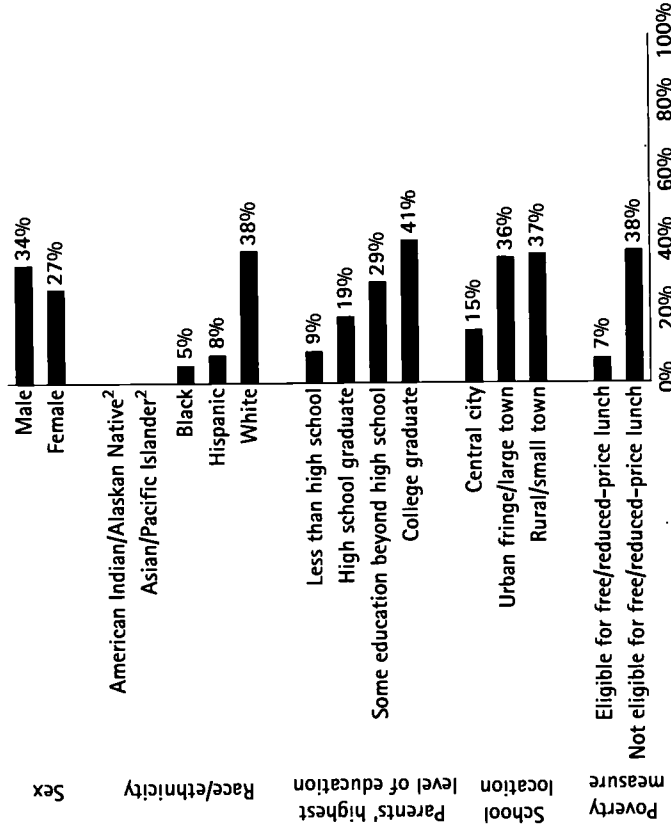
How did Connecticut compare with other states in 4th grade mathematics achievement in public schools in 1996?

5 states had similar ¹ percentages of students who were at or above Proficient on NAEP:	
Connecticut	31%
Minnesota	29%
Maine, Wisconsin	27%
New Jersey, Texas	25%

39 states had significantly lower ¹ percentages of students who were at or above Proficient on NAEP:	
Indiana, Massachusetts, Nebraska,	24%
North Dakota	23%
Michigan, Utah, Vermont	22%
Colorado, Iowa, Maryland, Montana	22%
U.S.,* Alaska, North Carolina, Oregon,	21%
Washington	20%
Missouri, New York, Pennsylvania	19%
Virginia, West Virginia, Wyoming	19%
Rhode Island, Tennessee	17%
Delaware, Hawaii, Kentucky	16%
Arizona, Florida	15%
Nevada	14%
Arkansas, Georgia, New Mexico	13%
South Carolina	12%
Alabama, California	11%
Louisiana, Mississippi	8%
District of Columbia	5%
Guam	3%

3. Subgroup Performance

What percentages of public school 4th graders in different subgroups¹ in Connecticut were at or above Proficient on the 1996 NAEP mathematics assessment?



[†] The term "state" is used to refer to the 50 states, the District of Columbia, and the territories.
¹ See explanation on pp. 3-4.
² Figure shown for the U.S. includes both public and nonpublic school data.

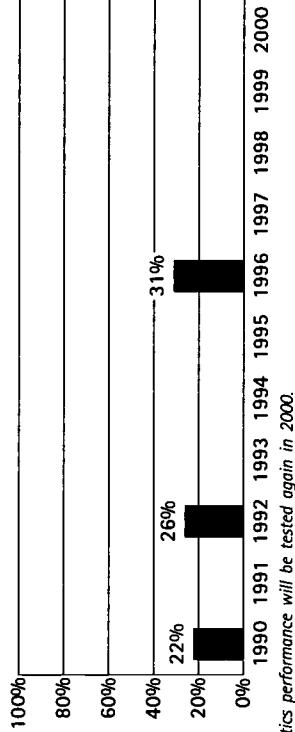
1. Improvement Over Time

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

Yes. The percentage of Connecticut's public school 8th graders who met the Goals Panel's performance standard in mathematics increased from 22% in 1990, to 31% in 1996.

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



Mathematics performance will be tested again in 2000.

2. State Comparisons[†]

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

12 states had similar¹ percentages of students who were at or above Proficient on NAEP:

Minnesota	34%	Alaska	30%
North Dakota	33%	Massachusetts, Michigan	28%
Montana, Wisconsin	32%	Vermont	27%
Connecticut , Iowa, Maine, Nebraska	31%	Oregon ²	26%

29 states had significantly lower¹ percentages of students who were at or above Proficient on NAEP:

Washington ²	26%	Georgia, Hawaii, Kentucky	16%
Colorado	25%	Tennessee	15%
U.S. [*] Indiana, Maryland, Utah	24%	New Mexico, South Carolina,	14%
Missouri, New York, Wyoming	22%	West Virginia	13%
Texas, Virginia	21%	Arkansas	12%
North Carolina, Rhode Island	20%	Alabama	7%
Delaware	19%	Louisiana, Mississippi	6%
Arizona	18%	Guam	5%
California, Florida	17%	District of Columbia	5%

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

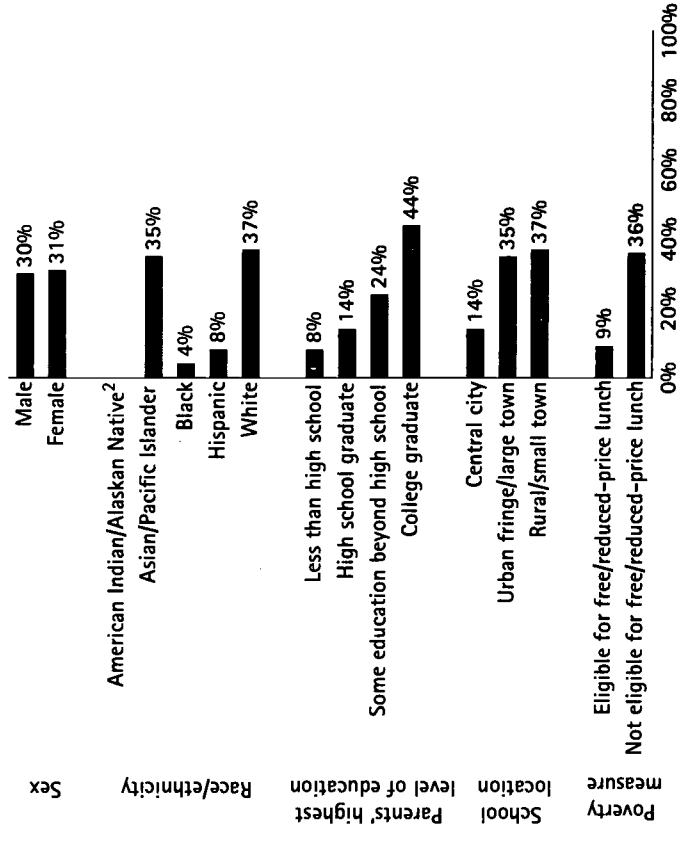
¹ See explanation on pp. 3-4.

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

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

3. Subgroup Performance

What percentages of public school 8th graders in different subgroups¹ in Connecticut 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.

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

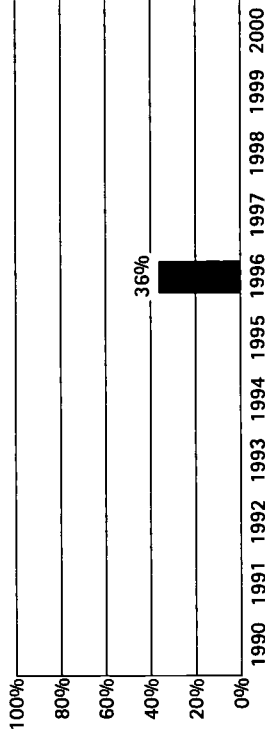
1. Improvement Over Time

Have Connecticut's 8th graders improved in science achievement?

In 1996, 36% of Connecticut's public school 8th graders met the Goals Panel's performance standard in science. The Goals Panel will report whether science performance has improved over time when science is assessed again in 2000.

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 science assessment



Science performance will be tested again in 2000.

2. State Comparisons[†]

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

15 states had similar¹ percentages of students who were at or above Proficient on NAEP:

Maine, Montana, North Dakota	41%	Nebraska	35%
Wisconsin	39%	Vermont, Wyoming	34%
Massachusetts, Minnesota	37%	Colorado, Michigan, Oregon, Utah	32%
Connecticut, Iowa	36%	Alaska	31%

26 states had significantly lower¹ percentages of students who were at or above Proficient on NAEP:

Indiana	30%	California	20%
U.S.*	29%	New Mexico	19%
Missouri	28%	Alabama	18%
New York, Virginia, Washington	27%	South Carolina	17%
Rhode Island	26%	Hawaii	15%
Maryland	25%	Louisiana	13%
North Carolina	24%	Mississippi	12%
Arizona, Kentucky, Texas	24%	Guam	7%
Arkansas, Tennessee	22%	District of Columbia	5%
Delaware, Florida, Georgia, West Virginia	21%		

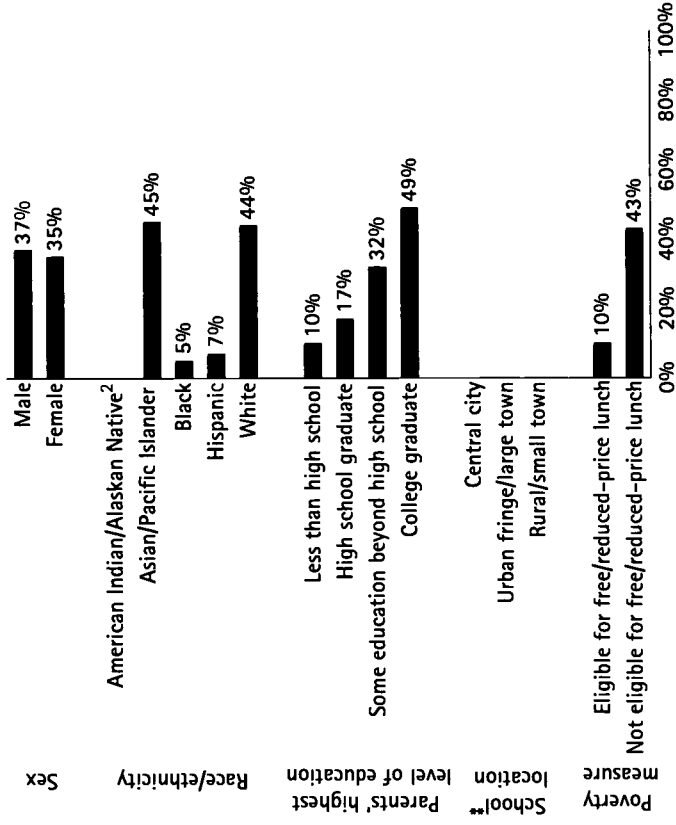
[†] The term "state" is used to refer to the 50 states, the District of Columbia, and the territories.

¹ See explanation on pp. 3-4.

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

3. Subgroup Performance

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



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

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

[‡] No school location data for science in 1996.

International Comparisons

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 Connecticut participated in the TIMSS mathematics assessment, how would their average performance compare to that of students who took TIMSS in these nations?

8 nations[†] would be expected to perform significantly higher:¹

Belgium – Flemish²
Czech Republic
Hong Kong
Japan
Korea
Singapore
Slovak Republic
(Switzerland)

21 nations[†] would be expected to perform similarly:¹

(Australia)
(Austria)
(Belgium – French)²
(Bulgaria)
Canada
Connecticut
(Denmark)
(England)
France
(Germany)
Hungary
Ireland
(Israel)
(Netherlands)
New Zealand
Norway
Russian Federation
(Scotland)
(Slovenia)
Sweden
(Thailand)
United States

12 nations[†] would be expected to perform significantly lower:¹

(Colombia)
Cyprus
(Greece)
Iceland
Iran, Islamic Republic
(Kuwait)
(Latvia – LSS)³
(Lithuania)
Portugal
(Romania)
(South Africa)
Spain

[†] The term "nation" is used to refer to nations, states, or jurisdictions. Performance for nations is based on public school data only. Nations not meeting international guidelines are shown in parentheses.

¹ See explanation on pp. 3–4.

² The Flemish and French educational systems in Belgium participated separately.

³ Latvia is designated LSS because only Latvian-speaking schools were tested, which represent less than 65% of the population.

Connecticut

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 Connecticut participated in the TIMSS science assessment, how would their average performance compare to that of students who took TIMSS in these nations?

1 nation[†] would be expected to perform significantly higher:¹

Singapore

20 nations[†] would be expected to perform similarly:¹

(Australia)
(Austria)
Belgium – Flemish²
(Bulgaria)
Canada
Connecticut
Czech Republic
(England)
(Germany)
Hungary
Ireland
(Israel)
Japan
Korea
(Netherlands)
New Zealand
Russian Federation
Slovak Republic
(Slovenia)
Sweden
United States

20 nations[†] would be expected to perform significantly lower:¹

(Belgium – French)²
(Colombia)
Cyprus
(Denmark)
France
(Greece)
Hong Kong
Iceland
Iran, Islamic Republic
(Kuwait)
(Latvia – LSS)³
(Lithuania)
Norway
Portugal
(Romania)
(Scotland)
(South Africa)
Spain
(Switzerland)
(Thailand)

[†] The term "nation" is used to refer to nations, states, or jurisdictions. Performance for nations is based on public school data only. Nations not meeting international guidelines are shown in parentheses.

¹ See explanation on pp. 3–4.

² The Flemish and French educational systems in Belgium participated separately.

³ Latvia is designated LSS because only Latvian-speaking schools were tested, which represent less than 65% of the population.

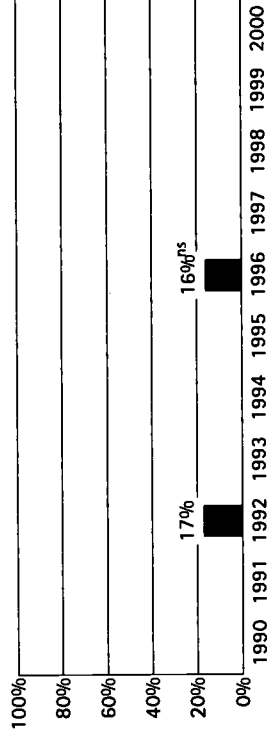
1. Improvement Over Time

Have Delaware'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 Delaware compare with other states in 4th grade mathematics achievement in public schools in 1996?

23 states had significantly higher[‡] percentages of students who were at or above Proficient on NAEP:

Connecticut	31%	Michigan, Utah, Vermont	23%
Minnesota	29%	Colorado, Iowa, Maryland, Montana	22%
Maine, Wisconsin	27%	U.S.* , Alaska, North Carolina, Oregon, Washington	21%
New Jersey, Texas	25%	Missouri, [‡] New York [‡]	20%
Indiana, Massachusetts, Nebraska, North Dakota	24%		

14 states had similar[†] percentages of students who were at or above Proficient on NAEP:

Pennsylvania [‡]	20%	Arizona, Florida	15%
Virginia, West Virginia, Wyoming	19%	Nevada	14%
Rhode Island, Tennessee	17%	Arkansas, Georgia, New Mexico	13%
Delaware, Hawaii, Kentucky	16%		

7 states had significantly lower[†] percentages of students who were at or above Proficient on NAEP:

South Carolina	12%	District of Columbia	5%
Alabama, California	11%	Guam	3%
Louisiana, Mississippi	8%		

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

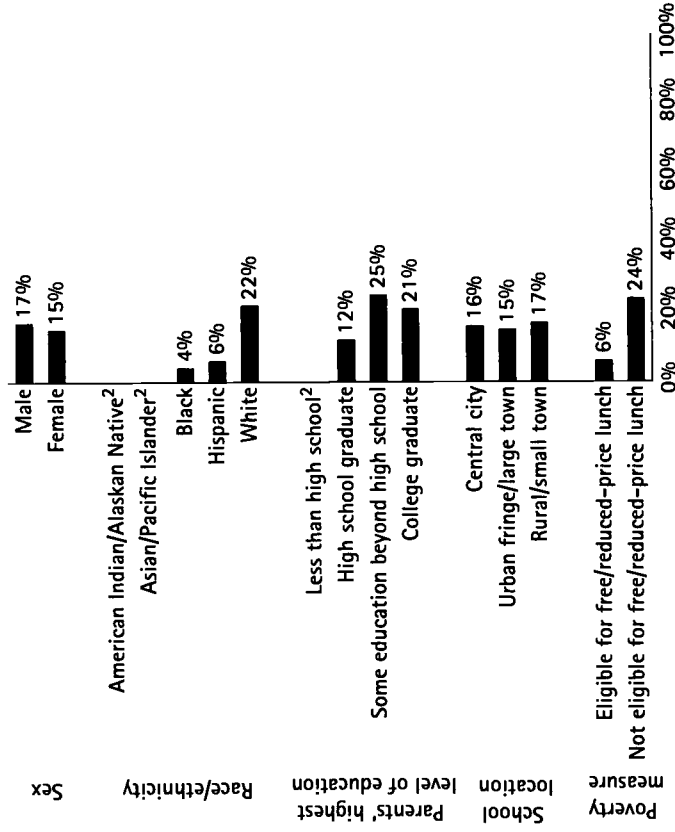
[‡] See explanation on pp. 3-4.

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

[•] 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 subgroups¹ in Delaware 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.

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

1. Improvement Over Time

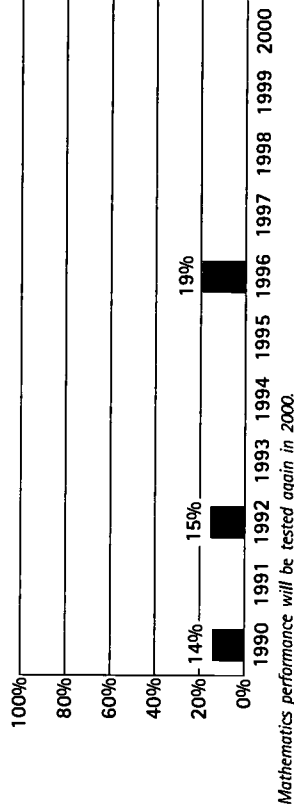


Have Delaware's 8th graders improved in mathematics achievement?

Yes. The percentage of Delaware's public school 8th graders who met the Goals Panel's performance standard in mathematics increased from 14% in 1990, to 19% in 1996.

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



2. State Comparisons*

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

17 states had significantly higher¹ percentages of students who were at or above Proficient on NAEP:

Minnesota	34%	Massachusetts, Michigan	28%
North Dakota	33%	Vermont	27%
Montana, Wisconsin	32%	Oregon, Washington	26%
Connecticut, Iowa, Maine, Nebraska	31%	Colorado	25%
Alaska	30%	U.S., ² Indiana, ² Utah ²	24%

13 states had similar¹ percentages of students who were at or above Proficient on NAEP:

Maryland ²	24%	Delaware	19%
Missouri, New York, Wyoming	22%	Arizona	18%
Texas, Virginia	21%	California, Florida	17%
North Carolina, Rhode Island	20%	Georgia, ² Kentucky ²	16%

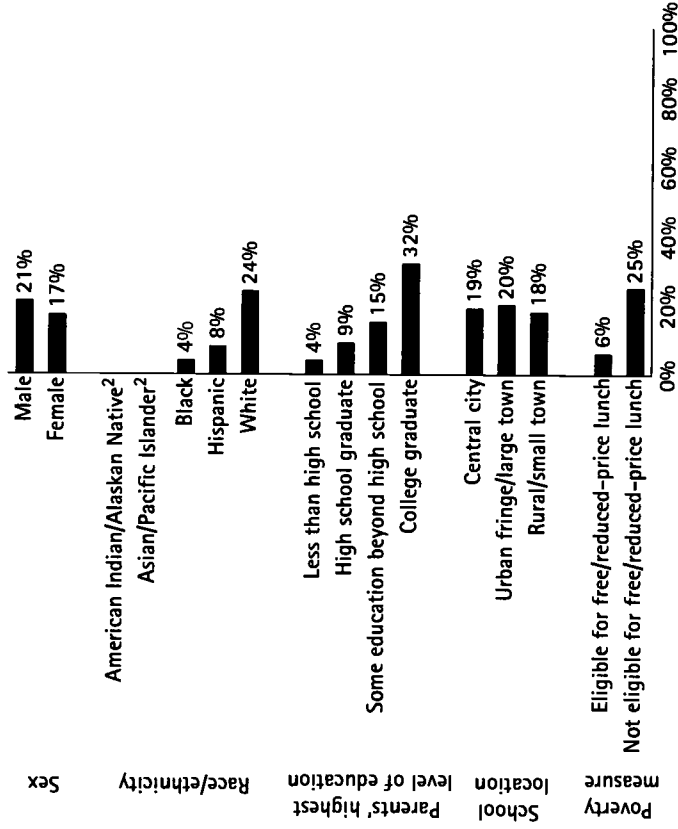
11 states had significantly lower¹ percentages of students who were at or above Proficient on NAEP:

Hawaii ²	16%	Alabama	12%
Tennessee	15%	Louisiana, Mississippi	7%
New Mexico, South Carolina,	14%	Guam	6%
West Virginia		District of Columbia	5%
Arkansas	13%		

† The term "state" is used to refer to the 50 states, the District of Columbia, and the territories.
 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.
 * Figure shown for the U.S. includes both public and nonpublic school data.

3. Subgroup Performance

What percentages of public school 8th graders in different subgroups¹ in Delaware 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.
 2 Characteristics of the sample do not permit a reliable estimate.

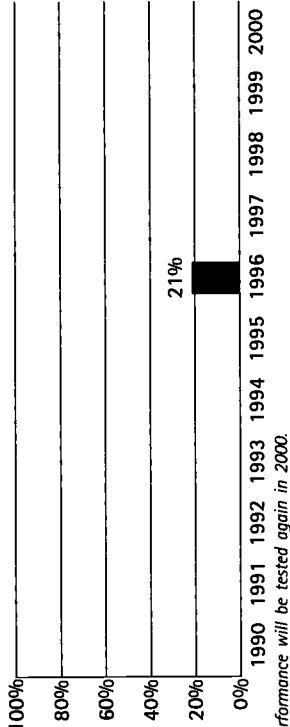
1. Improvement Over Time

Have Delaware's 8th graders improved in science achievement?

In 1996, 21% of Delaware's public school 8th graders met the Goals Panel's performance standard in science. The Goals Panel will report whether science performance has improved over time when science is assessed again in 2000.

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 science assessment



2. State Comparisons[†]

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

22 states had significantly higher¹ percentages of students who were at or above Proficient on NAEP:

Maine, Montana, North Dakota	41%	Alaska	31%
Wisconsin	39%	Indiana	30%
Massachusetts, Minnesota	37%	U.S.*	29%
Connecticut, Iowa	36%	Missouri	28%
Nebraska	35%	New York, Virginia, Washington	27%
Vermont, Wyoming	34%	Rhode Island	26%
Colorado, Michigan, Oregon, Utah	32%		

13 states had similar¹ percentages of students who were at or above Proficient on NAEP:

Maryland	25%	California	20%
North Carolina	24%	New Mexico	19%
Arizona, Kentucky, Texas	23%	Alabama	18%
Arkansas, Tennessee	22%		
Delaware, Florida, Georgia,	21%		
West Virginia			

6 states had significantly lower¹ percentages of students who were at or above Proficient on NAEP:

South Carolina	17%	Mississippi	12%
Hawaii	15%	Guam	7%
Louisiana	13%	District of Columbia	5%

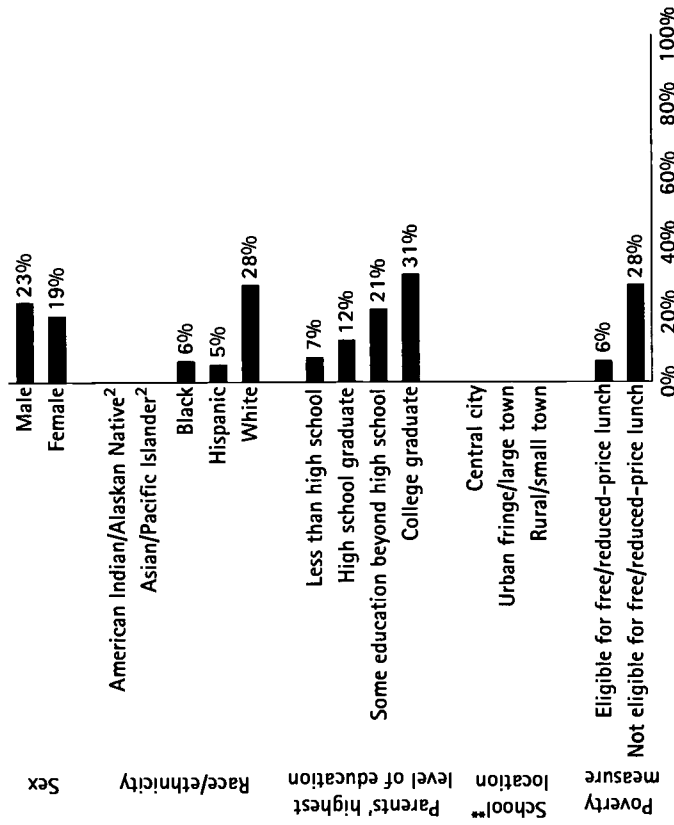
[†] The term "state" is used to refer to the 50 states, the District of Columbia, and the territories.

¹ See explanation on pp. 3-4.

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

3. Subgroup Performance

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



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

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

** No school location data for science in 1996.

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 Delaware participated in the TIMSS mathematics assessment, how would their average performance compare to that of students who took TIMSS in these nations?

22 nations[†] would be expected to perform significantly higher:¹

(Australia)
(Austria)
Belgium – Flemish²
(Belgium – French)²
(Bulgaria)
Canada
Czech Republic
France
Hong Kong
Hungary
Ireland
(Israel)
Japan
Korea
(Netherlands)
Russian Federation
Singapore
Slovak Republic
(Slovenia)
Sweden
(Switzerland)
(Thailand)

14 nations[†] would be expected to perform similarly:¹

Cyprus
Delaware
(Denmark)
(England)
(Germany)
(Greece)
Iceland
(Latvia – LSS)³
(Lithuania)
New Zealand
Norway
(Romania)
(Scotland)
Spain
United States

5 nations[†] would be expected to perform significantly lower:¹

(Colombia)
Iran, Islamic Republic
(Kuwait)
Portugal
(South Africa)

[†] The term "nation" is used to refer to nations, states, or jurisdictions. Performance for nations is based on public school data only. Nations not meeting international guidelines are shown in parentheses.

¹ See explanation on pp. 3-4.

² The Flemish and French educational systems in Belgium participated separately.

³ Latvia is designated LSS because only Latvian-speaking schools were tested, which represent less than 65% of the population.

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 Delaware participated in the TIMSS science assessment, how would their average performance compare to that of students who took TIMSS in these nations?

16 nations[†] would be expected to perform significantly higher:¹

(Australia)
(Austria)
Belgium – Flemish²
(Bulgaria)
Czech Republic
(England)
Hungary
Ireland
Japan
Korea
(Netherlands)
Russian Federation
Singapore
Slovak Republic
(Slovenia)
Sweden

15 nations[†] would be expected to perform similarly:¹

Canada
Delaware
France
(Germany)
(Greece)
Hong Kong
Iceland
(Israel)
New Zealand
Norway
(Romania)
(Scotland)
Spain
(Switzerland)
(Thailand)
United States

10 nations[†] would be expected to perform significantly lower:¹

(Belgium – French)²
(Colombia)
Cyprus
(Denmark)
Iran, Islamic Republic
(Kuwait)
(Latvia – LSS)³
(Lithuania)
Portugal
(South Africa)

[†] The term "nation" is used to refer to nations, states, or jurisdictions. Performance for nations is based on public school data only. Nations not meeting international guidelines are shown in parentheses.

¹ See explanation on pp. 3-4.

² The Flemish and French educational systems in Belgium participated separately.

³ Latvia is designated LSS because only Latvian-speaking schools were tested, which represent less than 65% of the population.

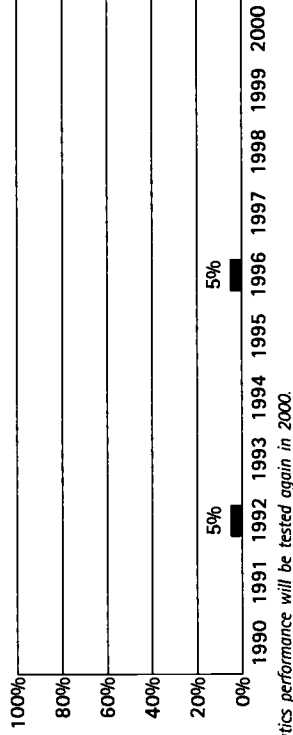
1. Improvement Over Time

Have the District of Columbia'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



Mathematics performance will be tested again in 2000.

2. State Comparisons[†]

How did the District of Columbia compare with other states in 4th grade mathematics achievement in public schools in 1996?

43 states had significantly higher¹ percentages of students who were at or above Proficient on NAEP:

Connecticut	31%	Missouri, New York, Pennsylvania	20%
Minnesota	29%	Virginia, West Virginia, Wyoming	19%
Maine, Wisconsin	27%	Rhode Island, Tennessee	17%
New Jersey, Texas	25%	Delaware, Hawaii, Kentucky	16%
Indiana, Massachusetts, Nebraska,	24%	Arizona, Florida	15%
North Dakota		Nevada	14%
Michigan, Utah, Vermont	23%	Arkansas, Georgia, New Mexico	13%
Colorado, Iowa, Maryland, Montana	22%	South Carolina	12%
U.S.,* Alaska, North Carolina, Oregon,	21%	Alabama, California	11%
Washington		Louisiana, Mississippi	8%

No state had a similar¹ percentage of students who were at or above Proficient on NAEP:

District of Columbia 5%

1 state had a significantly lower¹ percentage of students who were at or above Proficient on NAEP:

Guam 3%

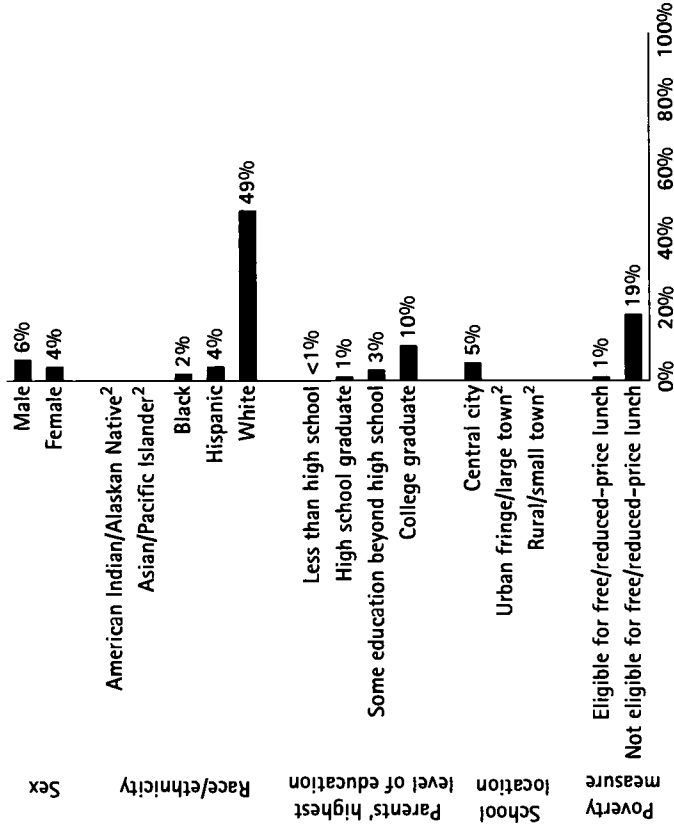
[†] The term "state" is used to refer to the 50 states, the District of Columbia, and the territories.

¹ See explanation on pp. 3-4.

* 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 subgroups¹ in the District of Columbia 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.

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

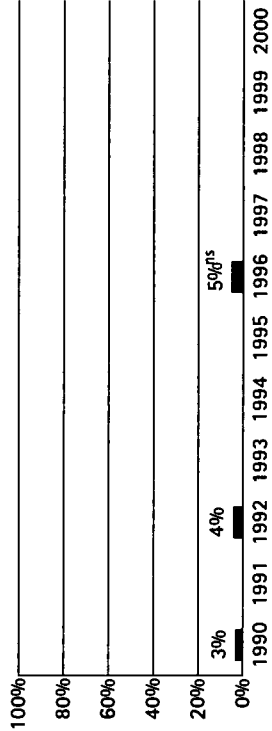
1. Improvement Over Time

Have the District of Columbia's 8th graders improved in mathematics achievement?

Not yet. Between 1990 and 1996, 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 the District of Columbia compare with other states in 8th grade mathematics achievement in public schools in 1996?

38 states had significantly higher¹ percentages of students who were at or above Proficient on NAEP:

Minnesota	34%	Texas, Virginia	21%
North Dakota	33%	North Carolina, Rhode Island	20%
Montana, Wisconsin	32%	Delaware	19%
Connecticut, Iowa, Maine, Nebraska	31%	Arizona	18%
Alaska	30%	California, Florida	17%
Massachusetts, Michigan	28%	Georgia, Hawaii, Kentucky	16%
Vermont	27%	Tennessee	15%
Oregon, Washington	26%	New Mexico, South Carolina,	14%
Colorado	25%	West Virginia	13%
U.S.* , Indiana, Maryland, Utah	24%	Arkansas	12%
Missouri, New York, Wyoming	22%	Alabama	12%

3 states had similar¹ percentages of students who were at or above Proficient on NAEP:

Louisiana, Mississippi	7%	District of Columbia	5%
Guam	6%		

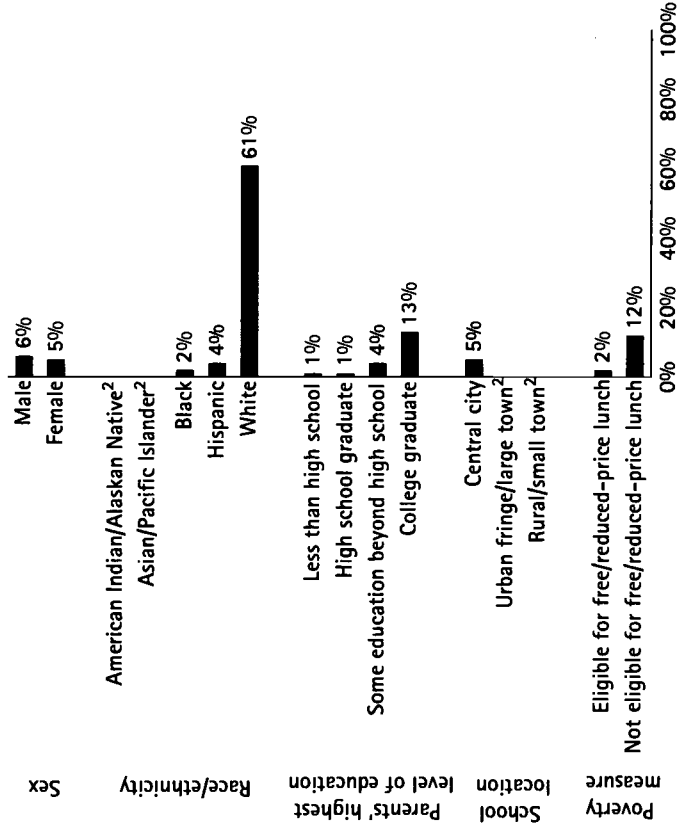
[†] The term "state" is used to refer to the 50 states, the District of Columbia, and the territories.

¹ See explanation on pp. 3-4.

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

3. Subgroup Performance

What percentages of public school 8th graders in different subgroups¹ in the District of Columbia 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.

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

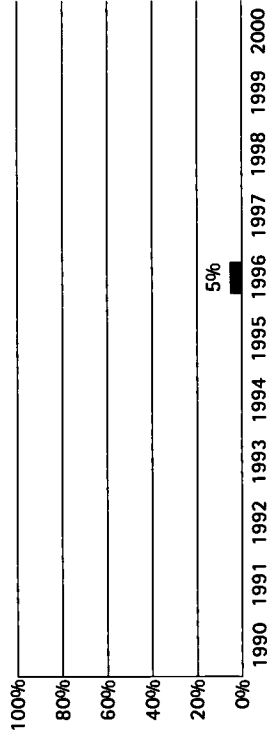
1. Improvement Over Time

Have the District of Columbia's 8th graders improved in science achievement?

In 1996, 5% of the District of Columbia's public school 8th graders met the Goals Panel's performance standard in science. The Goals Panel will report whether science performance has improved over time when science is assessed again in 2000.

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 science assessment



Science performance will be tested again in 2000.

2. State Comparisons*

How did the District of Columbia compare with other states in 8th grade science achievement in public schools in 1996?

40 states had significantly higher¹ percentages of students who were at or above Proficient on NAEP:

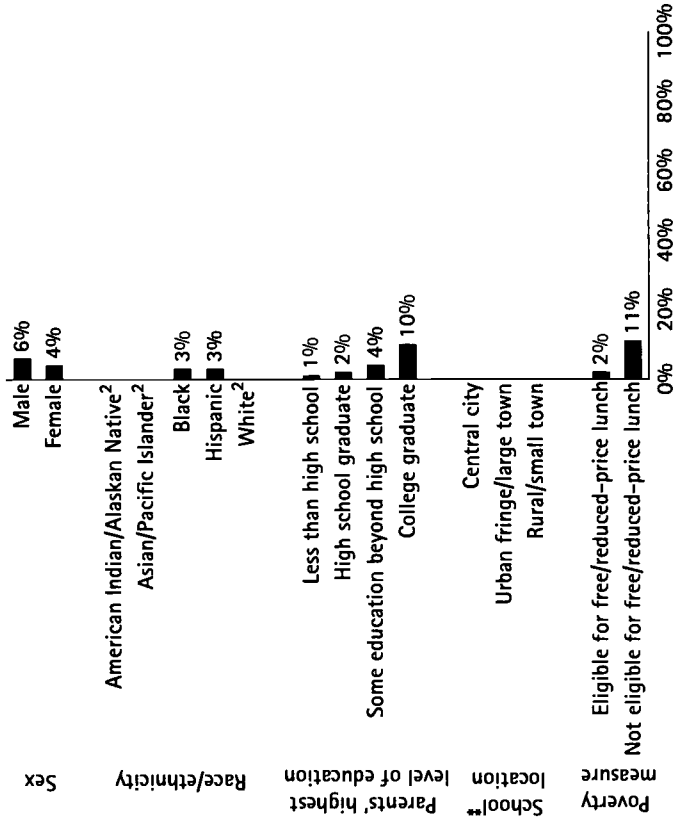
Maine, Montana, North Dakota	41%	Maryland	25%
Wisconsin	39%	North Carolina	24%
Massachusetts, Minnesota	37%	Arizona, Kentucky, Texas	23%
Connecticut, Iowa	36%	Arkansas, Tennessee	22%
Nebraska	35%	Delaware, Florida, Georgia, Nebraska	21%
Vermont, Wyoming	34%	West Virginia	20%
Colorado, Michigan, Oregon, Utah	32%	California	19%
Alaska	31%	New Mexico	18%
Indiana	30%	Alabama	17%
U.S.:	29%	South Carolina	17%
Missouri	28%	Hawaii	15%
New York, Virginia, Washington	27%	Louisiana	13%
Rhode Island	26%	Mississippi	12%

1 state had a similar¹ percentage of students who were at or above Proficient on NAEP:

Guam	7%	District of Columbia	5%
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3. Subgroup Performance

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



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

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

** No school location data for science in 1996.

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

¹ See explanation on pp. 3-4.

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

International Comparisons

District of Columbia

Mathematics Grade 8

Forty-one nations¹ participated in the Third International Mathematics and Science Study (TIMSS) in 8th grade mathematics in 1995. If public school 8th graders in the District of Columbia participated in the TIMSS mathematics assessment, how would their average performance compare to that of students who took TIMSS in these nations?

38 nations¹ would be expected to perform significantly higher:¹

(Australia)	Japan
(Austria)	Korea
Belgium – Flemish ²	(Latvia – LSS) ³
(Belgium – French) ²	(Lithuania)
(Bulgaria)	(Netherlands)
Canada	New Zealand
Cyprus	Norway
Czech Republic	Portugal
(Denmark)	(Romania)
(England)	Russian Federation
France	(Scotland)
(Germany)	Singapore
(Greece)	Slovak Republic
Hong Kong	(Slovenia)
Hungary	Spain
Iceland	Sweden
Iran, Islamic Republic	(Switzerland)
Ireland	(Thailand)
(Israel)	United States

2 nations¹ would be expected to perform similarly:¹

(Colombia)
District of Columbia

(Kuwait)

1 nation¹ would be expected to perform significantly lower:¹

(South Africa)

[†] The term "nation" is used to refer to nations, states, or jurisdictions. Performance for nations is based on public school data only. Nations not meeting international guidelines are shown in parentheses.

¹ See explanation on pp. 3-4.

² The Flemish and French educational systems in Belgium participated separately.

³ Latvia is designated LSS because only Latvian-speaking schools were tested, which represent less than 65% of the population.

Science Grade 8

Forty-one nations¹ participated in the Third International Mathematics and Science Study (TIMSS) in 8th grade science in 1995. If public school 8th graders in the District of Columbia participated in the TIMSS science assessment, how would their average performance compare to that of students who took TIMSS in these nations?

38 nations¹ would be expected to perform significantly higher:¹

(Australia)	Japan
(Austria)	Korea
Belgium – Flemish ²	(Latvia – LSS) ³
(Belgium – French) ²	(Lithuania)
(Bulgaria)	(Netherlands)
Canada	New Zealand
Cyprus	Norway
Czech Republic	Portugal
(Denmark)	(Romania)
(England)	Russian Federation
France	(Scotland)
(Germany)	Singapore
(Greece)	Slovak Republic
Hong Kong	(Slovenia)
Hungary	Spain
Iceland	Sweden
Iran, Islamic Republic	(Switzerland)
Ireland	(Thailand)
(Israel)	United States

2 nations¹ would be expected to perform similarly:¹

(Colombia)
District of Columbia

(Kuwait)

1 nation¹ would be expected to perform significantly lower:¹

(South Africa)

[†] The term "nation" is used to refer to nations, states, or jurisdictions. Performance for nations is based on public school data only. Nations not meeting international guidelines are shown in parentheses.

¹ See explanation on pp. 3-4.

² The Flemish and French educational systems in Belgium participated separately.

³ Latvia is designated LSS because only Latvian-speaking schools were tested, which represent less than 65% of the population.

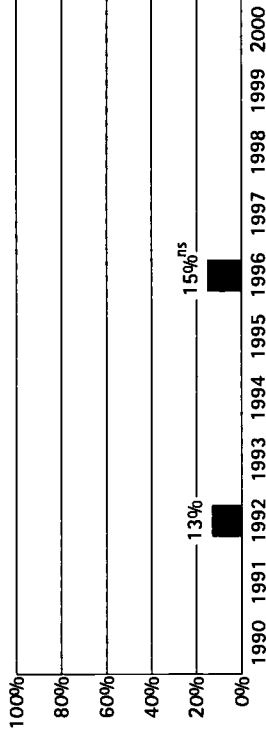
1. Improvement Over Time

Have Florida'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 Florida compare with other states in 4th grade mathematics achievement in public schools in 1996?

26 states had significantly higher¹ percentages of students who were at or above Proficient on NAEP:

Connecticut	31%	Michigan, Utah, Vermont	23%
Minnesota	29%	Colorado, Iowa, Maryland, Montana	22%
Maine, Wisconsin	27%	U.S.,² Alaska, North Carolina, Oregon,	21%
New Jersey, Texas	25%	Washington	
Indiana, Massachusetts, Nebraska,	24%	Missouri, New York, Pennsylvania	20%
North Dakota		West Virginia, ³ Wyoming ³	19%

12 states had similar¹ percentages of students who were at or above Proficient on NAEP:

Virginia [†]	19%	Nevada	14%
Rhode Island, Tennessee	17%	Arkansas, Georgia, New Mexico	13%
Delaware, Hawaii, Kentucky	16%	South Carolina	12%
Florida, Arizona	15%		

6 states had significantly lower¹ percentages of students who were at or above Proficient on NAEP:

Alabama, California	11%	District of Columbia	5%
Louisiana, Mississippi	8%	Guam	3%

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

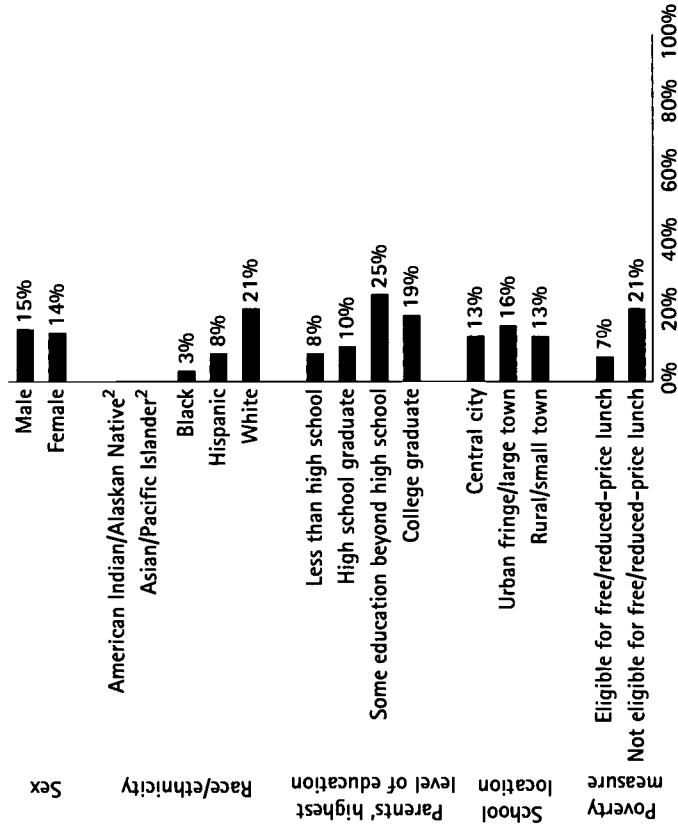
¹ See explanation on pp. 3-4.

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

³ 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 subgroups¹ in Florida 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.

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

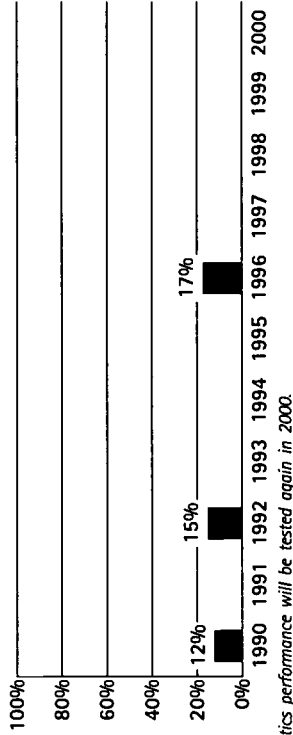
1. Improvement Over Time

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

Yes. The percentage of Florida's public school 8th graders who met the Goals Panel's performance standard in mathematics increased from 12% in 1990, to 17% in 1996.

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



Mathematics performance will be tested again in 2000.

2. State Comparisons[†]

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

22 states had significantly higher¹ percentages of students who were at or above Proficient on NAEP:

Minnesota	27%
North Dakota	26%
Montana, Wisconsin	25%
Connecticut, Iowa, Maine, Nebraska	24%
Alaska	22%
Massachusetts, Michigan	21%
Vermont	27%
Oregon, Washington	26%
Colorado	25%
U.S., ² Indiana, Maryland, Utah	24%
Missouri, New York, Wyoming	22%
Virginia ²	21%

13 states had similar¹ percentages of students who were at or above Proficient on NAEP:

Texas ²	16%
North Carolina, Rhode Island	15%
Delaware	14%
Arizona	18%
Florida, California	17%
Georgia, Hawaii, Kentucky	16%
Tennessee	15%
New Mexico, South Carolina, West Virginia	14%

6 states had significantly lower¹ percentages of students who were at or above Proficient on NAEP:

Arkansas	6%
Alabama	5%
Louisiana, Mississippi	7%
Guam	13%
District of Columbia	12%

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

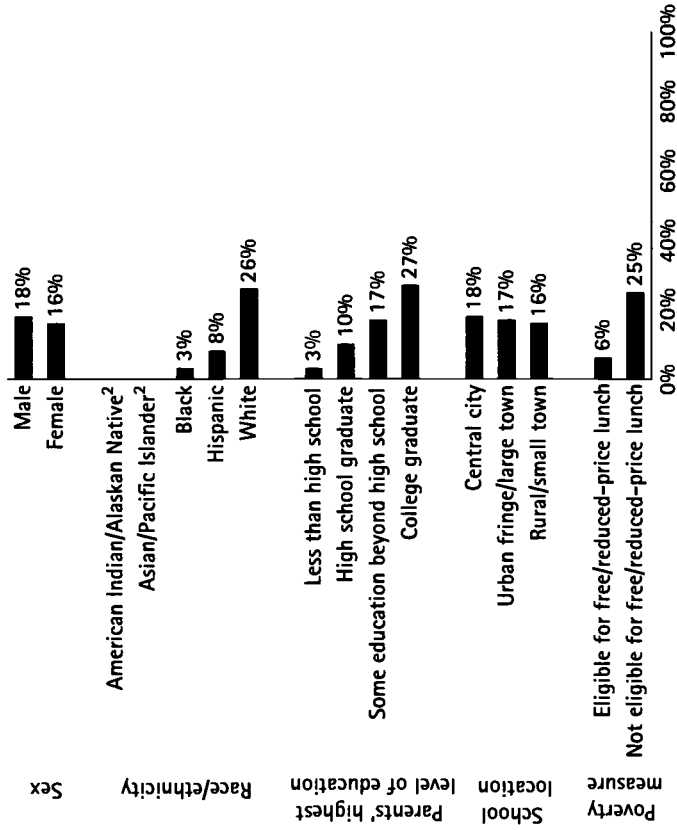
¹ See explanation on pp. 3-4.

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

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

3. Subgroup Performance

What percentages of public school 8th graders in different subgroups¹ in Florida 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.

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

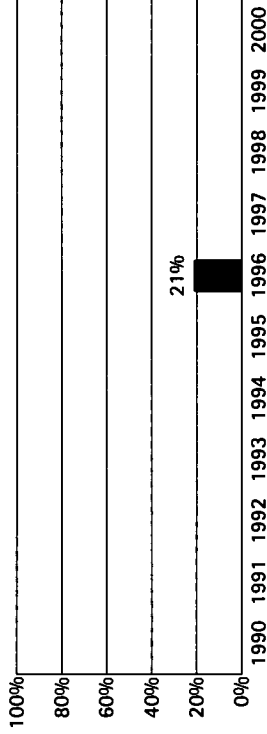
1. Improvement Over Time

Have Florida's 8th graders improved in science achievement?

In 1996, 21% of Florida's public school 8th graders met the Goals Panel's performance standard in science. The Goals Panel will report whether science performance has improved over time when science is assessed again in 2000.

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 science assessment



Science performance will be tested again in 2000.

2. State Comparisons[†]

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

22 states had significantly higher¹ percentages of students who were at or above Proficient on NAEP:

Maine, Montana, North Dakota	41%	Alaska	31%
Wisconsin	39%	Indiana	30%
Massachusetts, Minnesota	37%	U.S.*	29%
Connecticut, Iowa	36%	Missouri	28%
Nebraska	35%	New York, Virginia, Washington	27%
Vermont, Wyoming	34%	Rhode Island	26%
Colorado, Michigan, Oregon, Utah	32%		

14 states had similar¹ percentages of students who were at or above Proficient on NAEP:

Maryland	25%	California	20%
North Carolina	24%	New Mexico	19%
Arizona, Kentucky, Texas	23%	Alabama	18%
Arkansas, Tennessee	22%	South Carolina	17%
Florida , Delaware, Georgia, West Virginia	21%		

5 states had significantly lower¹ percentages of students who were at or above Proficient on NAEP:

Hawaii	15%	Guam	7%
Louisiana	13%	District of Columbia	5%
Mississippi	12%		

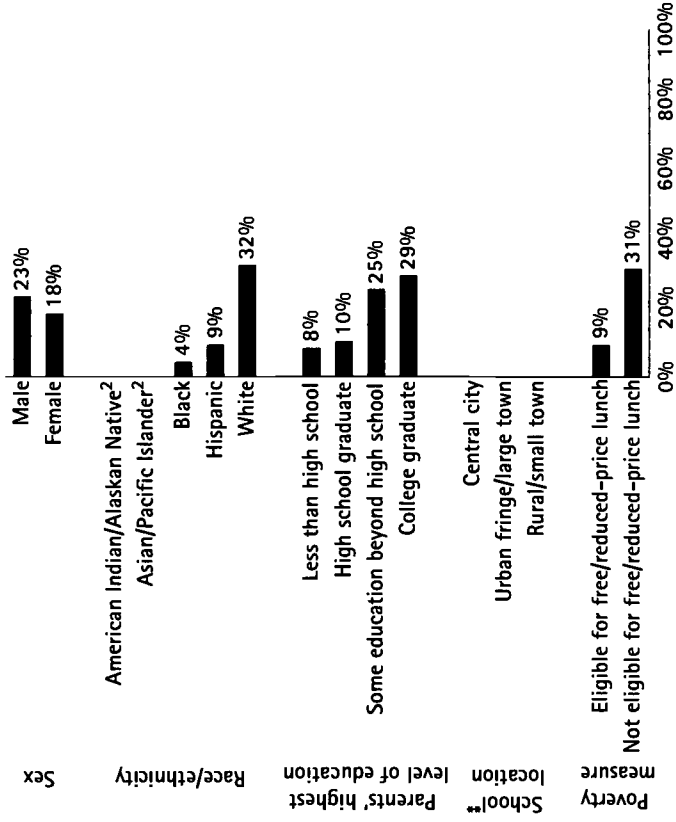
[†] The term "state" is used to refer to the 50 states, the District of Columbia, and the territories.

¹ See explanation on pp. 3-4.

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

3. Subgroup Performance

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



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

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

** No school location data for science in 1996.

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 Florida participated in the TIMSS mathematics assessment, how would their average performance compare to that of students who took TIMSS in these nations?

22 nations[†] would be expected to perform significantly higher:¹

(Australia)
(Austria)
Belgium – Flemish²
(Belgium – French)²
(Bulgaria)
Canada
Czech Republic
France
Hong Kong
Hungary
Ireland
(Israel)
Japan
Korea
(Netherlands)
Russian Federation
Singapore
Slovak Republic
(Slovenia)
Sweden
(Switzerland)
(Thailand)

14 nations[†] would be expected to perform similarly:¹

Cyprus
(Denmark)
(England)
Florida
(Germany)
(Greece)
Iceland
(Latvia – LSS)³
(Lithuania)
New Zealand
Norway
(Romania)
(Scotland)
Spain
United States

5 nations[†] would be expected to perform significantly lower:¹

(Colombia)
Iran, Islamic Republic
(Kuwait)
Portugal
(South Africa)

[†] The term "nation" is used to refer to nations, states, or jurisdictions. Performance for nations is based on public school data only. Nations not meeting international guidelines are shown in parentheses.

¹ See explanation on pp. 3-4.

² The Flemish and French educational systems in Belgium participated separately.

³ Latvia is designated LSS because only Latvian-speaking schools were tested, which represent less than 65% of the population.

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 Florida participated in the TIMSS science assessment, how would their average performance compare to that of students who took TIMSS in these nations?

13 nations[†] would be expected to perform significantly higher:¹

(Australia)
(Austria)
Belgium – Flemish²
(Bulgaria)
Czech Republic
(England)
Hungary
Japan
Korea
(Netherlands)
Singapore
Slovak Republic
(Slovenia)

18 nations[†] would be expected to perform similarly:¹

Canada
Florida
France
(Germany)
(Greece)
Hong Kong
Iceland
Ireland
(Israel)
New Zealand
Norway
(Romania)
Russian Federation
(Scotland)
Spain
Sweden
(Switzerland)
(Thailand)
United States

10 nations[†] would be expected to perform significantly lower:¹

(Belgium – French)²
(Colombia)
Cyprus
(Denmark)
Iran, Islamic Republic
(Kuwait)
(Latvia – LSS)³
(Lithuania)
Portugal
(South Africa)

[†] The term "nation" is used to refer to nations, states, or jurisdictions. Performance for nations is based on public school data only. Nations not meeting international guidelines are shown in parentheses.

¹ See explanation on pp. 3-4.

² The Flemish and French educational systems in Belgium participated separately.

³ Latvia is designated LSS because only Latvian-speaking schools were tested, which represent less than 65% of the population.

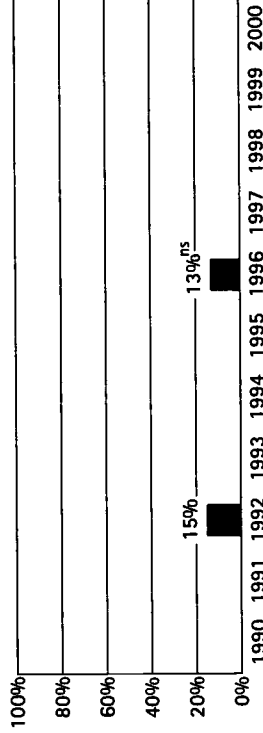
1. Improvement Over Time

Have Georgia'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 Georgia compare with other states in 4th grade mathematics achievement in public schools in 1996?

28 states had significantly higher¹ percentages of students who were at or above Proficient on NAEP:

Connecticut	31%	Colorado, Iowa, Maryland, Montana	22%
Minnesota	29%	U.S.* Alaska, North Carolina, Oregon,	21%
Maine, Wisconsin	27%	Washington	
New Jersey, Texas	25%	Missouri, New York, Pennsylvania	20%
Indiana, Massachusetts, Nebraska,	24%	Virginia, West Virginia, Wyoming	19%
North Dakota		Rhode Island ²	17%
Michigan, Utah, Vermont	23%		

12 states had similar¹ percentages of students who were at or above Proficient on NAEP:

Tennessee ²	17%	Georgia , Arkansas, New Mexico	13%
Delaware, Hawaii, Kentucky	16%	South Carolina	12%
Arizona, Florida	15%	Alabama, California	11%
Nevada	14%		

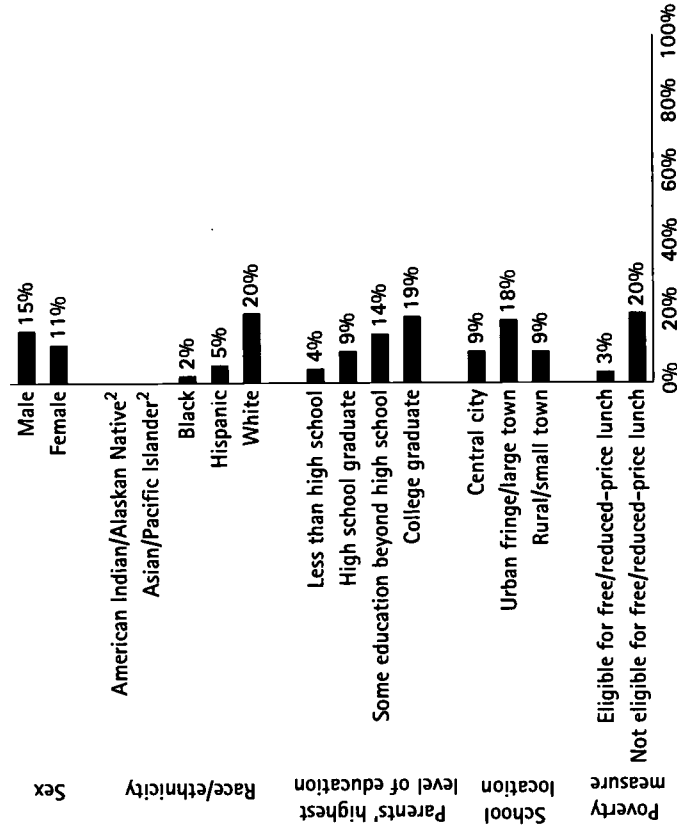
4 states had significantly lower¹ percentages of students who were at or above Proficient on NAEP:

Louisiana, Mississippi	8%	Guam	3%
District of Columbia	5%		

[†] The term "state" is used to refer to the 50 states, the District of Columbia, and the territories.
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.
 • 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 subgroups¹ in Georgia 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.
² Characteristics of the sample do not permit a reliable estimate.

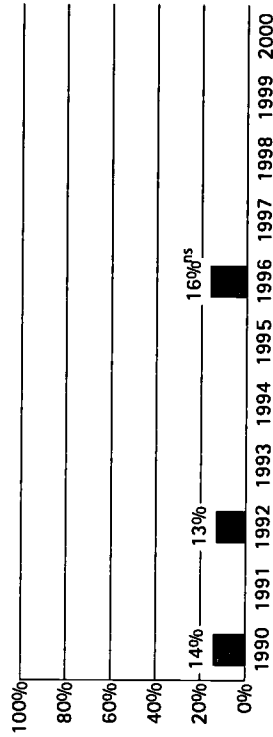
1. Improvement Over Time

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

Not yet. Between 1990 and 1996, 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 Georgia compare with other states in 8th grade mathematics achievement in public schools in 1996?

22 states had significantly higher¹ percentages of students who were at or above Proficient on NAEP:

Minnesota	34%	Vermont	27%
North Dakota	33%	Oregon, Washington	26%
Montana, Wisconsin	32%	Colorado	25%
Connecticut, Iowa, Maine, Nebraska	31%	U.S. , ² Indiana, Maryland, Utah	24%
Alaska	30%	Missouri, New York, Wyoming	22%
Massachusetts, Michigan	28%	Virginia ²	21%

15 states had similar¹ percentages of students who were at or above Proficient on NAEP:

Texas ²	21%	Tennessee	15%
North Carolina, Rhode Island	20%	New Mexico, South Carolina,	14%
Delaware	19%	West Virginia	13%
Arizona	18%	Arkansas	12%
California, Florida	17%	Alabama	12%
Georgia , Hawaii, Kentucky	16%		

4 states had significantly lower² percentages of students who were at or above Proficient on NAEP:

Louisiana, Mississippi	7%	District of Columbia	5%
Guam	6%		

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

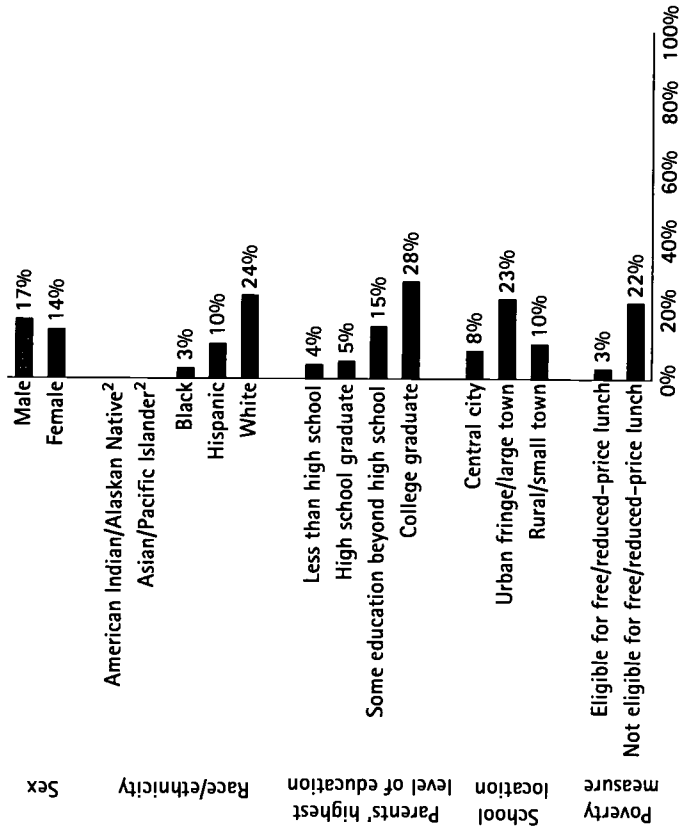
¹ See explanation on pp. 3-4.

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

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

3. Subgroup Performance

What percentages of public school 8th graders in different subgroups¹ in Georgia 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.

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

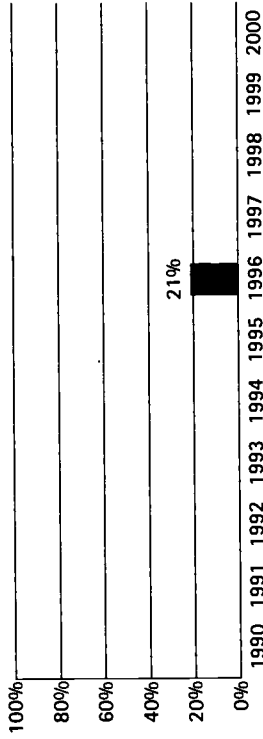
1. Improvement Over Time

Have Georgia's 8th graders improved in science achievement?

In 1996, 21% of Georgia's public school 8th graders met the Goals Panel's performance standard in science. The Goals Panel will report whether science performance has improved over time when science is assessed again in 2000.

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 science assessment



Science performance will be tested again in 2000.

2. State Comparisons[†]

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

20 states had significantly higher¹ percentages of students who were at or above Proficient on NAEP:

Maine, Montana, North Dakota	41%	Colorado, Michigan, Oregon, Utah	32%
Wisconsin	39%	Alaska	31%
Massachusetts, Minnesota	37%	Indiana	30%
Connecticut, Iowa	36%	U.S.*	29%
Nebraska	35%	Missouri	28%
Vermont, Wyoming	34%	New York, ² Washington ²	27%

16 states had similar¹ percentages of students who were at or above Proficient on NAEP:

Virginia ²	27%	Georgia , Delaware, Florida,	21%
Rhode Island	26%	West Virginia	
Maryland	25%	California	20%
North Carolina	24%	New Mexico	19%
Arizona, Kentucky, Texas	23%	Alabama	18%
Arkansas, Tennessee	22%	South Carolina	17%

5 states had significantly lower¹ percentages of students who were at or above Proficient on NAEP:

Hawaii	15%	Guam	7%
Louisiana	13%	District of Columbia	5%
Mississippi	12%		

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

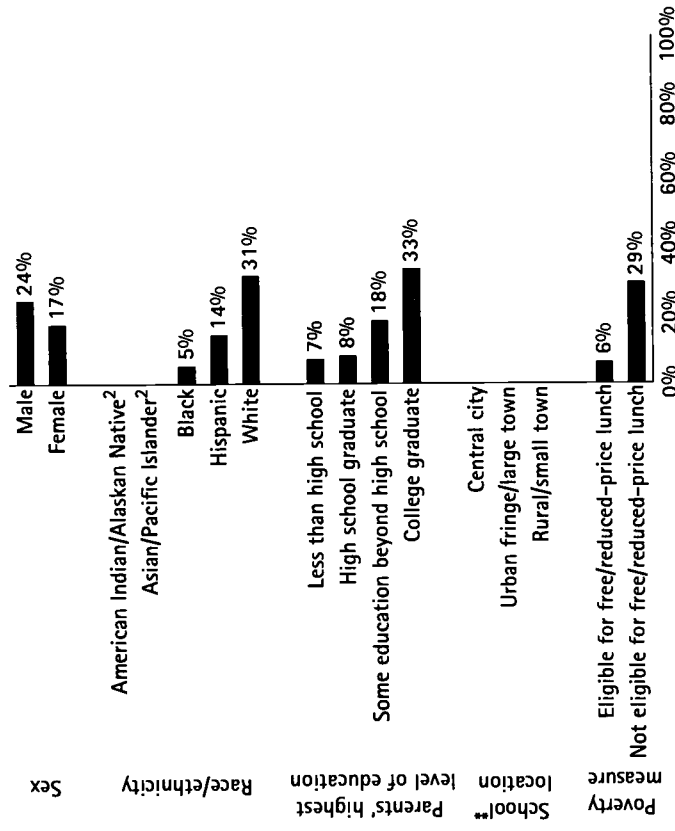
¹ See explanation on pp. 3-4.

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

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

3. Subgroup Performance

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



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

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

** No school location data for science in 1996.

International Comparisons

Georgia

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 Georgia participated in the TIMSS mathematics assessment, how would their average performance compare to that of students who took TIMSS in these nations?

27 nations[†] would be expected to perform significantly higher:¹

(Australia)
(Austria)
Belgium – Flemish²
(Belgium – French)²
(Bulgaria)
Canada
Czech Republic
(Denmark)
(England)
France
(Germany)
Hong Kong
Hungary
Ireland
(Israel)
Japan
Korea
(Netherlands)
New Zealand
Norway
Russian Federation
Singapore
Slovak Republic
(Slovenia)
Sweden
(Switzerland)
(Thailand)

10 nations[†] would be expected to perform similarly:¹

Cyprus
Georgia
(Greece)
Iceland
(Latvia – LSS)³
(Lithuania)
Portugal
(Romania)
(Scotland)
Spain
United States

4 nations[†] would be expected to perform significantly lower:¹

(Colombia)
Iran, Islamic Republic
(Kuwait)
(South Africa)

[†] The term "nation" is used to refer to nations, states, or jurisdictions. Performance for nations is based on public school data only. Nations not meeting international guidelines are shown in parentheses.

¹ See explanation on pp. 3–4.

² The Flemish and French educational systems in Belgium participated separately.

³ Latvia is designated LSS because only Latvian-speaking schools were tested, which represent less than 65% of the population.

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 Georgia participated in the TIMSS science assessment, how would their average performance compare to that of students who took TIMSS in these nations?

14 nations[†] would be expected to perform significantly higher:¹

(Australia)
(Austria)
Belgium – Flemish²
(Bulgaria)
Czech Republic
(England)
Hungary
Japan
Korea
(Netherlands)
Russian Federation
Singapore
Slovak Republic
(Slovenia)

17 nations[†] would be expected to perform similarly:¹

Canada
France
Georgia
(Germany)
(Greece)
Hong Kong
Iceland
Ireland
(Israel)
New Zealand
Norway
(Romania)
(Scotland)
Spain
Sweden
(Switzerland)
(Thailand)
United States

10 nations[†] would be expected to perform significantly lower:¹

(Belgium – French)²
(Colombia)
Cyprus
(Denmark)
Iran, Islamic Republic
(Kuwait)
(Latvia – LSS)³
(Lithuania)
Portugal
(South Africa)

[†] The term "nation" is used to refer to nations, states, or jurisdictions. Performance for nations is based on public school data only. Nations not meeting international guidelines are shown in parentheses.

¹ See explanation on pp. 3–4.

² The Flemish and French educational systems in Belgium participated separately.

³ Latvia is designated LSS because only Latvian-speaking schools were tested, which represent less than 65% of the population.

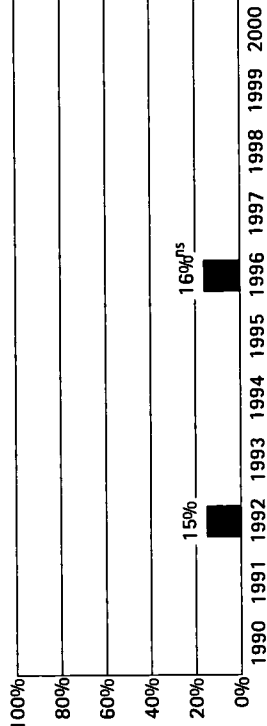
1. Improvement Over Time

Have Hawaii'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 Hawaii compare with other states in 4th grade mathematics achievement in public schools in 1996?

23 states had significantly higher[‡] percentages of students who were at or above Proficient on NAEP:

Connecticut	31%	Michigan, Utah, Vermont	23%
Minnesota	29%	Colorado, Iowa, Maryland, Montana	22%
Maine, Wisconsin	27%	U.S.* , Alaska, North Carolina, Oregon,	21%
New Jersey, Texas	25%	Washington	
Indiana, Massachusetts, Nebraska,	24%	Missouri, [‡] New York [‡]	20%
North Dakota			

14 states had similar[‡] percentages of students who were at or above Proficient on NAEP:

Pennsylvania [‡]	20%	Arizona, Florida	15%
Virginia, West Virginia, Wyoming	19%	Nevada	14%
Rhode Island, Tennessee	17%	Arkansas, Georgia, New Mexico	13%
Hawaii , Delaware, Kentucky	16%		

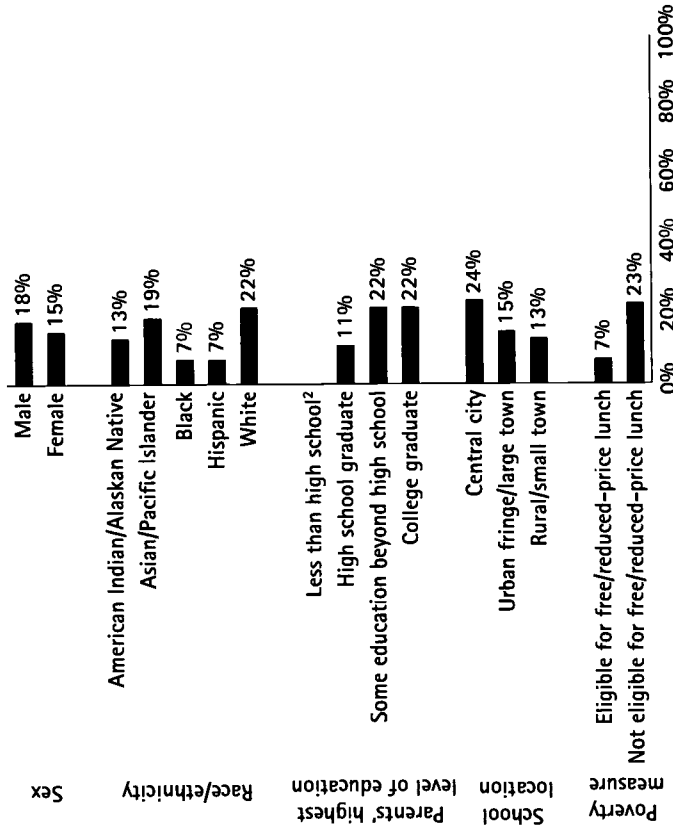
7 states had significantly lower[‡] percentages of students who were at or above Proficient on NAEP:

South Carolina	12%	District of Columbia	5%
Alabama, California	11%	Guam	3%
Louisiana, Mississippi	8%		

[†] The term "state" is used to refer to the 50 states, the District of Columbia, and the territories.
[‡] See explanation on pp. 3-4.
^{*} State may appear to be out of place; however, statistically, its placement is correct. See pp. 3-4.
[‡] 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 subgroups¹ in Hawaii 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.
² Characteristics of the sample do not permit a reliable estimate.

1. Improvement Over Time

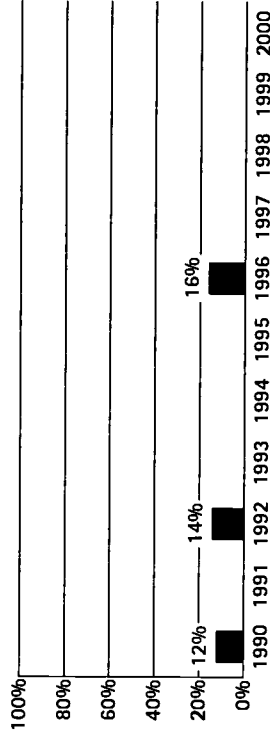


Have Hawaii's 8th graders improved in mathematics achievement?

Yes. The percentage of Hawaii's public school 8th graders who met the Goals Panel's performance standard in mathematics increased from 12% in 1990, to 16% in 1996.

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



Mathematics performance will be tested again in 2000.

2. State Comparisons[†]

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

26 states had significantly higher¹ percentages of students who were at or above Proficient on NAEP:

Minnesota	34%	Oregon, Washington	26%
North Dakota	33%	Colorado	25%
Montana, Wisconsin	32%	U.S.,² Indiana, Maryland, Utah	24%
Connecticut, Iowa, Maine, Nebraska	31%	Missouri, New York, Wyoming	22%
Alaska	30%	Texas, Virginia	21%
Massachusetts, Michigan	28%	North Carolina, Rhode Island	20%
Vermont	27%	Delaware	19%

10 states had similar¹ percentages of students who were at or above Proficient on NAEP:

Arizona	18%	New Mexico, South Carolina,	14%
California, Florida	17%	West Virginia	
Hawaii, Georgia, Kentucky	16%	Alabama ²	12%
Tennessee	15%		

5 states had significantly lower¹ percentages of students who were at or above Proficient on NAEP:

Arkansas ²	13%	Guam	6%
Louisiana, Mississippi	7%	District of Columbia	5%

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

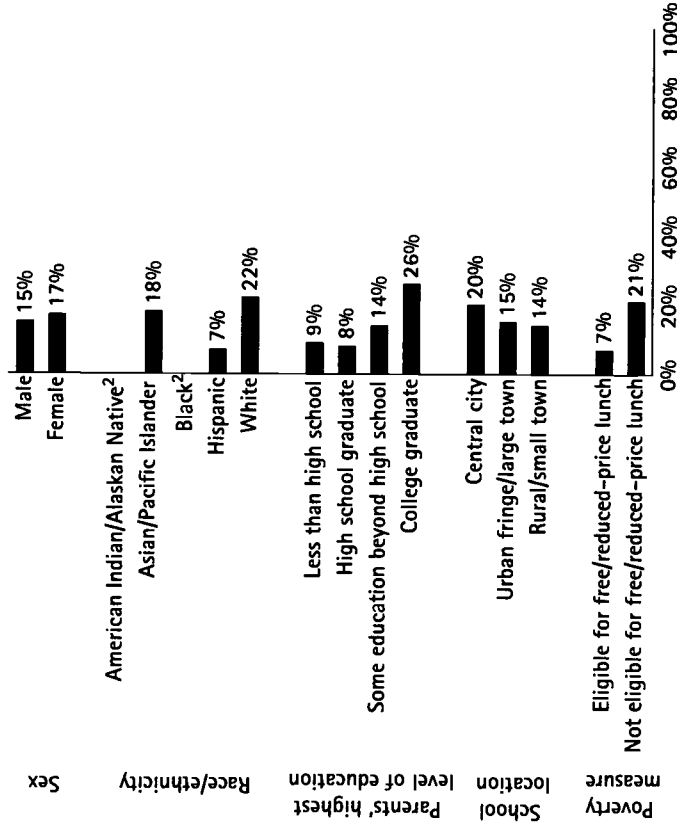
¹ See explanation on pp. 3-4.

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

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

3. Subgroup Performance

What percentages of public school 8th graders in different subgroups¹ in Hawaii 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.

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

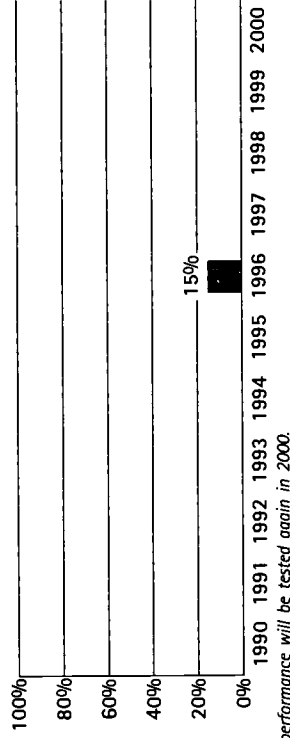
1. Improvement Over Time

Have Hawaii's 8th graders improved in science achievement?

In 1996, 15% of Hawaii's public school 8th graders met the Goals Panel's performance standard in science. The Goals Panel will report whether science performance has improved over time when science is assessed again in 2000.

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 science assessment



Science performance will be tested again in 2000.

2. State Comparisons[†]

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

35 states had significantly higher¹ percentages of students who were at or above Proficient on NAEP:

Maine, Montana, North Dakota	41%	New York, Virginia, Washington	27%
Wisconsin	39%	Rhode Island	26%
Massachusetts, Minnesota	37%	Maryland	25%
Connecticut, Iowa	36%	North Carolina	24%
Nebraska	35%	Arizona, Kentucky, Texas	23%
Vermont, Wyoming	34%	Arkansas, Tennessee	22%
Colorado, Michigan, Oregon, Utah	32%	Delaware, Florida, Georgia,	21%
Alaska	31%	West Virginia	20%
Indiana	30%	California	19%
U.S.*	29%	New Mexico	19%
Missouri	28%		

3 states had similar¹ percentages of students who were at or above Proficient on NAEP:

Alabama	18%	Hawaii	15%
South Carolina	17%	Louisiana	13%

3 states had significantly lower¹ percentages of students who were at or above Proficient on NAEP:

Mississippi	12%	District of Columbia	5%
Guam	7%		

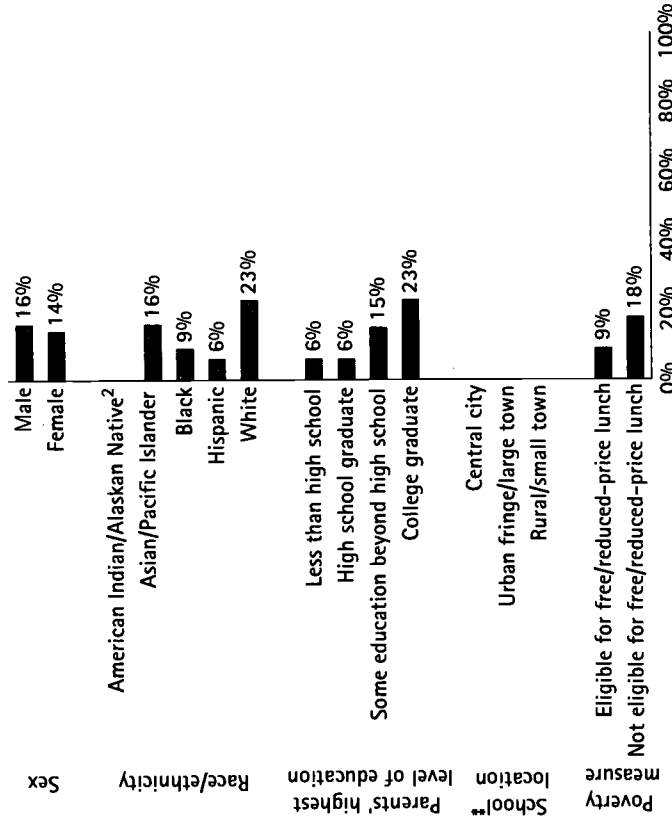
[†] The term "state" is used to refer to the 50 states, the District of Columbia, and the territories.

¹ See explanation on pp. 3-4.

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

3. Subgroup Performance

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



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

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

** No school location data for science in 1996.

International Comparisons

Hawaii

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 Hawaii participated in the TIMSS mathematics assessment, how would their average performance compare to that of students who took TIMSS in these nations?

27 nations[†] would be expected to perform significantly higher.¹

(Australia)
(Austria)
Belgium – Flemish²
(Belgium – French)²
(Bulgaria)
Canada
Czech Republic
(Denmark)
(England)
France
(Germany)
Hong Kong
Hungary
Ireland
(Israel)
Japan
Korea
(Netherlands)
New Zealand
Norway
Russian Federation
Singapore
Slovak Republic
(Slovenia)
Sweden
(Switzerland)
(Thailand)

9 nations[†] would be expected to perform similarly.¹

Cyprus
(Greece)
Hawaii
Iceland
(Latvia – LSS)³
(Lithuania)
(Romania)
(Scotland)
Spain
United States

5 nations[†] would be expected to perform significantly lower.¹

(Colombia)
Iran, Islamic Republic
(Kuwait)
Portugal
(South Africa)

[†] The term "nation" is used to refer to nations, states, or jurisdictions. Performance for nations is based on public school data only. Nations not meeting international guidelines are shown in parentheses.
¹ See explanation on pp. 3–4.

² The Flemish and French educational systems in Belgium participated separately.

³ Latvia is designated LSS because only Latvian-speaking schools were tested, which represent less than 65% of the population.

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 Hawaii participated in the TIMSS science assessment, how would their average performance compare to that of students who took TIMSS in these nations?

26 nations[†] would be expected to perform significantly higher.¹

(Australia)
(Austria)
Belgium – Flemish²
(Bulgaria)
Canada
Czech Republic
(England)
(Germany)
Hong Kong
Hungary
Ireland
(Israel)
Japan
Korea
(Netherlands)
New Zealand
Norway
Russian Federation
Singapore
Slovak Republic
(Slovenia)
Spain
Sweden
(Switzerland)
(Thailand)
United States

11 nations[†] would be expected to perform similarly.¹

(Belgium – French)²
(Denmark)
France
(Greece)
Hawaii
Iceland
Iran, Islamic Republic
(Latvia – LSS)³
(Lithuania)
Portugal
(Romania)
(Scotland)

4 nations[†] would be expected to perform significantly lower.¹

(Colombia)
Cyprus
(Kuwait)
(South Africa)

[†] The term "nation" is used to refer to nations, states, or jurisdictions. Performance for nations is based on public school data only. Nations not meeting international guidelines are shown in parentheses.
¹ See explanation on pp. 3–4.

² The Flemish and French educational systems in Belgium participated separately.

³ Latvia is designated LSS because only Latvian-speaking schools were tested, which represent less than 65% of the population.

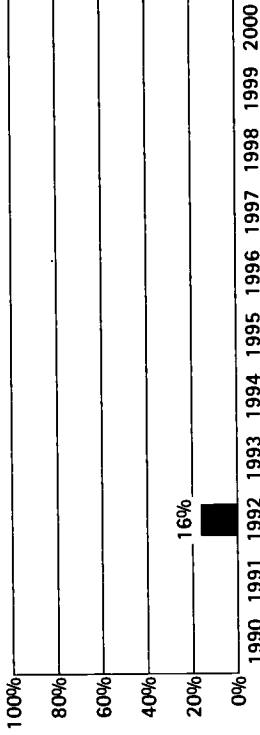
1. Improvement Over Time

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

In 1992, 16% of Idaho's public school 4th graders met the Goals Panel's performance standard in mathematics. The Goals Panel will report whether mathematics performance has improved over time when mathematics is assessed again in 2000.

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



Mathematics performance will be tested again in 2000.

2. State Comparisons

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

Idaho did not participate in NAEP mathematics in 1996.

3. Subgroup Performance

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

Idaho did not participate in NAEP mathematics in 1996.

Subgroup	Percentage of public school 4th graders at or above Proficient
Sex	Male Female
Race/ethnicity	American Indian/Alaskan Native Asian/Pacific Islander Black Hispanic White
Parents' highest level of education	Less than high school High school graduate Some education beyond high school College graduate
School location	Central city Urban fringe/large town Rural/small town
Poverty measure	Eligible for free/reduced-price lunch Not eligible for free/reduced-price lunch

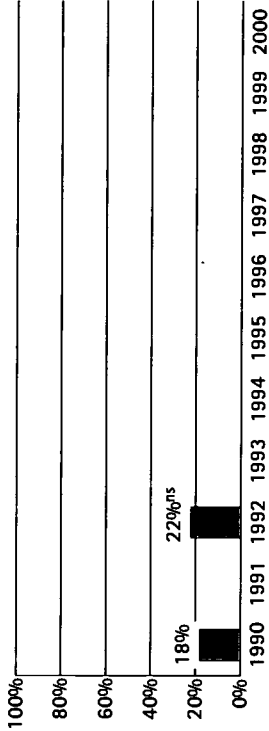
1. Improvement Over Time

Have Idaho'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

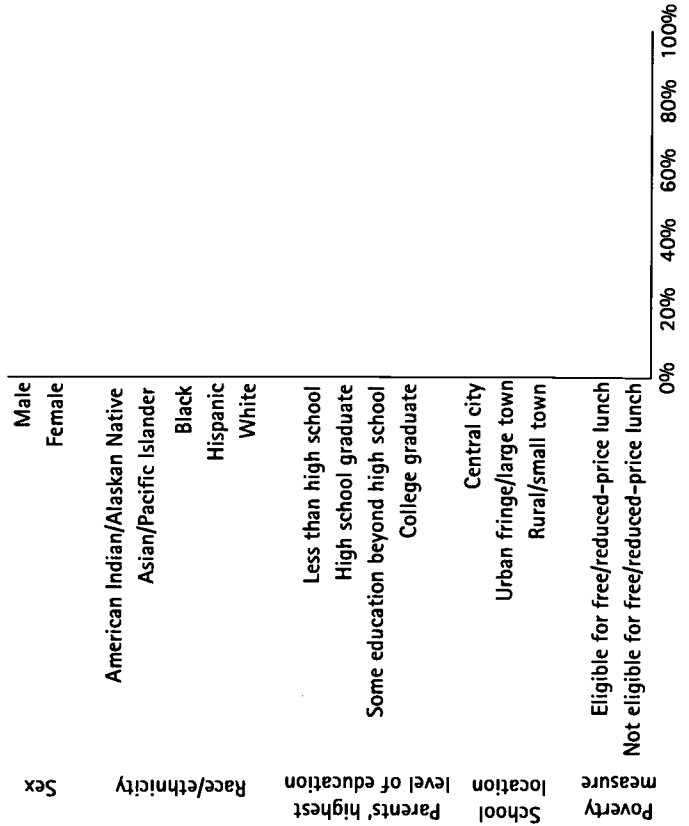
How did Idaho compare with other states in 8th grade mathematics achievement in public schools in 1996?

Idaho did not participate in NAEP mathematics in 1996.

3. Subgroup Performance

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

Idaho did not participate in NAEP mathematics in 1996.

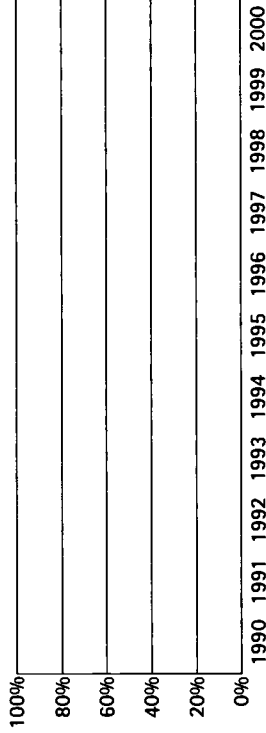


1. Improvement Over Time

Have Idaho's 8th graders improved in science achievement?

Idaho 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

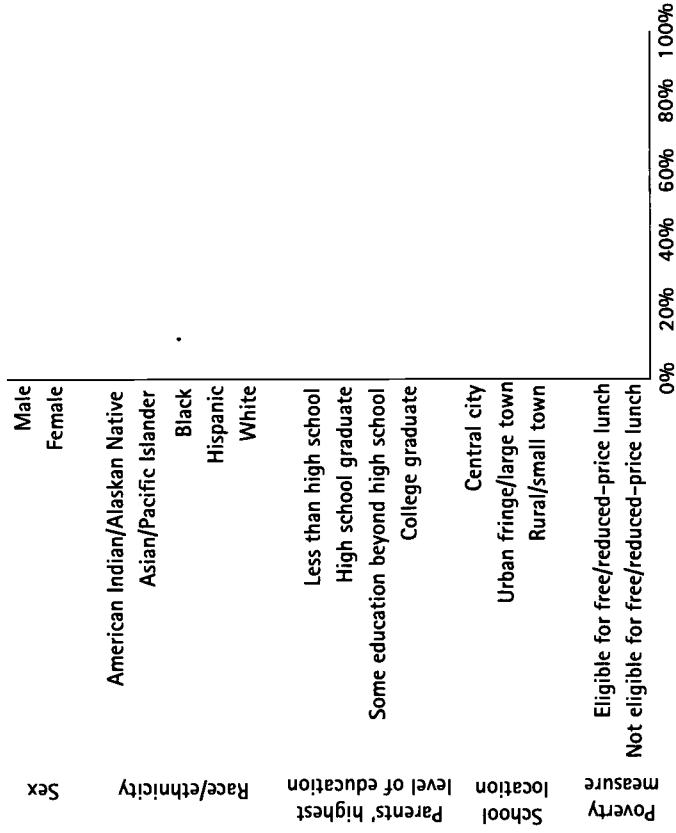
How did Idaho compare with other states in 8th grade science achievement in public schools in 1996?

Idaho did not participate in NAEP science in 1996.

3. Subgroup Performance

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

Idaho did not participate in NAEP science in 1996.



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 Idaho 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 Idaho would have performed on TIMSS, because the estimate is based on scores from the 1996 NAEP mathematics assessment. Idaho did not participate in NAEP mathematics 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 Idaho 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 Idaho would have performed on TIMSS, because the estimate is based on scores from the 1996 NAEP science assessment. Idaho did not participate in NAEP science in 1996.

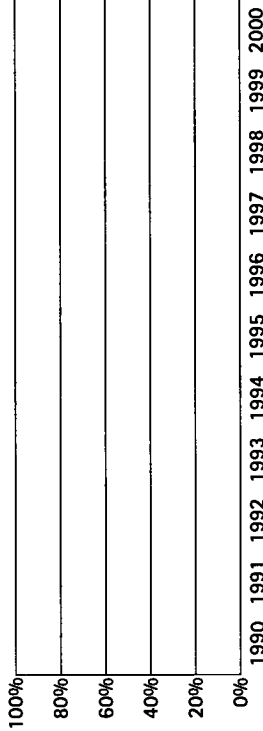
[†] The term "nation" is used to refer to nations, states, or jurisdictions.

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

1. Improvement Over Time

Have Illinois' 4th graders improved in mathematics achievement?
Illinois did not participate in NAEP mathematics in 1992 or 1996.

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



Mathematics performance will be tested again in 2000.

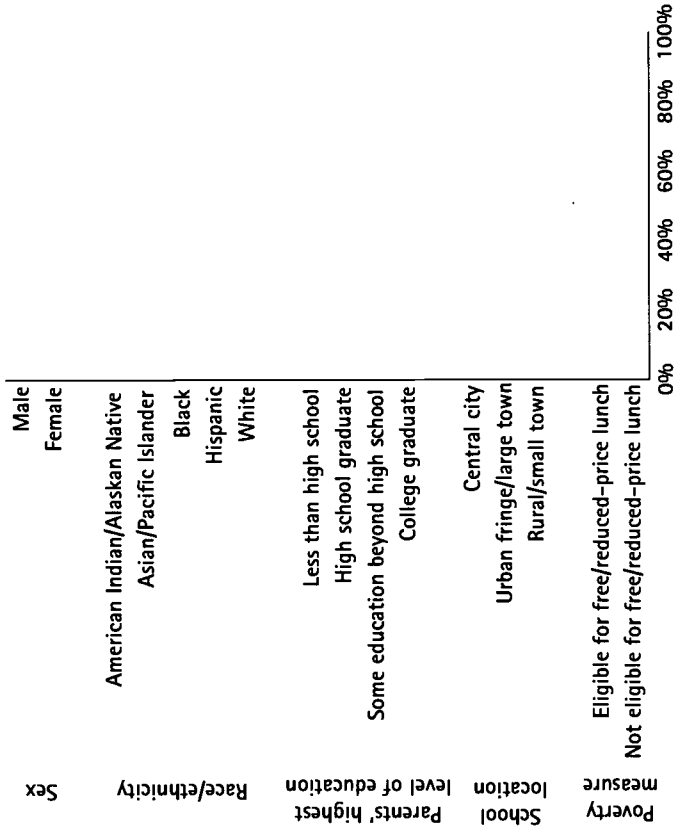
2. State Comparisons

How did Illinois compare with other states in 4th grade mathematics achievement in public schools in 1996?
Illinois did not participate in NAEP mathematics in 1996.

3. Subgroup Performance

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

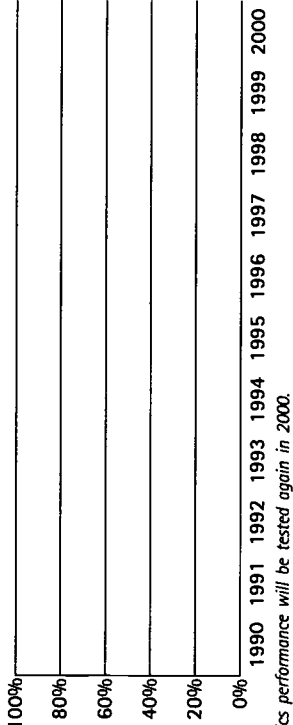
Illinois did not participate in NAEP mathematics in 1996.



1. Improvement Over Time

Have Illinois' 8th graders improved in mathematics achievement?
Illinois did not participate in NAEP mathematics in 1990, 1992, or 1996.

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



Mathematics performance will be tested again in 2000.

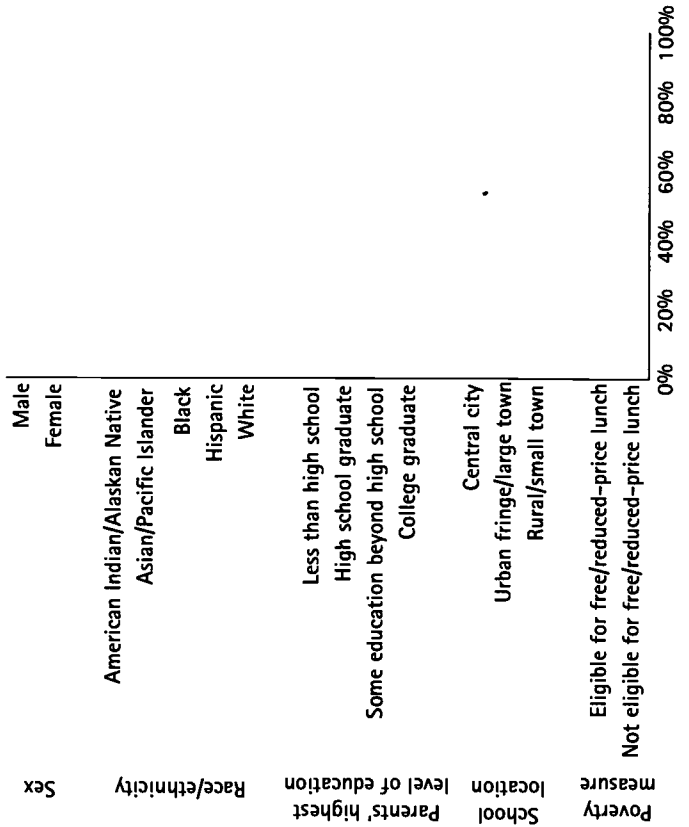
2. State Comparisons

How did Illinois compare with other states in 8th grade mathematics achievement in public schools in 1996?
Illinois did not participate in NAEP mathematics in 1996.

3. Subgroup Performance

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

Illinois did not participate in NAEP mathematics in 1996.

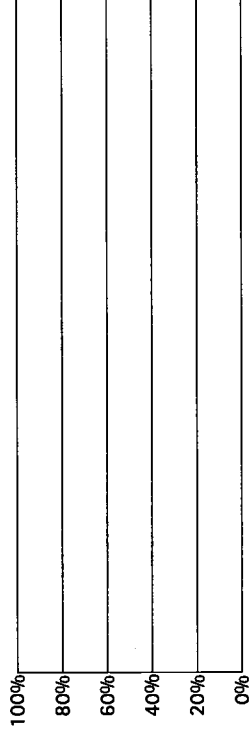


1. Improvement Over Time

Have Illinois' 8th graders improved in science achievement?

Illinois 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

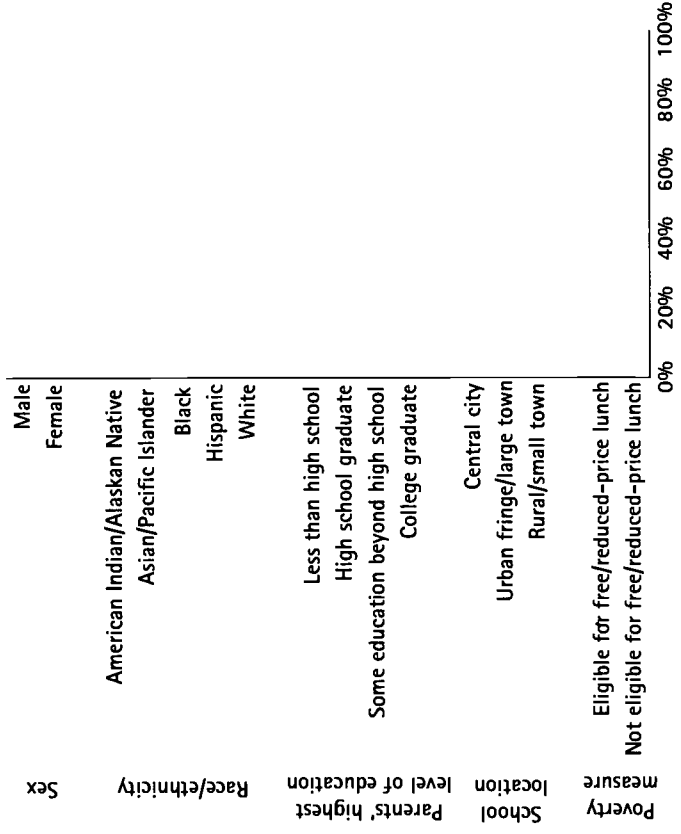
How did Illinois compare with other states in 8th grade science achievement in public schools in 1996?

Illinois did not participate in NAEP science in 1996.

3. Subgroup Performance

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

Illinois did not participate in NAEP science in 1996.



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 Illinois 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 Illinois would have performed on TIMSS, because the estimate is based on scores from the 1996 NAEP mathematics assessment. Illinois did not participate in NAEP mathematics 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 Illinois 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 Illinois would have performed on TIMSS, because the estimate is based on scores from the 1996 NAEP science assessment. Illinois did not participate in NAEP science in 1996.

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

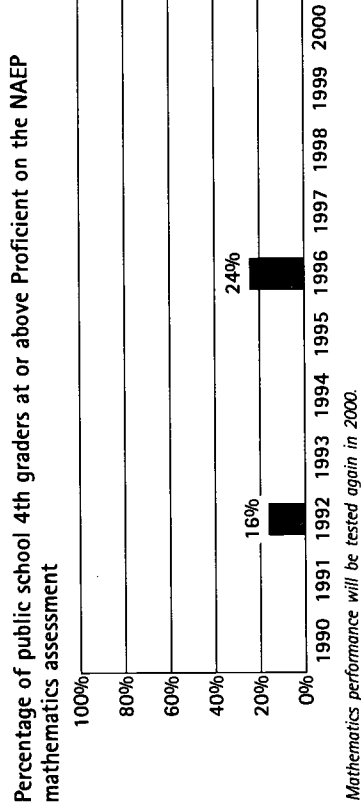
[†] The term "nation" is used to refer to nations, states, or jurisdictions.



1. Improvement Over Time

Have Indiana's 4th graders improved in mathematics achievement?
 Yes. The percentage of Indiana's public school 4th graders who met the Goals Panel's performance standard in mathematics increased from 16% in 1992, to 24% in 1996.

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.



2. State Comparisons[†]

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

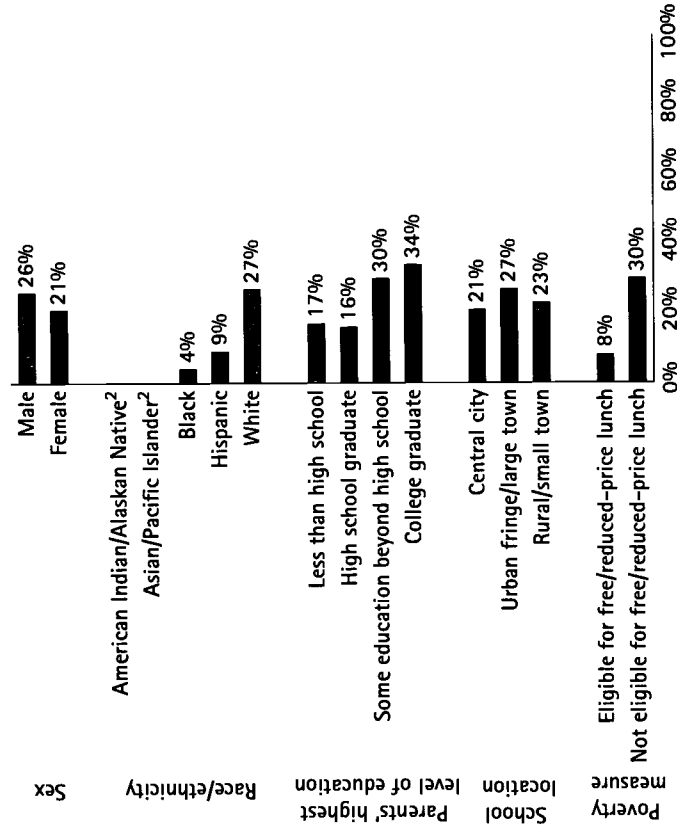
23 states had similar ¹ percentages of students who were at or above Proficient on NAEP:	
Connecticut	31%
Michigan, Utah, Vermont	23%
Minnesota	29%
Colorado, Iowa, Maryland, Montana	22%
Maine, Wisconsin	27%
U.S.,* Alaska, North Carolina, Oregon, New Jersey, Texas	25%
Washington	21%
Indiana, Massachusetts, Nebraska, North Dakota	20%
Missouri, New York, Pennsylvania	20%

21 states had significantly lower ¹ percentages of students who were at or above Proficient on NAEP:	
Virginia, West Virginia, Wyoming	19%
South Carolina	12%
Rhode Island, Tennessee	17%
Alabama, California	11%
Delaware, Hawaii, Kentucky	16%
Louisiana, Mississippi	8%
Arizona, Florida	15%
District of Columbia	5%
Nevada	14%
Guam	3%
Arkansas, Georgia, New Mexico	13%

[†] The term "state" is used to refer to the 50 states, the District of Columbia, and the territories.
¹ See explanation on pp. 3-4.
 * 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 subgroups¹ in Indiana 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.
² Characteristics of the sample do not permit a reliable estimate.

1. Improvement Over Time

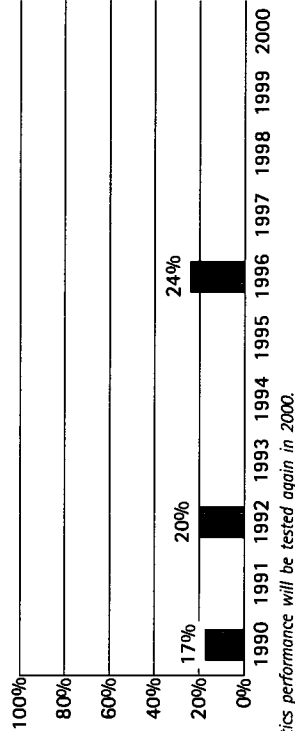


Percentage of public school 8th graders at or above Proficient on the NAEP mathematics assessment

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

Yes. The percentage of Indiana's public school 8th graders who met the Goals Panel's performance standard in mathematics increased from 17% in 1990, to 24% in 1996.

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.



Mathematics performance will be tested again in 2000.

2. State Comparisons[†]

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

9 states had significantly higher¹ percentages of students who were at or above Proficient on NAEP:

Minnesota	34%	Connecticut, Iowa, Maine, Nebraska	31%
North Dakota	33%	Alaska	30%
Montana, Wisconsin	32%		

15 states had similar¹ percentages of students who were at or above Proficient on NAEP:

Massachusetts, Michigan	28%	U.S.* Indiana , Maryland, Utah	24%
Vermont	27%	Missouri, New York, Wyoming	22%
Oregon, Washington	26%	Texas, Virginia	21%
Colorado	25%	North Carolina, Rhode Island	20%

17 states had significantly lower¹ percentages of students who were at or above Proficient on NAEP:

Delaware	19%	Arkansas	13%
Arizona	18%	Alabama	12%
California, Florida	17%	Louisiana, Mississippi	7%
Georgia, Hawaii, Kentucky	16%	Guam	6%
Tennessee	15%	District of Columbia	5%
New Mexico, South Carolina, West Virginia	14%		

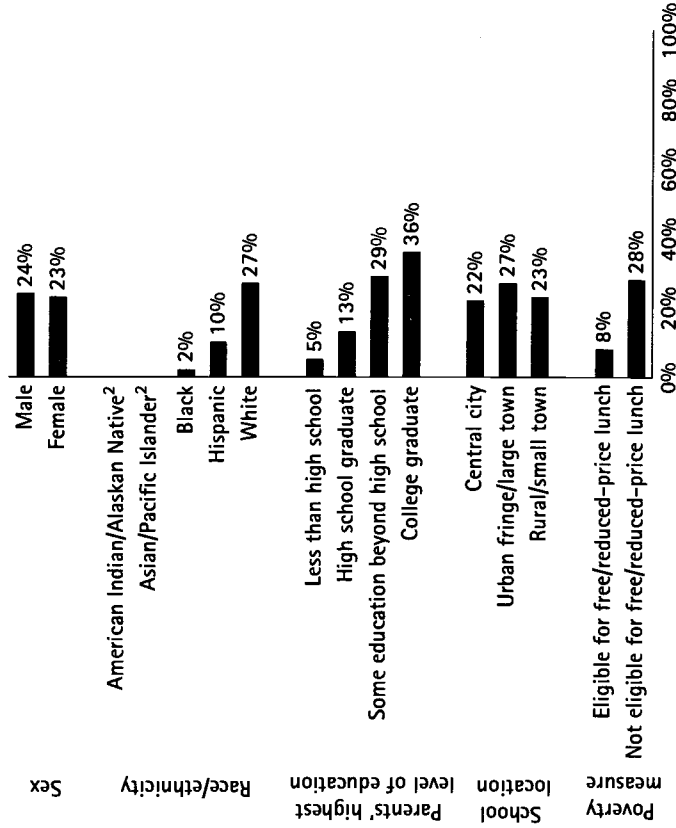
[†] The term "state" is used to refer to the 50 states, the District of Columbia, and the territories.

¹ See explanation on pp. 3-4.

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

3. Subgroup Performance

What percentages of public school 8th graders in different subgroups¹ in Indiana 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.

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

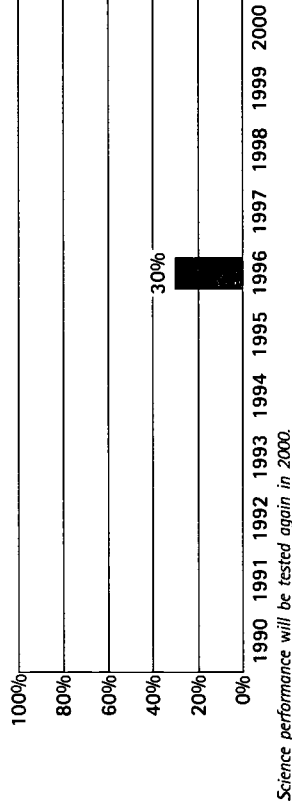
1. Improvement Over Time

Have Indiana's 8th graders improved in science achievement?

In 1996, 30% of Indiana's public school 8th graders met the Goals Panel's performance standard in science. The Goals Panel will report whether science performance has improved over time when science is assessed again in 2000.

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 science assessment



2. State Comparisons[†]

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

5 states had significantly higher¹ percentages of students who were at or above Proficient on NAEP:

Maine, Montana, North Dakota, Wisconsin	41%	Minnesota ²	37%
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17 states had similar¹ percentages of students who were at or above Proficient on NAEP:

Massachusetts ²	37%	Indiana	30%
Connecticut, Iowa	36%	U.S.*	29%
Nebraska	35%	Missouri	28%
Vermont, Wyoming	34%	New York, Virginia, Washington	27%
Colorado, Michigan, Oregon, Utah	32%	Rhode Island	26%
Alaska	31%	Maryland	25%

19 states had significantly lower¹ percentages of students who were at or above Proficient on NAEP:

North Carolina	24%	Alabama	18%
Arizona, Kentucky, Texas	23%	South Carolina	17%
Arkansas, Tennessee	22%	Hawaii	15%
Delaware, Florida, Georgia, West Virginia	21%	Louisiana	13%
California	20%	Mississippi	12%
New Mexico	19%	Guam	7%
		District of Columbia	5%

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

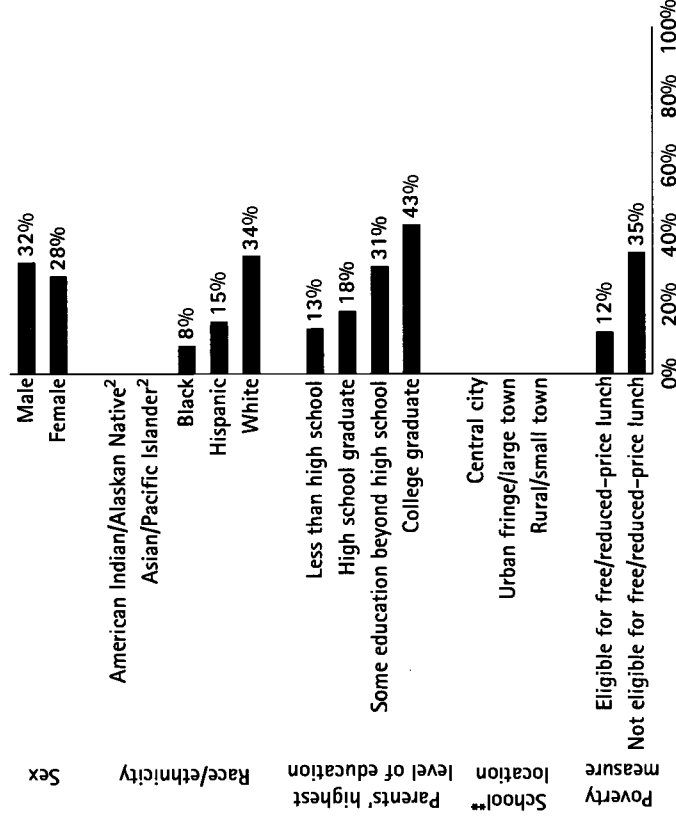
¹ See explanation on pp. 3-4.

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

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

3. Subgroup Performance

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



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

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

** No school location data for science in 1996.

International Comparisons

Indiana

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 Indiana participated in the TIMSS mathematics assessment, how would their average performance compare to that of students who took TIMSS in these nations?

12 nations[†] would be expected to perform significantly higher:¹

(Austria)
Belgium – Flemish²
Czech Republic
France
Hong Kong
Hungary
Japan
Korea
Singapore
Slovak Republic
(Slovenia)
(Switzerland)

19 nations[†] would be expected to perform similarly:¹

(Australia)
(Belgium – French)²
(Bulgaria)
Canada
(Denmark)
(England)
(Germany)
Iceland
Indiana
Ireland
(Israel)
(Latvia – LSS)³
(Netherlands)
New Zealand
Norway
Russian Federation
(Scotland)
Sweden
(Thailand)
United States

10 nations[†] would be expected to perform significantly lower:¹

(Colombia)
Cyprus
(Greece)
Iran, Islamic Republic
(Kuwait)
(Lithuania)
Portugal
(Romania)
(South Africa)
Spain

[†] The term "nation" is used to refer to nations, states, or jurisdictions. Performance for nations is based on public school data only. Nations not meeting international guidelines are shown in parentheses.

¹ See explanation on pp. 3-4.

² The Flemish and French educational systems in Belgium participated separately.

³ Latvia is designated LSS because only Latvian-speaking schools were tested, which represent less than 65% of the population.

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 Indiana participated in the TIMSS science assessment, how would their average performance compare to that of students who took TIMSS in these nations?

3 nations[†] would be expected to perform significantly higher:¹

Czech Republic
Japan
Singapore

22 nations[†] would be expected to perform similarly:¹

(Australia)
(Austria)
Belgium – Flemish²
(Bulgaria)
Canada
(England)
(Germany)
Hong Kong
Hungary
Indiana
Ireland
(Israel)
Korea
(Netherlands)
New Zealand
Norway
Russian Federation
Slovak Republic
(Slovenia)
Sweden
(Switzerland)
(Thailand)
United States

16 nations[†] would be expected to perform significantly lower:¹

(Belgium – French)²
(Colombia)
Cyprus
(Denmark)
France
(Greece)
Iceland
Iran, Islamic Republic
(Kuwait)
(Latvia – LSS)³
(Lithuania)
Portugal
(Romania)
(Scotland)
(South Africa)
Spain

[†] The term "nation" is used to refer to nations, states, or jurisdictions. Performance for nations is based on public school data only. Nations not meeting international guidelines are shown in parentheses.

¹ See explanation on pp. 3-4.

² The Flemish and French educational systems in Belgium participated separately.

³ Latvia is designated LSS because only Latvian-speaking schools were tested, which represent less than 65% of the population.

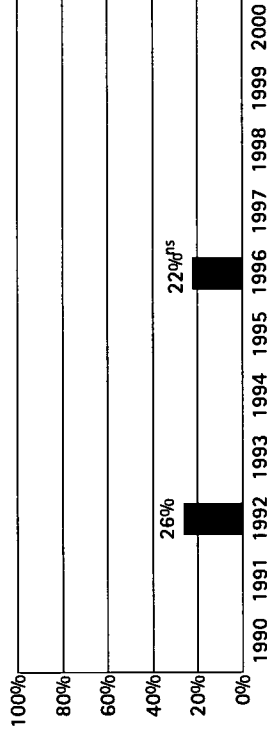
1. Improvement Over Time

Have Iowa'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 Iowa compare with other states in 4th grade mathematics achievement in public schools in 1996?

2 states had significantly higher¹ percentages of students who were at or above Proficient on NAEP:

Connecticut	31%	Minnesota	29%
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24 states had similar¹ percentages of students who were at or above Proficient on NAEP:

Maine, Wisconsin	27%	Iowa, Colorado, Maryland, Montana	22%
New Jersey, Texas	25%	U.S.,* Alaska, North Carolina, Oregon,	21%
Indiana, Massachusetts, Nebraska,	24%	Washington	
North Dakota		Missouri, New York, Pennsylvania	20%
Michigan, Utah, Vermont	23%	Virginia, West Virginia, Wyoming	19%

18 states had significantly lower¹ percentages of students who were at or above Proficient on NAEP:

Rhode Island, Tennessee	17%	South Carolina	12%
Delaware, Hawaii, Kentucky	16%	Alabama, California	11%
Arizona, Florida	15%	Louisiana, Mississippi	8%
Nevada	14%	District of Columbia	5%
Arkansas, Georgia, New Mexico	13%	Guam	3%

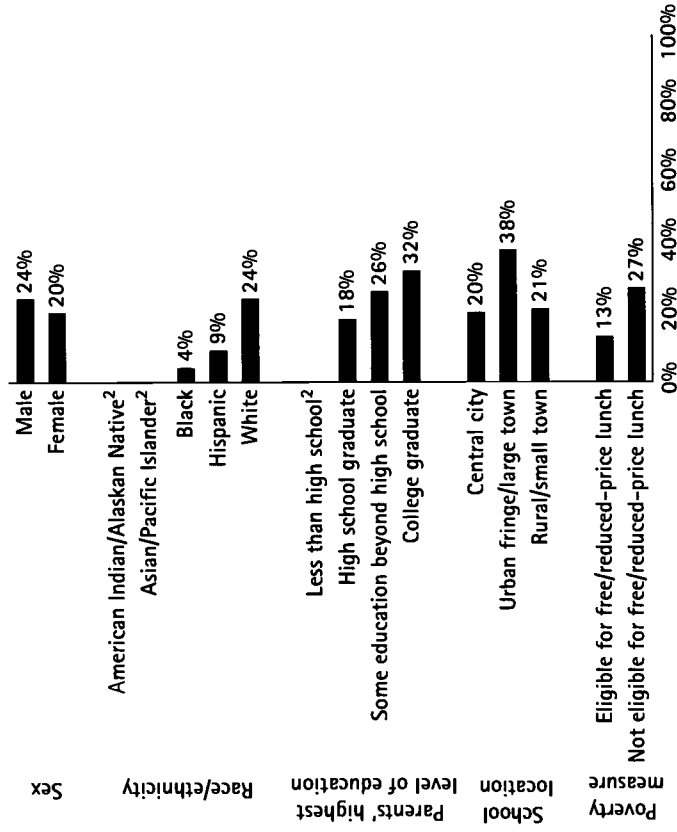
[†] The term "state" is used to refer to the 50 states, the District of Columbia, and the territories.

¹ See explanation on pp. 3-4.

* 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 subgroups¹ in Iowa 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.

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

1. Improvement Over Time

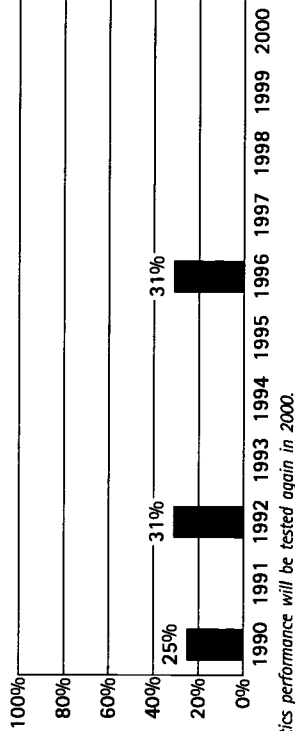


Have Iowa's 8th graders improved in mathematics achievement?

Yes. The percentage of Iowa's public school 8th graders who met the Goals Panel's performance standard in mathematics increased from 25% in 1990, to 31% in 1996.

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



2. State Comparisons[†]

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

13 states had similar¹ percentages of students who were at or above Proficient on NAEP:

Minnesota	34%	Alaska	30%
North Dakota	33%	Massachusetts, Michigan	28%
Montana, Wisconsin	32%	Vermont	27%
Iowa, Connecticut, Maine, Nebraska	31%	Oregon, Washington	26%

28 states had significantly lower¹ percentages of students who were at or above Proficient on NAEP:

Colorado	25%	Tennessee	15%
U.S. [*] , Indiana, Maryland, Utah	24%	New Mexico, South Carolina,	14%
Missouri, New York, Wyoming	22%	West Virginia	
Texas, Virginia	21%	Arkansas	13%
North Carolina, Rhode Island	20%	Alabama	12%
Delaware	19%	Louisiana, Mississippi	7%
Arizona	18%	Guam	6%
California, Florida	17%	District of Columbia	5%
Georgia, Hawaii, Kentucky	16%		

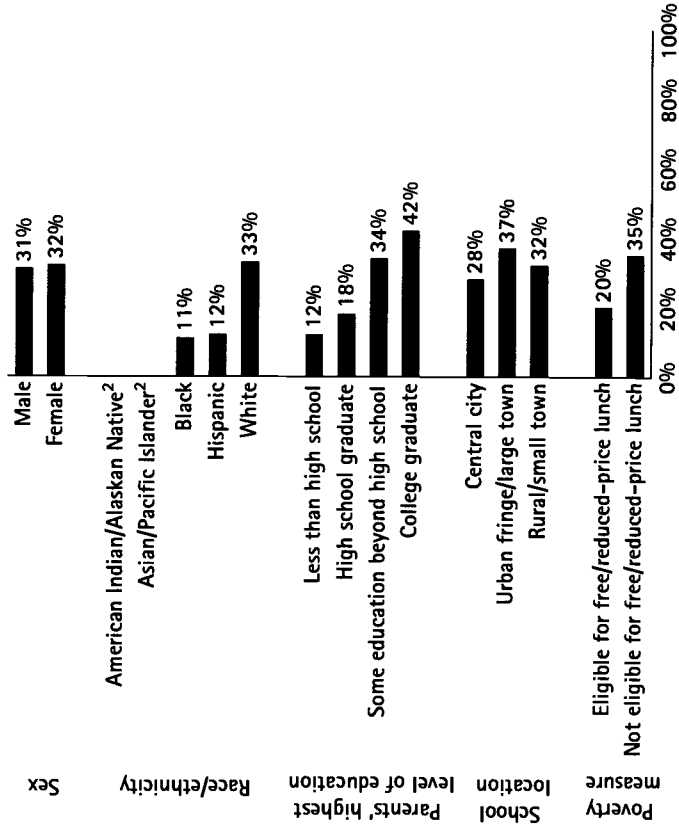
[†] The term "state" is used to refer to the 50 states, the District of Columbia, and the territories.

¹ See explanation on pp. 3-4.

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

3. Subgroup Performance

What percentages of public school 8th graders in different subgroups¹ in Iowa 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.

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

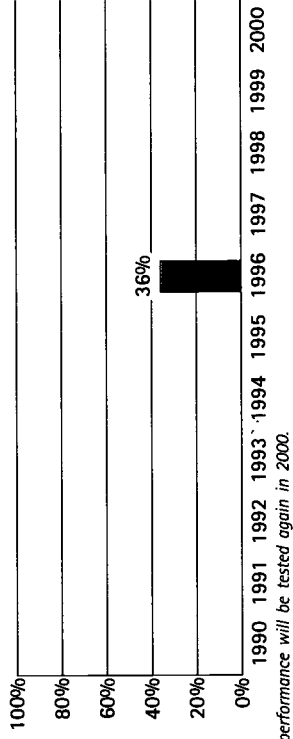
1. Improvement Over Time

Have Iowa's 8th graders improved in science achievement?

In 1996, 36% of Iowa's public school 8th graders met the Goals Panel's performance standard in science. The Goals Panel will report whether science performance has improved over time when science is assessed again in 2000.

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 science assessment



2. State Comparisons[†]

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

15 states had similar ¹ percentages of students who were at or above Proficient on NAEP:	
Maine, Montana, North Dakota	41%
Nebraska	35%
Wisconsin	39%
Vermont, Wyoming	34%
Massachusetts, Minnesota	37%
Colorado, Michigan, Oregon, Utah	32%
Iowa, Connecticut	36%
Alaska	31%

26 states had significantly lower ¹ percentages of students who were at or above Proficient on NAEP:	
Indiana	20%
U.S.*	29%
California	30%
New Mexico	19%
Alabama	28%
South Carolina	27%
Hawaii	26%
Louisiana	25%
Mississippi	25%
North Carolina	24%
Arizona, Kentucky, Texas	23%
Guam	22%
District of Columbia	22%
Delaware, Florida, Georgia, West Virginia	21%

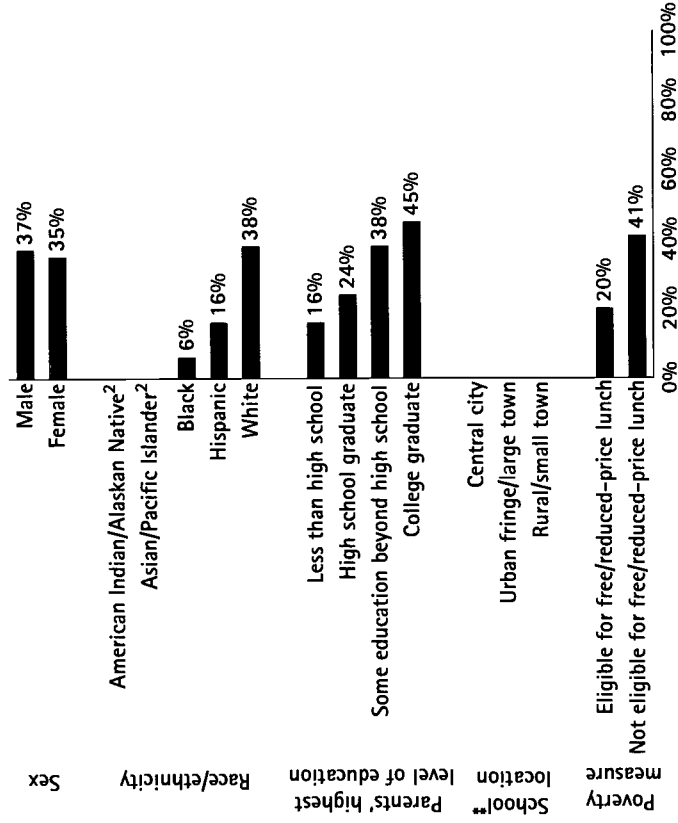
[†] The term "state" is used to refer to the 50 states, the District of Columbia, and the territories.

¹ See explanation on pp. 3-4.

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

3. Subgroup Performance

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



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

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

** No school location data for science in 1996.

International Comparisons

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 Iowa participated in the TIMSS mathematics assessment, how would their average performance compare to that of students who took TIMSS in these nations?

6 nations[†] would be expected to perform significantly higher:¹

Belgium – Flemish²
Czech Republic
Hong Kong
Japan
Korea
Singapore

18 nations[†] would be expected to perform similarly:¹

(Australia)
(Austria)
(Belgium – French)²
(Bulgaria)
Canada
France
(Germany)
Hungary
Iowa
Ireland
(Israel)
(Netherlands)
New Zealand
Russian Federation
Slovak Republic
(Slovenia)
Sweden
(Switzerland)
(Thailand)

17 nations[†] would be expected to perform significantly lower:¹

(Colombia)
Cyprus
(Denmark)
(England)
(Greece)
Iceland
Iran, Islamic Republic
(Kuwait)
(Latvia – LSS)³
(Lithuania)
Norway
Portugal
(Romania)
(Scotland)
(South Africa)
Spain
United States

[†] The term "nation" is used to refer to nations, states, or jurisdictions. Performance for nations is based on public school data only. Nations not meeting international guidelines are shown in parentheses.

¹ See explanation on pp. 3-4.

² The Flemish and French educational systems in Belgium participated separately.

³ Latvia is designated LSS because only Latvian-speaking schools were tested, which represent less than 65% of the population.

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 Iowa participated in the TIMSS science assessment, how would their average performance compare to that of students who took TIMSS in these nations?

1 nation[†] would be expected to perform significantly higher:¹

Singapore

14 nations[†] would be expected to perform similarly:¹

(Australia)
(Austria)
Belgium – Flemish²
(Bulgaria)
Czech Republic
(England)
Hungary
Iowa
Ireland
Japan
Korea
(Netherlands)
Russian Federation
Slovak Republic
(Slovenia)

26 nations[†] would be expected to perform significantly lower:¹

(Belgium – French)²
Canada
(Colombia)
Cyprus
(Denmark)
France
(Germany)
(Greece)
Hong Kong
Iceland
Iran, Islamic Republic
(Israel)
(Kuwait)
(Latvia – LSS)³
(Lithuania)
New Zealand
Norway
Portugal
(Romania)
(Scotland)
(South Africa)
Spain
Sweden
(Switzerland)
(Thailand)
United States

[†] The term "nation" is used to refer to nations, states, or jurisdictions. Performance for nations is based on public school data only. Nations not meeting international guidelines are shown in parentheses.

¹ See explanation on pp. 3-4.

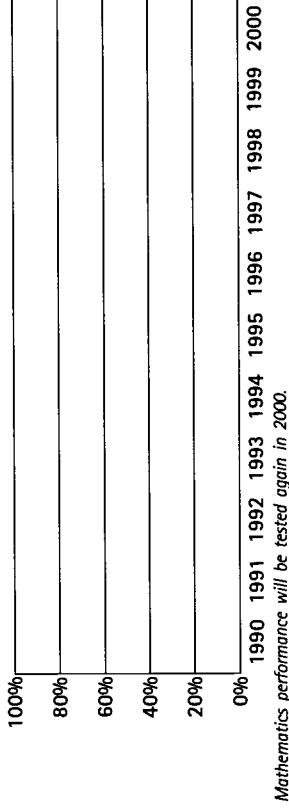
² The Flemish and French educational systems in Belgium participated separately.

³ Latvia is designated LSS because only Latvian-speaking schools were tested, which represent less than 65% of the population.

1. Improvement Over Time

Have Kansas' 4th graders improved in mathematics achievement?
Kansas did not participate in NAEP mathematics in 1992 or 1996.

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



Mathematics performance will be tested again in 2000.

2. State Comparisons

How did Kansas compare with other states in 4th grade mathematics achievement in public schools in 1996?
Kansas did not participate in NAEP mathematics in 1996.

3. Subgroup Performance

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

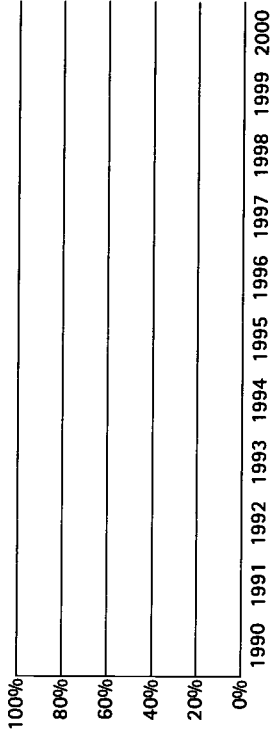
Kansas did not participate in NAEP mathematics in 1996.

	Male	Female
Sex		
Race/ethnicity	American Indian/Alaskan Native	Asian/Pacific Islander
	Black	Hispanic
	White	
Parents' highest level of education	Less than high school	High school graduate
	Some education beyond high school	College graduate
School location	Central city	Urban fringe/large town
		Rural/small town
Poverty measure	Eligible for free/reduced-price lunch	Not eligible for free/reduced-price lunch

1. Improvement Over Time

Have Kansas' 8th graders improved in mathematics achievement?
Kansas did not participate in NAEP mathematics in 1990, 1992, or 1996.

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



Mathematics performance will be tested again in 2000.

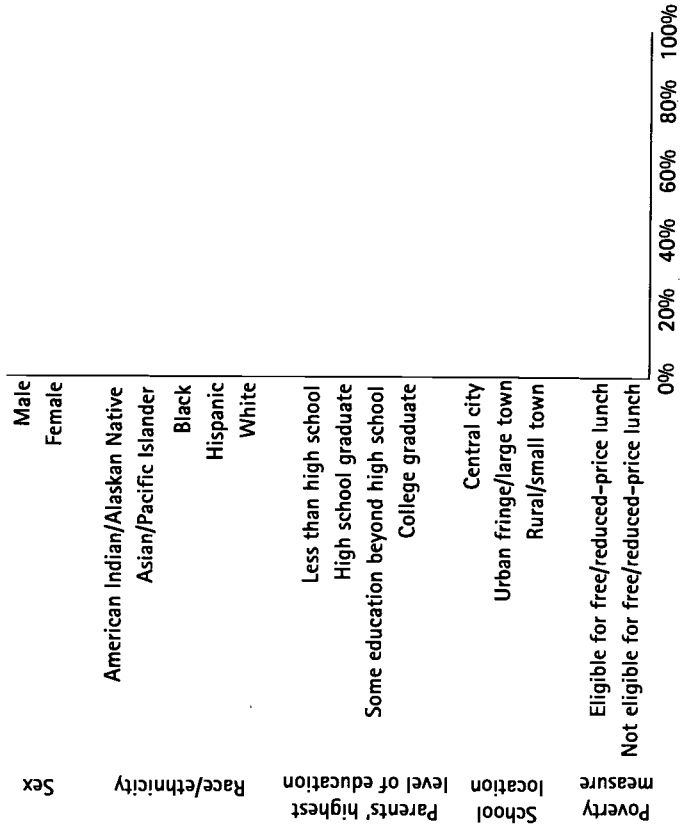
2. State Comparisons

How did Kansas compare with other states in 8th grade mathematics achievement in public schools in 1996?
Kansas did not participate in NAEP mathematics in 1996.

3. Subgroup Performance

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

Kansas did not participate in NAEP mathematics in 1996.

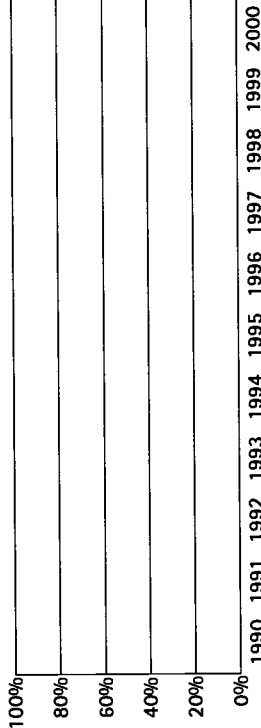


1. Improvement Over Time

Have Kansas' 8th graders improved in science achievement?

Kansas 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

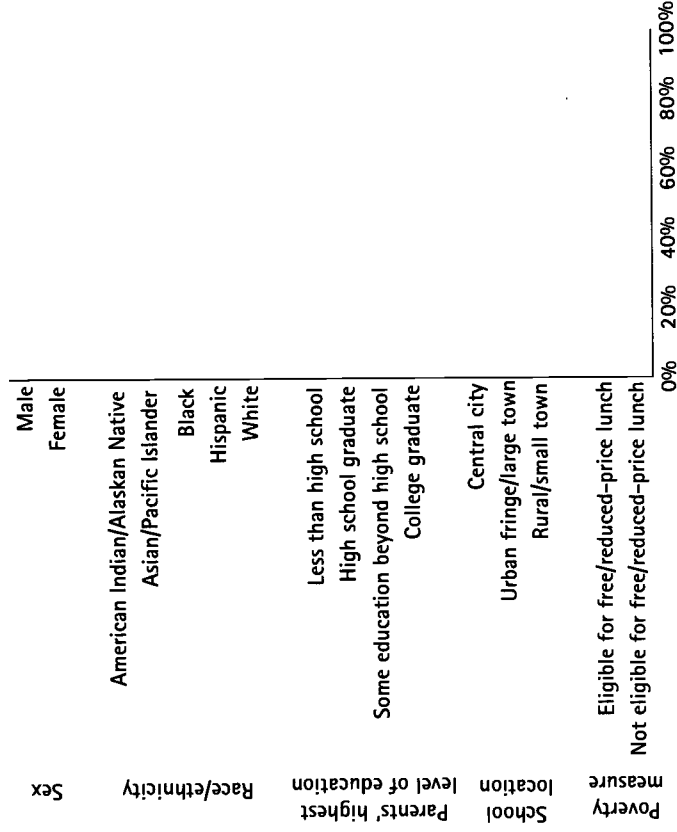
How did Kansas compare with other states in 8th grade science achievement in public schools in 1996?

Kansas did not participate in NAEP science in 1996.

3. Subgroup Performance

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

Kansas did not participate in NAEP science in 1996.



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 Kansas 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 Kansas would have performed on TIMSS, because the estimate is based on scores from the 1996 NAEP mathematics assessment. Kansas did not participate in NAEP mathematics 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 Kansas 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 Kansas would have performed on TIMSS, because the estimate is based on scores from the 1996 NAEP science assessment. Kansas did not participate in NAEP science in 1996.

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

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

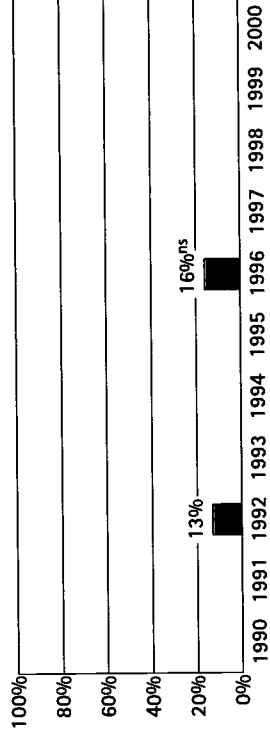
1. Improvement Over Time

Have Kentucky'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 Kentucky compare with other states in 4th grade mathematics achievement in public schools in 1996?

23 states had significantly higher[†] percentages of students who were at or above Proficient on NAEP:

Connecticut	31%	Michigan, Utah, Vermont	23%
Minnesota	29%	Colorado, Iowa, Maryland, Montana	22%
Maine, Wisconsin	27%	U.S.[*] , Alaska, North Carolina, Oregon, 21%	
New Jersey, Texas	25%	Washington	
Indiana, Massachusetts, Nebraska, North Dakota	24%	Missouri, ² New York ²	20%

14 states had similar[†] percentages of students who were at or above Proficient on NAEP:

Pennsylvania ²	20%	Arizona, Florida	15%
Virginia, West Virginia, Wyoming	19%	Nevada	14%
Rhode Island, Tennessee	17%	Arkansas, Georgia, New Mexico	13%
Kentucky , Delaware, Hawaii	16%		

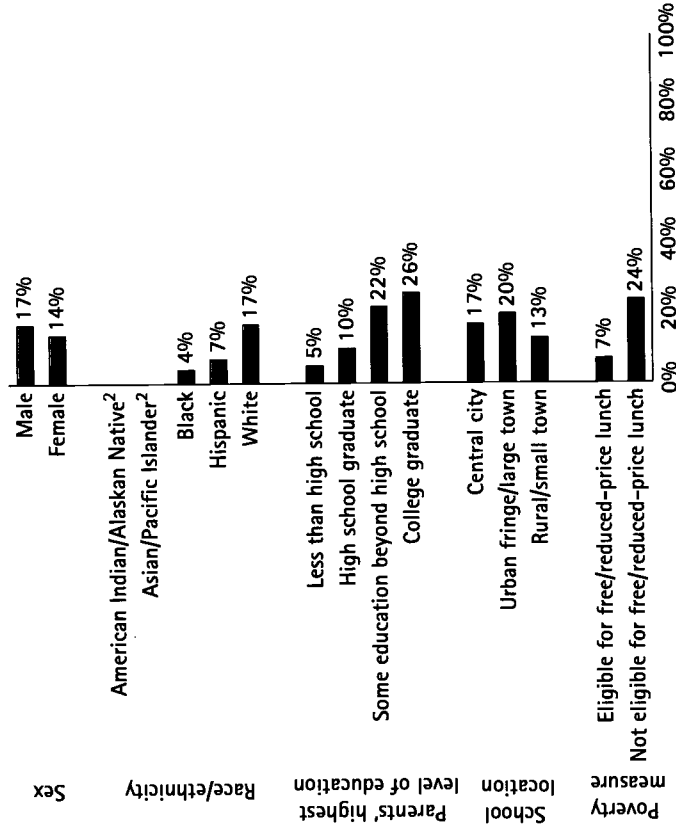
7 states had significantly lower[†] percentages of students who were at or above Proficient on NAEP:

South Carolina	12%	District of Columbia	5%
Alabama, California	11%	Guam	3%
Louisiana, Mississippi	8%		

[†] The term "state" is used to refer to the 50 states, the District of Columbia, and the territories.
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.
^{*} 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 subgroups¹ in Kentucky 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.
² Characteristics of the sample do not permit a reliable estimate.



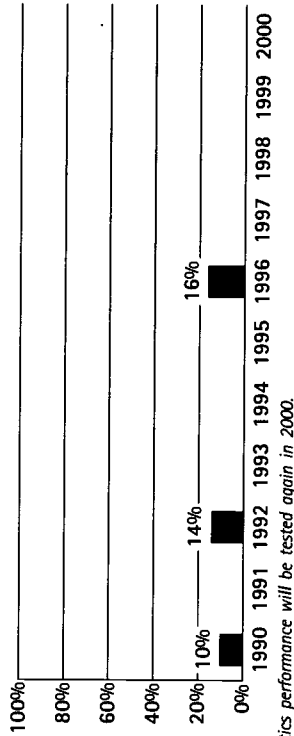
1. Improvement Over Time

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

Yes. The percentage of Kentucky's public school 8th graders who met the Goals Panel's performance standard in mathematics increased from 10% in 1990, to 16% in 1996.

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



Mathematics performance will be tested again in 2000.

2. State Comparisons*

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

25 states had significantly higher¹ percentages of students who were at or above Proficient on NAEP:

Minnesota	34%	Oregon, Washington	26%
North Dakota	33%	Colorado	25%
Montana, Wisconsin	32%	U.S.*	24%
Connecticut, Iowa, Maine, Nebraska	31%	Missouri, New York, Wyoming	22%
Alaska	30%	Texas, Virginia	21%
Massachusetts, Michigan	28%	North Carolina, Rhode Island	20%
Vermont	27%		

12 states had similar¹ percentages of students who were at or above Proficient on NAEP:

Delaware	19%	New Mexico, South Carolina,	14%
Arizona	18%	West Virginia	13%
California, Florida	17%	Arkansas	12%
Kentucky, Georgia, Hawaii	16%	Alabama	15%
Tennessee	15%		

4 states had significantly lower¹ percentages of students who were at or above Proficient on NAEP:

Louisiana, Mississippi	7%	District of Columbia	5%
Guam	6%		

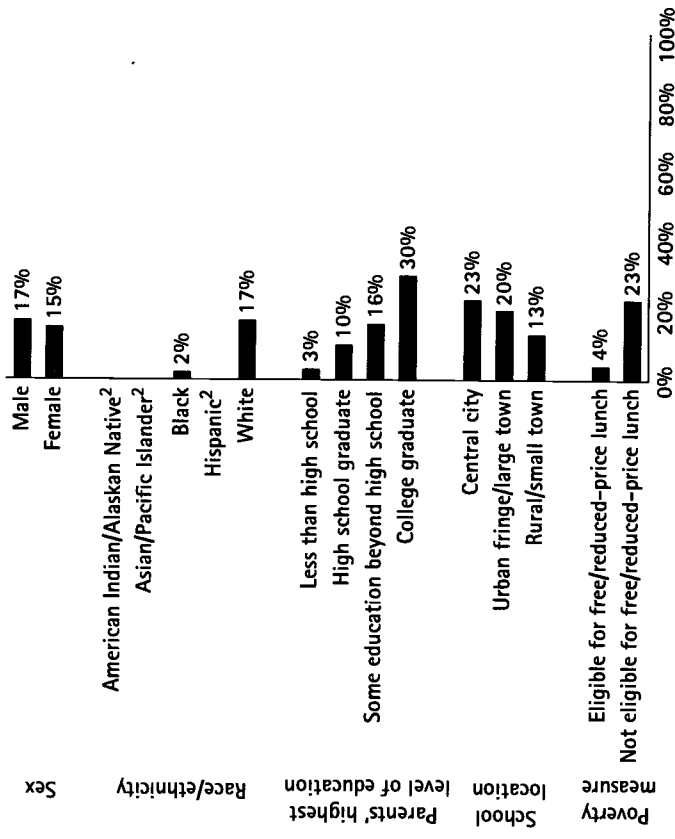
* The term "state" is used to refer to the 50 states, the District of Columbia, and the territories.

¹ See explanation on pp. 3-4.

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

3. Subgroup Performance

What percentages of public school 8th graders in different subgroups¹ in Kentucky 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.

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

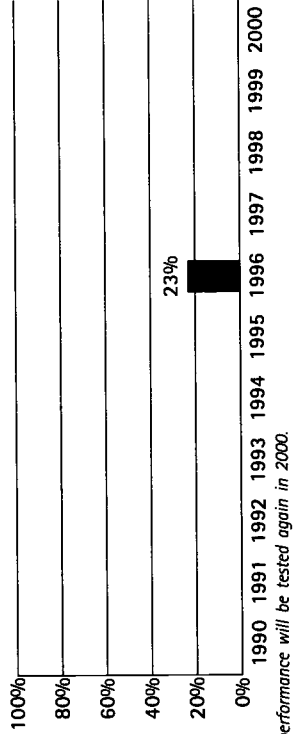
1. Improvement Over Time

Have Kentucky's 8th graders improved in science achievement?

In 1996, 23% of Kentucky's public school 8th graders met the Goals Panel's performance standard in science. The Goals Panel will report whether science performance has improved over time when science is assessed again in 2000.

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 science assessment



Science performance will be tested again in 2000.

2. State Comparisons[†]

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

18 states had significantly higher¹ percentages of students who were at or above Proficient on NAEP:

Maine, Montana, North Dakota	41%	Colorado, Michigan, Oregon, Utah	32%
Wisconsin	39%	Alaska	31%
Massachusetts, Minnesota	37%	Indiana	30%
Connecticut, Iowa	36%	U.S.*	29%
Nebraska	35%	Missouri	28%
Vermont, Wyoming	34%		

15 states had similar¹ percentages of students who were at or above Proficient on NAEP:

New York, Virginia, Washington	27%	Arkansas, Tennessee	22%
Rhode Island	26%	Delaware, Florida, Georgia,	21%
Maryland	25%	West Virginia	
North Carolina	24%	California	20%
Kentucky , Arizona, Texas	23%		

8 states had significantly lower¹ percentages of students who were at or above Proficient on NAEP:

New Mexico	19%	Louisiana	13%
Alabama	18%	Mississippi	12%
South Carolina	17%	Guam	7%
Hawaii	15%	District of Columbia	5%

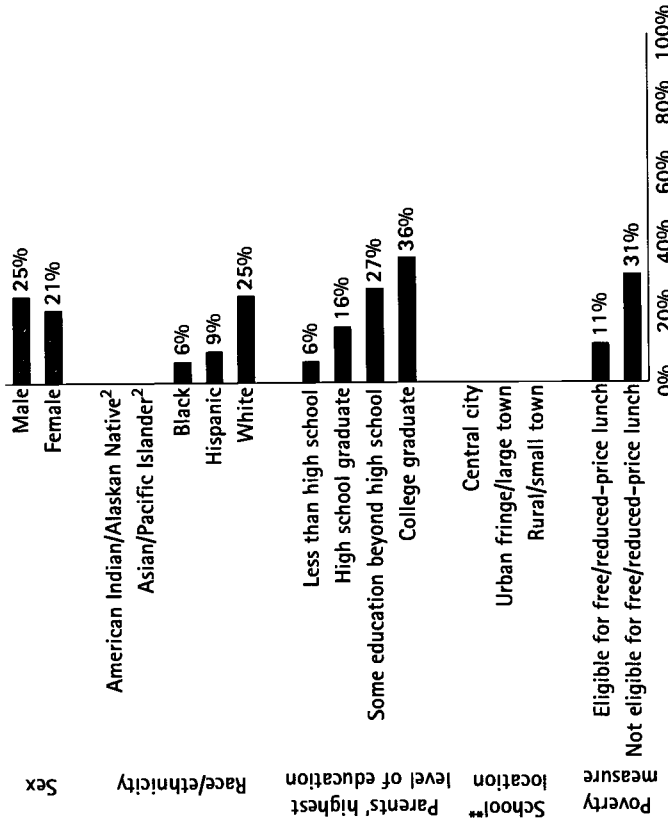
[†] The term "state" is used to refer to the 50 states, the District of Columbia, and the territories.

¹ See explanation on pp. 3-4.

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

3. Subgroup Performance

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



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

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

** No school location data for science in 1996.

International Comparisons

Kentucky

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 Kentucky participated in the TIMSS mathematics assessment, how would their average performance compare to that of students who took TIMSS in these nations?

22 nations[†] would be expected to perform significantly higher:¹

(Australia)
(Austria)
Belgium – Flemish²
(Belgium – French)²
(Bulgaria)
Canada
Czech Republic
France
Hong Kong
Hungary
Ireland
(Israel)
Japan
Korea
(Netherlands)
Russian Federation
Singapore
Slovak Republic
(Slovenia)
Sweden
(Switzerland)
(Thailand)

14 nations[†] would be expected to perform similarly:¹

Cyprus
(Denmark)
(England)
(Germany)
(Greece)
Iceland
Kentucky
(Latvia – LSS)³
(Lithuania)
New Zealand
Norway
(Romania)
(Scotland)
Spain
United States

5 nations[†] would be expected to perform significantly lower:¹

(Colombia)
Iran, Islamic Republic
(Kuwait)
Portugal
(South Africa)

[†] The term "nation" is used to refer to nations, states, or jurisdictions. Performance for nations is based on public school data only. Nations not meeting international guidelines are shown in parentheses.
¹ See explanation on pp. 3-4.
² The Flemish and French educational systems in Belgium participated separately.
³ Latvia is designated LSS because only Latvian-speaking schools were tested, which represent less than 65% of the population.

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 Kentucky participated in the TIMSS science assessment, how would their average performance compare to that of students who took TIMSS in these nations?

8 nations[†] would be expected to perform significantly higher:¹

(Austria)
(Bulgaria)
Czech Republic
Japan
Korea
(Netherlands)
Singapore
(Slovenia)

19 nations[†] would be expected to perform similarly:¹

(Australia)
Belgium – Flemish²
Canada
(England)
(Germany)
Hong Kong
Hungary
Ireland
(Israel)
Kentucky
New Zealand
Norway
Russian Federation
(Scotland)
Slovak Republic
Spain
Sweden
(Switzerland)
(Thailand)
United States

14 nations[†] would be expected to perform significantly lower:¹

(Belgium – French)²
(Colombia)
Cyprus
(Denmark)
France
(Greece)
Iceland
Iran, Islamic Republic
(Kuwait)
(Latvia – LSS)³
(Lithuania)
Portugal
(Romania)
(South Africa)

[†] The term "nation" is used to refer to nations, states, or jurisdictions. Performance for nations is based on public school data only. Nations not meeting international guidelines are shown in parentheses.
¹ See explanation on pp. 3-4.
² The Flemish and French educational systems in Belgium participated separately.
³ Latvia is designated LSS because only Latvian-speaking schools were tested, which represent less than 65% of the population.

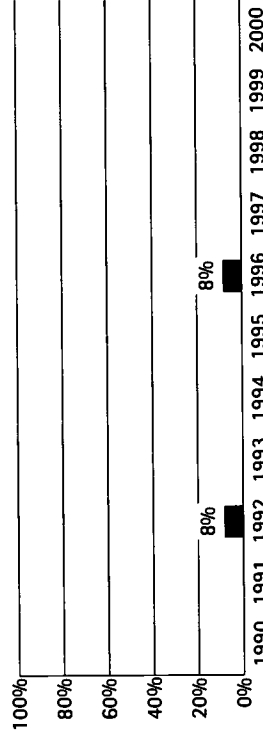
1. Improvement Over Time

Have Louisiana'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



Mathematics performance will be tested again in 2000.

2. State Comparisons[†]

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

40 states had significantly higher¹ percentages of students who were at or above Proficient on NAEP:

Connecticut	31%	Missouri, New York, Pennsylvania	20%
Minnesota	29%	Virginia, West Virginia, Wyoming	19%
Maine, Wisconsin	27%	Rhode Island, Tennessee	17%
New Jersey, Texas	25%	Delaware, Hawaii, Kentucky	16%
Indiana, Massachusetts, Nebraska, North Dakota	24%	Arizona, Florida	15%
Michigan, Utah, Vermont	23%	Nevada	14%
Colorado, Iowa, Maryland, Montana	22%	Arkansas, Georgia, New Mexico	13%
U.S.,* Alaska, North Carolina, Oregon, Washington	21%	South Carolina	12%
		Alabama ²	11%

2 states had similar¹ percentages of students who were at or above Proficient on NAEP:

California ²	11%	Louisiana, Mississippi	8%
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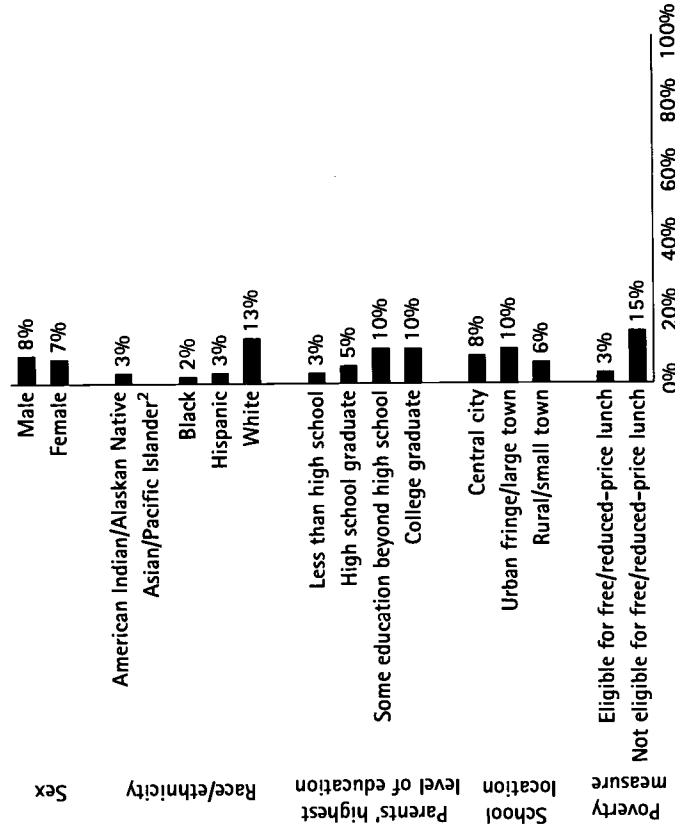
2 states had significantly lower¹ percentages of students who were at or above Proficient on NAEP:

District of Columbia	5%	Guam	3%
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[†] The term "state" is used to refer to the 50 states, the District of Columbia, and the territories.
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.
 * 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 subgroups¹ in Louisiana 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.
² Characteristics of the sample do not permit a reliable estimate.

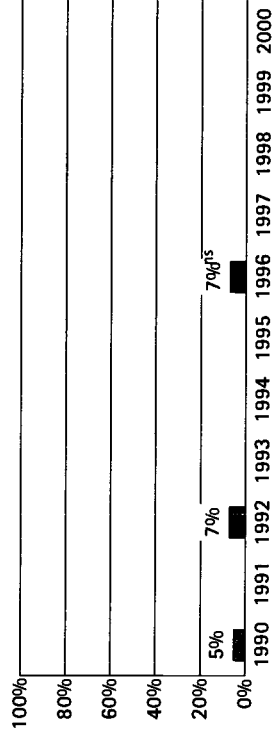
1. Improvement Over Time

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

Not yet. Between 1990 and 1996, 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 Louisiana compare with other states in 8th grade mathematics achievement in public schools in 1996?

38 states had significantly higher¹ percentages of students who were at or above Proficient on NAEP:

Minnesota	34%	Texas, Virginia	21%
North Dakota	33%	North Carolina, Rhode Island	20%
Montana, Wisconsin	32%	Delaware	19%
Connecticut, Iowa, Maine, Nebraska	31%	Arizona	18%
Alaska	30%	California, Florida	17%
Massachusetts, Michigan	28%	Georgia, Hawaii, Kentucky	16%
Vermont	27%	Tennessee	15%
Oregon, Washington	26%	New Mexico, South Carolina,	14%
Colorado	25%	West Virginia	14%
U.S., ² Indiana, Maryland, Utah	24%	Arkansas	13%
Missouri, New York, Wyoming	22%	Alabama	12%

3 states had similar¹ percentages of students who were at or above Proficient on NAEP:

Louisiana, Mississippi	7%	District of Columbia	5%
Guam	6%		

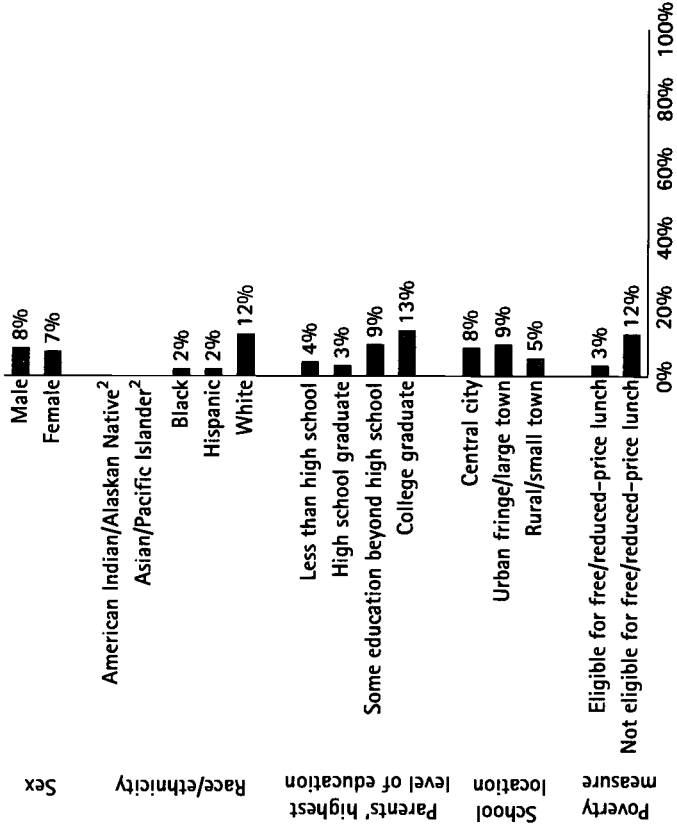
[†] The term "state" is used to refer to the 50 states, the District of Columbia, and the territories.

¹ See explanation on pp. 3-4.

² Figure shown for the U.S. includes both public and nonpublic school data.

3. Subgroup Performance

What percentages of public school 8th graders in different subgroups¹ in Louisiana 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.

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

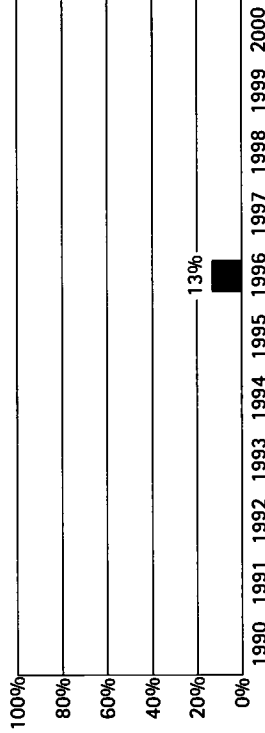
1. Improvement Over Time

Have Louisiana's 8th graders improved in science achievement?

In 1996, 13% of Louisiana's public school 8th graders met the Goals Panel's performance standard in science. The Goals Panel will report whether science performance has improved over time when science is assessed again in 2000.

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 science assessment



Science performance will be tested again in 2000.

2. State Comparisons[†]

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

37 states had significantly higher¹ percentages of students who were at or above Proficient on NAEP:

Maine, Montana, North Dakota	41%	Rhode Island	26%
Wisconsin	39%	Maryland	25%
Massachusetts, Minnesota	37%	North Carolina	24%
Connecticut, Iowa	36%	Arizona, Kentucky, Texas	23%
Nebraska	35%	Arkansas, Tennessee	22%
Vermont, Wyoming	34%	Delaware, Florida, Georgia,	21%
Colorado, Michigan, Oregon, Utah	32%	West Virginia	20%
Alaska	31%	California	19%
Indiana	30%	New Mexico	18%
U.S.*	29%	Alabama	17%
Missouri	28%	South Carolina	17%
New York, Virginia, Washington	27%		

2 states had similar¹ percentages of students who were at or above Proficient on NAEP:

Hawaii	15%	Mississippi	12%
Louisiana	13%		

2 states had significantly lower¹ percentages of students who were at or above Proficient on NAEP:

Guam	7%	District of Columbia	5%
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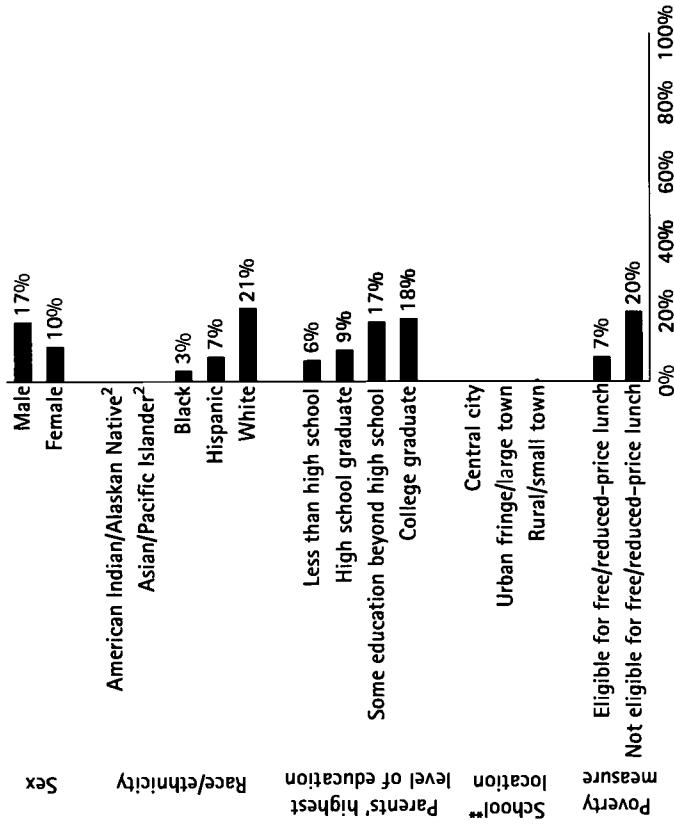
[†] The term "state" is used to refer to the 50 states, the District of Columbia, and the territories.

¹ See explanation on pp. 3-4.

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

3. Subgroup Performance

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



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

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

** No school location data for science in 1996.

International Comparisons

Louisiana

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 Louisiana participated in the TIMSS mathematics assessment, how would their average performance compare to that of students who took TIMSS in these nations?

34 nations[†] would be expected to perform significantly higher:¹

(Australia)
(Austria)
Belgium – Flemish²
(Belgium – French)²
(Bulgaria)
Canada
Czech Republic
(Denmark)
(England)
France
(Germany)
(Greece)
Hong Kong
Hungary
Iceland
Ireland
(Israel)
Japan
Korea
(Latvia – LSS)³
(Netherlands)
New Zealand
Norway
(Romania)
Russian Federation
(Scotland)
Singapore
Slovak Republic
(Slovenia)
Spain
Sweden
(Switzerland)
(Thailand)
United States

4 nations[†] would be expected to perform similarly:¹

Cyprus
Iran, Islamic Republic
(Lithuania)
Louisiana
Portugal

3 nations[†] would be expected to perform significantly lower:¹

(Colombia)
(Kuwait)
(South Africa)

[†] The term "nation" is used to refer to nations, states, or jurisdictions. Performance for nations is based on public school data only. Nations not meeting international guidelines are shown in parentheses.
¹ See explanation on pp. 3–4.

² The Flemish and French educational systems in Belgium participated separately.

³ Latvia is designated LSS because only Latvian-speaking schools were tested, which represent less than 65% of the population.

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 Louisiana participated in the TIMSS science assessment, how would their average performance compare to that of students who took TIMSS in these nations?

27 nations[†] would be expected to perform significantly higher:¹

(Australia)
(Austria)
Belgium – Flemish²
(Bulgaria)
Canada
Czech Republic
(England)
(Germany)
Hong Kong
Hungary
Ireland
(Israel)
Japan
Korea
(Netherlands)
New Zealand
Norway
Russian Federation
(Scotland)
Singapore
Slovak Republic
(Slovenia)
Spain
Sweden
(Switzerland)
(Thailand)
United States

11 nations[†] would be expected to perform similarly:¹

(Belgium – French)²
Cyprus
(Denmark)
France
(Greece)
Iceland
Iran, Islamic Republic
(Latvia – LSS)³
(Lithuania)
Louisiana
Portugal
(Romania)

3 nations[†] would be expected to perform significantly lower:¹

(Colombia)
(Kuwait)
(South Africa)

[†] The term "nation" is used to refer to nations, states, or jurisdictions. Performance for nations is based on public school data only. Nations not meeting international guidelines are shown in parentheses.
¹ See explanation on pp. 3–4.

² The Flemish and French educational systems in Belgium participated separately.

³ Latvia is designated LSS because only Latvian-speaking schools were tested, which represent less than 65% of the population.

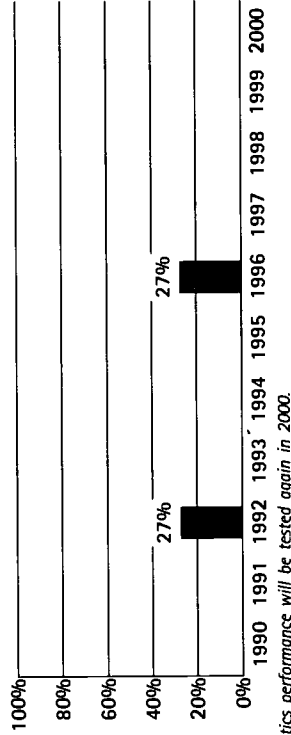
1. Improvement Over Time

Have Maine'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



Mathematics performance will be tested again in 2000.

2. State Comparisons[†]

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

14 states had similar¹ percentages of students who were at or above Proficient on NAEP:

Connecticut	31%	Indiana, Massachusetts, Nebraska,	24%
Minnesota	29%	North Dakota	
Maine , Wisconsin	27%	Michigan, Utah, Vermont	23%
New Jersey, Texas	25%	Maryland, ² Montana ²	22%

30 states had significantly lower¹ percentages of students who were at or above Proficient on NAEP:

Colorado, ² Iowa, ²	14%	Nevada	14%
U.S. , [*] Alaska, North Carolina, Oregon,	21%	Arkansas, Georgia, New Mexico	13%
Washington	12%	South Carolina	12%
Missouri, New York, Pennsylvania	20%	Alabama, California	11%
Virginia, West Virginia, Wyoming	19%	Louisiana, Mississippi	8%
Rhode Island, Tennessee	17%	District of Columbia	5%
Delaware, Hawaii, Kentucky	16%	Guam	3%
Arizona, Florida	15%		

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

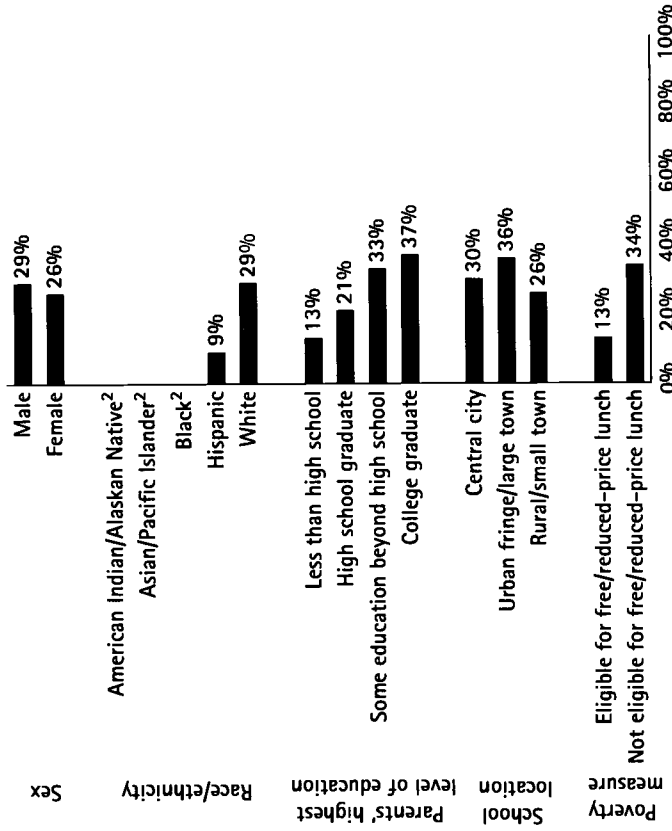
¹ See explanation on pp. 3-4.

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

* 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 subgroups¹ in Maine 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.

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

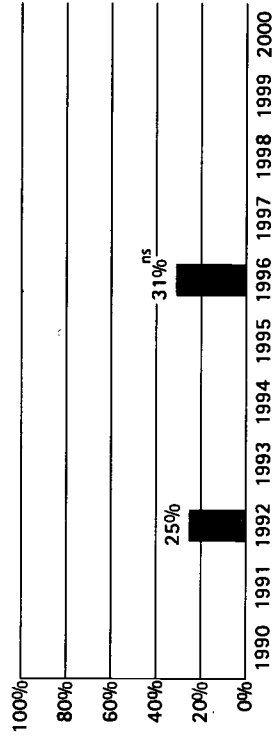
1. Improvement Over Time

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

Not yet. Between 1992 and 1996, 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 Maine compare with other states in 8th grade mathematics achievement in public schools in 1996?

13 states had similar¹ percentages of students who were at or above Proficient on NAEP:

Minnesota	34%	Alaska	30%
North Dakota	33%	Massachusetts, Michigan	28%
Montana, Wisconsin	32%	Vermont	27%
Maine, Connecticut, Iowa, Nebraska	31%	Oregon, Washington	26%

28 states had significantly lower¹ percentages of students who were at or above Proficient on NAEP:

Colorado	25%	Tennessee	15%
U.S., [*] Indiana, Maryland, Utah	24%	New Mexico, South Carolina,	14%
Missouri, New York, Wyoming	22%	West Virginia	13%
Texas, Virginia	21%	Arkansas	12%
North Carolina, Rhode Island	20%	Alabama	7%
Delaware	19%	Louisiana, Mississippi	6%
Arizona	18%	Guam	5%
California, Florida	17%	District of Columbia	5%
Georgia, Hawaii, Kentucky	16%		

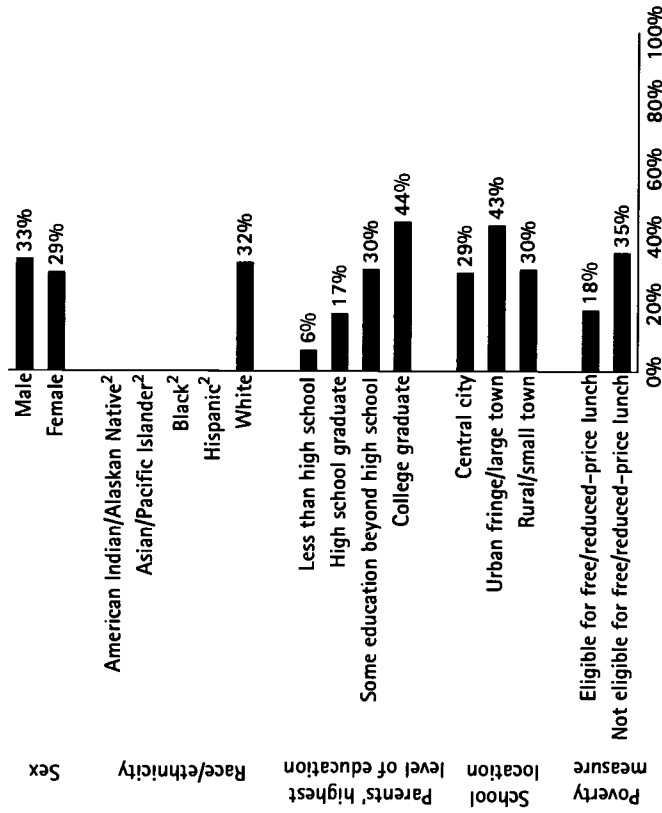
[†] The term "state" is used to refer to the 50 states, the District of Columbia, and the territories.

¹ See explanation on pp. 3-4.

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

3. Subgroup Performance

What percentages of public school 8th graders in different subgroups¹ in Maine 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.

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

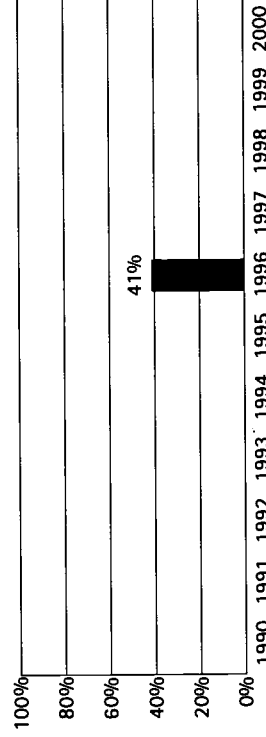
1. Improvement Over Time

Have Maine's 8th graders improved in science achievement?

In 1996, 41% of Maine's public school 8th graders met the Goals Panel's performance standard in science. The Goals Panel will report whether science performance has improved over time when science is assessed again in 2000.

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 science assessment



Science performance will be tested again in 2000.

2. State Comparisons[†]

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

8 states had similar¹ percentages of students who were at or above Proficient on NAEP:

Maine , Montana, North Dakota	41%	Connecticut, Iowa	36%
Wisconsin	39%	Nebraska	35%
Massachusetts, Minnesota	37%		

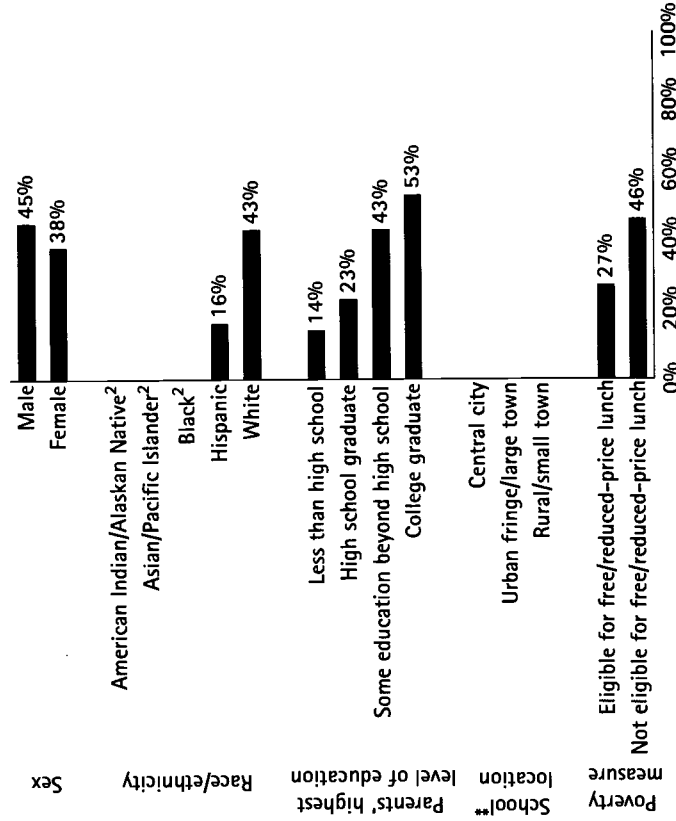
33 states had significantly lower¹ percentages of students who were at or above Proficient on NAEP:

Vermont, Wyoming	34%	Delaware, Florida, Georgia,	21%
Colorado, Michigan, Oregon, Utah	32%	West Virginia	20%
Alaska	31%	California	19%
Indiana	30%	New Mexico	18%
U.S.*	29%	Alabama	17%
Missouri	28%	South Carolina	15%
New York, Virginia, Washington	27%	Hawaii	13%
Rhode Island	26%	Louisiana	12%
Maryland	25%	Mississippi	7%
North Carolina	24%	Guam	5%
Arizona, Kentucky, Texas	23%	District of Columbia	
Arkansas, Tennessee	22%		

[†] The term "state" is used to refer to the 50 states, the District of Columbia, and the territories.
¹ See explanation on pp. 3-4.
^{*} Figure shown for the U.S. includes both public and nonpublic school data.

3. Subgroup Performance

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



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

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

** No school location data for science in 1996.

International Comparisons

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 Maine participated in the TIMSS mathematics assessment, how would their average performance compare to that of students who took TIMSS in these nations?

6 nations[†] would be expected to perform significantly higher:¹

Belgium – Flemish²
Czech Republic
Hong Kong
Japan
Korea
Singapore

18 nations[†] would be expected to perform similarly:¹

(Australia)
(Austria)
(Belgium – French)²
(Bulgaria)
Canada
France
(Germany)
Hungary
Ireland
(Israel)

Maine
(Netherlands)
New Zealand
Russian Federation
Slovak Republic
(Slovenia)
Sweden
(Switzerland)
(Thailand)

17 nations[†] would be expected to perform significantly lower:¹

(Colombia)
Cyprus
(Denmark)
(England)
(Greece)
Iceland
Iran, Islamic Republic
(Kuwait)
(Latvia – LSS)³

(Lithuania)
Norway
Portugal
(Romania)
(Scotland)
(South Africa)
Spain
United States

[†] The term "nation" is used to refer to nations, states, or jurisdictions. Performance for nations is based on public school data only. Nations not meeting international guidelines are shown in parentheses.

¹ See explanation on pp. 3–4.

² The Flemish and French educational systems in Belgium participated separately.

³ Latvia is designated LSS because only Latvian-speaking schools were tested, which represent less than 65% of the population.

Maine

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 Maine participated in the TIMSS science assessment, how would their average performance compare to that of students who took TIMSS in these nations?

1 nation[†] would be expected to perform significantly higher:¹

Singapore

8 nations[†] would be expected to perform similarly:¹

(Austria)
(Bulgaria)
Czech Republic
(England)
Japan

Korea
Maine
(Netherlands)
(Slovenia)

32 nations[†] would be expected to perform significantly lower:¹

(Australia)
Belgium – Flemish²
(Belgium – French)²
Canada
(Colombia)
Cyprus
(Denmark)
France
(Germany)
(Greece)
Hong Kong
Hungary
Iceland
Iran, Islamic Republic
Ireland
(Israel)

(Kuwait)
(Latvia – LSS)³
(Lithuania)
New Zealand
Norway
Portugal
(Romania)
Russian Federation
(Scotland)
Slovak Republic
(South Africa)
Spain
Sweden
(Switzerland)
(Thailand)
United States

[†] The term "nation" is used to refer to nations, states, or jurisdictions. Performance for nations is based on public school data only. Nations not meeting international guidelines are shown in parentheses.

¹ See explanation on pp. 3–4.

² The Flemish and French educational systems in Belgium participated separately.

³ Latvia is designated LSS because only Latvian-speaking schools were tested, which represent less than 65% of the population.

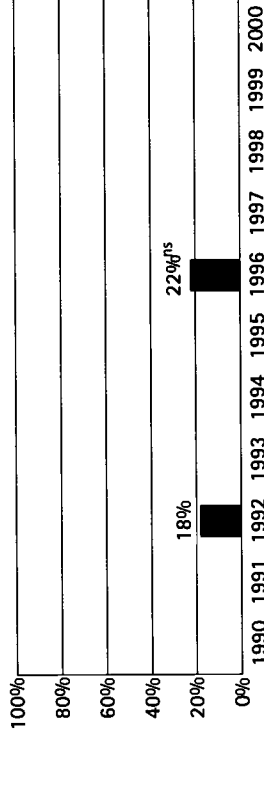
1. Improvement Over Time

Have Maryland'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 Maryland compare with other states in 4th grade mathematics achievement in public schools in 1996?

2 states had significantly higher¹ percentages of students who were at or above Proficient on NAEP:

Connecticut	31%	Minnesota	29%
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24 states had similar¹ percentages of students who were at or above Proficient on NAEP:

Maine, Wisconsin	27%	Maryland , Colorado, Iowa, Montana	22%
New Jersey, Texas	25%	U.S.* , Alaska, North Carolina, Oregon,	21%
Indiana, Massachusetts, Nebraska,	24%	Washington	
North Dakota		Missouri, New York, Pennsylvania	20%
Michigan, Utah, Vermont	23%	Virginia, West Virginia, Wyoming	19%

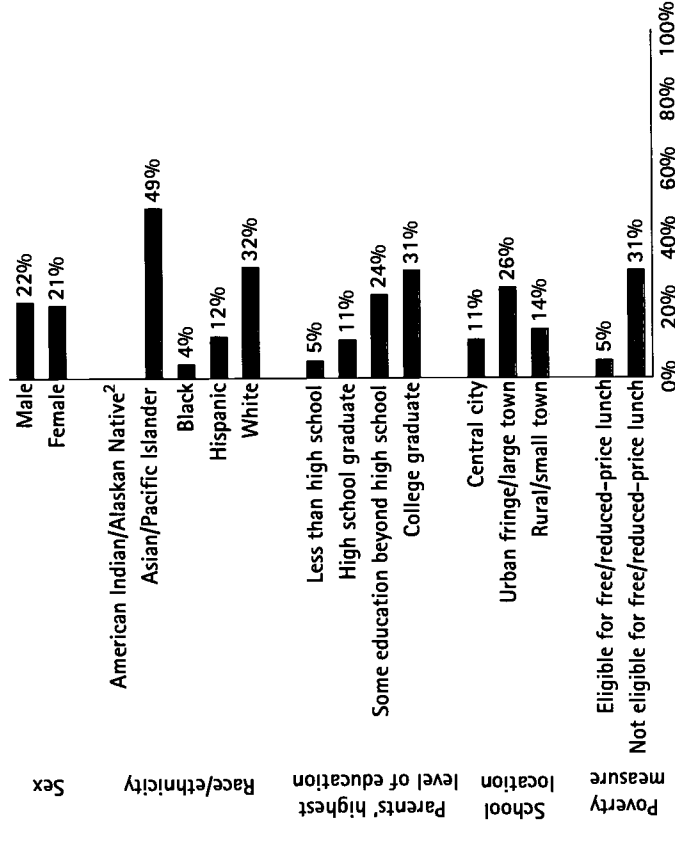
18 states had significantly lower¹ percentages of students who were at or above Proficient on NAEP:

Rhode Island, Tennessee	17%	South Carolina	12%
Delaware, Hawaii, Kentucky	16%	Alabama, California	11%
Arizona, Florida	15%	Louisiana, Mississippi	8%
Nevada	14%	District of Columbia	5%
Arkansas, Georgia, New Mexico	13%	Guam	3%

[†] The term "state" is used to refer to the 50 states, the District of Columbia, and the territories.
¹ See explanation on pp. 3-4.
^{*} 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 subgroups¹ in Maryland 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.
² Characteristics of the sample do not permit a reliable estimate.

See Appendix A for definitions, sources, and technical notes.

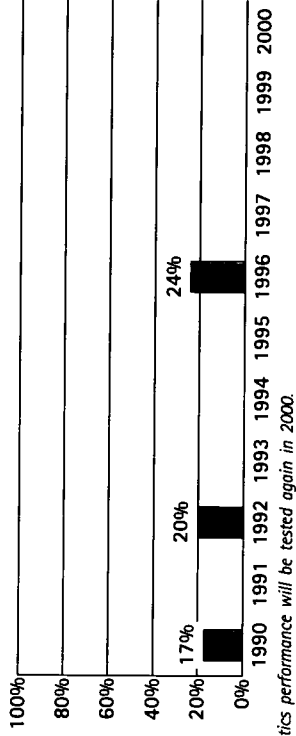
1. Improvement Over Time

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

Yes. The percentage of Maryland's public school 8th graders who met the Goals Panel's performance standard in mathematics increased from 17% in 1990, to 24% in 1996.

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



Mathematics performance will be tested again in 2000.

2. State Comparisons[†]

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

4 states had significantly higher¹ percentages of students who were at or above Proficient on NAEP:

Minnesota	34%	Montana, Wisconsin	32%
North Dakota	33%		

21 states had similar¹ percentages of students who were at or above Proficient on NAEP:

Connecticut, Iowa, Maine, Nebraska	31%	U.S.,[*] Maryland, Indiana, Utah	24%
Alaska	30%	Missouri, New York, Wyoming	22%
Massachusetts, Michigan	28%	Texas, Virginia	21%
Vermont	27%	North Carolina, Rhode Island	20%
Oregon, Washington	26%	Delaware	19%
Colorado	25%		

16 states had significantly lower¹ percentages of students who were at or above Proficient on NAEP:

Arizona	18%	Arkansas	13%
California, Florida	17%	Alabama	12%
Georgia, Hawaii, Kentucky	16%	Louisiana, Mississippi	7%
Tennessee	15%	Guam	6%
New Mexico, South Carolina, West Virginia	14%	District of Columbia	5%

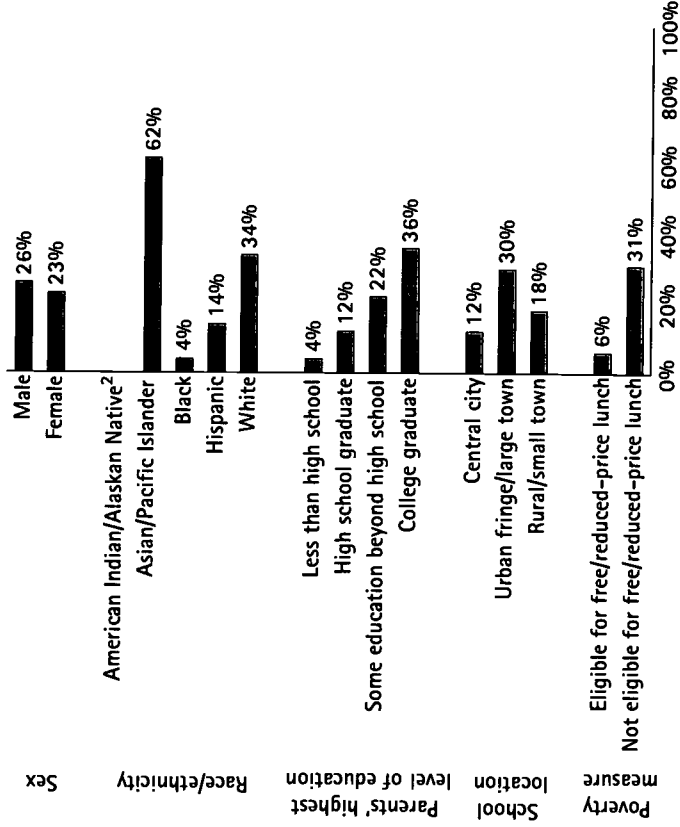
[†] The term "state" is used to refer to the 50 states, the District of Columbia, and the territories.

¹ See explanation on pp. 3-4.

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

3. Subgroup Performance

What percentages of public school 8th graders in different subgroups¹ in Maryland were at or above Proficient on the 1996 NAEP mathematics assessment?²



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

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

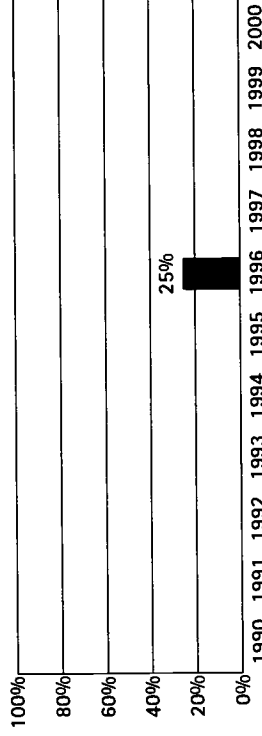
1. Improvement Over Time

Have Maryland's 8th graders improved in science achievement?

In 1996, 25% of Maryland's public school 8th graders met the Goals Panel's performance standard in science. The Goals Panel will report whether science performance has improved over time when science is assessed again in 2000.

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 science assessment



Science performance will be tested again in 2000.

2. State Comparisons[†]

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

16 states had significantly higher[†] percentages of students who were at or above Proficient on NAEP:

Maine, Montana, North Dakota	41%	Nebraska	35%
Wisconsin	39%	Vermont, Wyoming	34%
Massachusetts, Minnesota	37%	Colorado, Michigan, Oregon, Utah	32%
Connecticut, Iowa	36%	Alaska	31%

17 states had similar[†] percentages of students who were at or above Proficient on NAEP:

Indiana	30%	North Carolina	24%
U.S.*	29%	Arizona, Kentucky, Texas	23%
Missouri	28%	Arkansas, Tennessee	22%
New York, Virginia, Washington	27%	Delaware, Florida, Georgia, Rhode Island	21%
	26%	West Virginia	
Maryland	25%	California	20%

8 states had significantly lower[†] percentages of students who were at or above Proficient on NAEP:

New Mexico	19%	Louisiana	13%
Alabama	18%	Mississippi	12%
South Carolina	17%	Guam	7%
Hawaii	15%	District of Columbia	5%

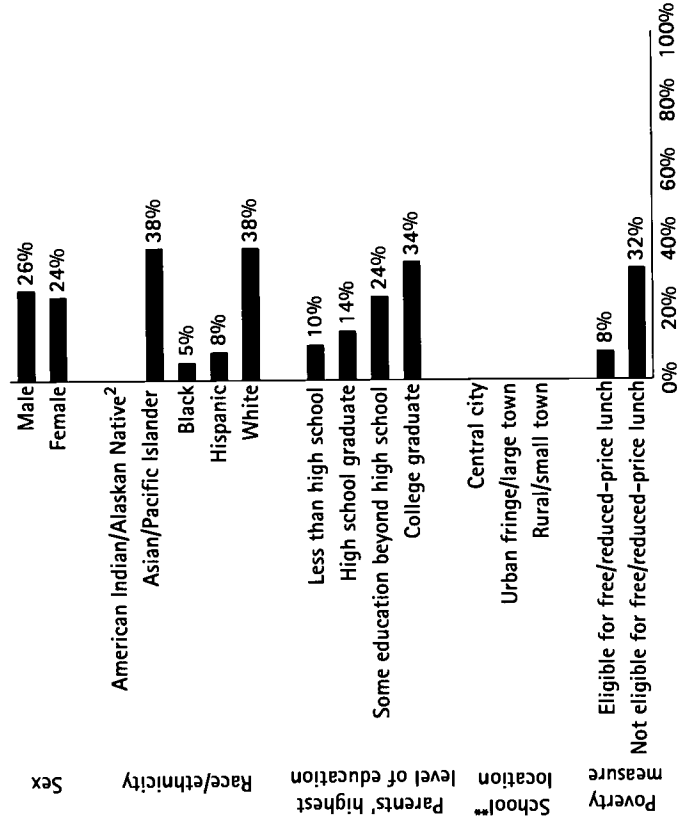
[†] The term "state" is used to refer to the 50 states, the District of Columbia, and the territories.

¹ See explanation on pp. 3-4.

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

3. Subgroup Performance

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



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

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

** No school location data for science in 1996.

International Comparisons

Maryland

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 Maryland participated in the TIMSS mathematics assessment, how would their average performance compare to that of students who took TIMSS in these nations?

19 nations[†] would be expected to perform significantly higher:¹

(Australia)
(Austria)
Belgium – Flemish²
(Belgium – French)²
(Bulgaria)
Canada
Czech Republic
France
Hong Kong
Hungary
Ireland
Japan
Korea
(Netherlands)
Russian Federation
Singapore
Slovak Republic
(Slovenia)
(Switzerland)

17 nations[†] would be expected to perform similarly:¹

Cyprus
(Denmark)
(England)
(Germany)
(Greece)
Iceland
(Israel)
(Latvia – LSS)³
(Lithuania)
Maryland
New Zealand
Norway
(Romania)
(Scotland)
Spain
Sweden
(Thailand)
United States

5 nations[†] would be expected to perform significantly lower:¹

(Colombia)
Iran, Islamic Republic
(Kuwait)
Portugal
(South Africa)

[†] The term "nation" is used to refer to nations, states, or jurisdictions. Performance for nations is based on public school data only. Nations not meeting international guidelines are shown in parentheses.

¹ See explanation on pp. 3–4.

² The Flemish and French educational systems in Belgium participated separately.

³ Latvia is designated LSS because only Latvian-speaking schools were tested, which represent less than 65% of the population.

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 Maryland participated in the TIMSS science assessment, how would their average performance compare to that of students who took TIMSS in these nations?

10 nations[†] would be expected to perform significantly higher:¹

(Austria)
(Bulgaria)
Czech Republic
(England)
Hungary
Japan
Korea
(Netherlands)
Singapore
(Slovenia)

19 nations[†] would be expected to perform similarly:¹

(Australia)
Belgium – Flemish²
Canada
France
(Germany)
(Greece)
Hong Kong
Ireland
(Israel)
Maryland
New Zealand
Norway
Russian Federation
(Scotland)
Slovak Republic
Spain
Sweden
(Switzerland)
(Thailand)
United States

12 nations[†] would be expected to perform significantly lower:¹

(Belgium – French)²
(Colombia)
Cyprus
(Denmark)
Iceland
Iran, Islamic Republic
(Kuwait)
(Latvia – LSS)³
(Lithuania)
Portugal
(Romania)
(South Africa)

[†] The term "nation" is used to refer to nations, states, or jurisdictions. Performance for nations is based on public school data only. Nations not meeting international guidelines are shown in parentheses.

¹ See explanation on pp. 3–4.

² The Flemish and French educational systems in Belgium participated separately.

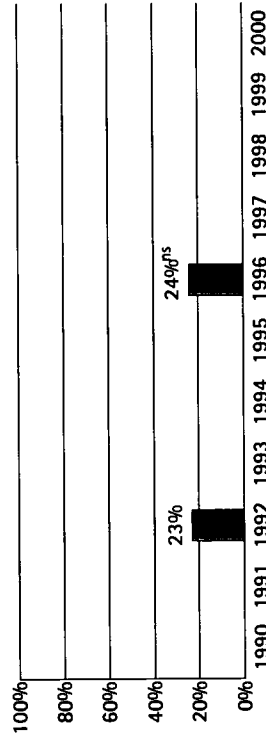
³ Latvia is designated LSS because only Latvian-speaking schools were tested, which represent less than 65% of the population.

1. Improvement Over Time

Have Massachusetts' 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 Massachusetts compare with other states in 4th grade mathematics achievement in public schools in 1996?

24 states had similar¹ percentages of students who were at or above Proficient on NAEP:

Connecticut	31%	Michigan, Utah, Vermont	23%
Minnesota	29%	Colorado, Iowa, Maryland, Montana	22%
Maine, Wisconsin	27%	U.S.,* Alaska, North Carolina, Oregon,	21%
New Jersey, Texas	25%	Washington	
Massachusetts, Indiana, Nebraska,	24%	Missouri, New York, Pennsylvania	20%
North Dakota		Virginia ²	19%

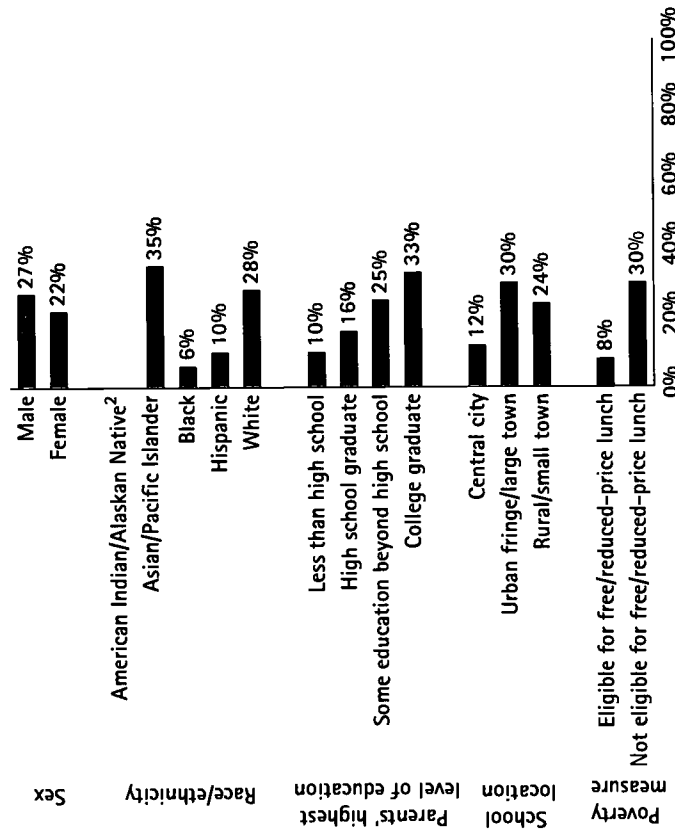
20 states had significantly lower¹ percentages of students who were at or above Proficient on NAEP:

West Virginia, ² Wyoming ²	19%	South Carolina	12%
Rhode Island, Tennessee	17%	Alabama, California	11%
Delaware, Hawaii, Kentucky	16%	Louisiana, Mississippi	8%
Arizona, Florida	15%	District of Columbia	5%
Nevada	14%	Guam	3%
Arkansas, Georgia, New Mexico	13%		

[†] The term "state" is used to refer to the 50 states, the District of Columbia, and the territories.
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.
 * 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 subgroups¹ in Massachusetts 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.
² Characteristics of the sample do not permit a reliable estimate.

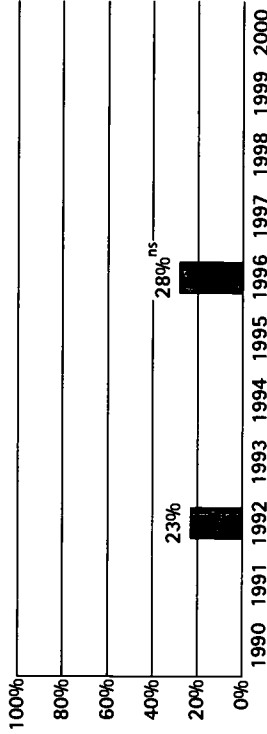
1. Improvement Over Time

Have Massachusetts' 8th graders improved in mathematics achievement?

Not yet. Between 1992 and 1996, 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 Massachusetts compare with other states in 8th grade mathematics achievement in public schools in 1996?

17 states had similar¹ percentages of students who were at or above Proficient on NAEP:

Minnesota	34%	Massachusetts , Michigan	28%
North Dakota	33%	Vermont	27%
Montana, Wisconsin	32%	Oregon, Washington	26%
Connecticut, Iowa, Maine, Nebraska	31%	Colorado	25%
Alaska	30%	U.S. , ² Indiana, Maryland, Utah	24%

24 states had significantly lower¹ percentages of students who were at or above Proficient on NAEP:

Missouri, New York, Wyoming	22%	New Mexico, South Carolina,	14%
Texas, Virginia	21%	West Virginia	13%
North Carolina, Rhode Island	20%	Arkansas	12%
Delaware	19%	Alabama	7%
Arizona	18%	Louisiana, Mississippi	6%
California, Florida	17%	Guam	5%
Georgia, Hawaii, Kentucky	16%	District of Columbia	15%
Tennessee	15%		

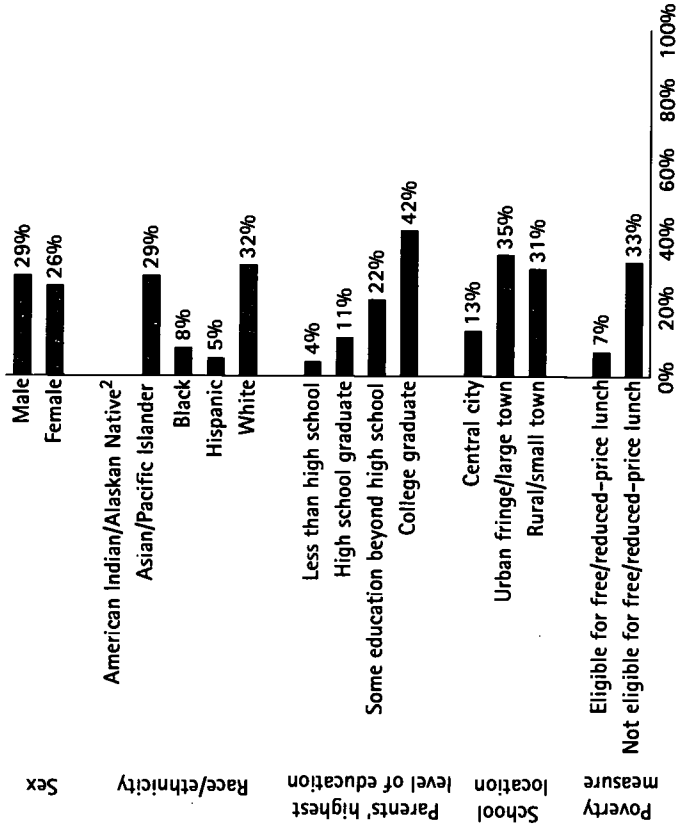
[†] The term "state" is used to refer to the 50 states, the District of Columbia, and the territories.

¹ See explanation on pp. 3-4.

² Figure shown for the U.S. includes both public and nonpublic school data.

3. Subgroup Performance

What percentages of public school 8th graders in different subgroups¹ in Massachusetts 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.

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

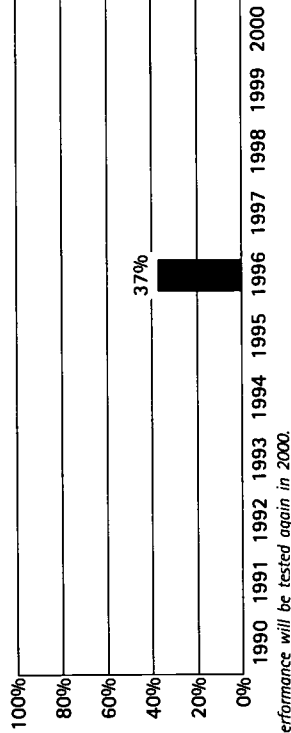
1. Improvement Over Time

Have Massachusetts' 8th graders improved in science achievement?

In 1996, 37% of Massachusetts' public school 8th graders met the Goals Panel's performance standard in science. The Goals Panel will report whether science performance has improved over time when science is assessed again in 2000.

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 science assessment



2. State Comparisons[†]

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

13 states had similar¹ percentages of students who were at or above Proficient on NAEP:

Maine, Montana, North Dakota	41%	Nebraska	35%
Wisconsin	39%	Vermont, Wyoming	34%
Massachusetts , Minnesota	37%	Colorado, ² Michigan, ² Oregon ²	32%
Connecticut, Iowa	36%		

28 states had significantly lower¹ percentages of students who were at or above Proficient on NAEP:

Utah ²	32%	Delaware, Florida, Georgia,	21%
Alaska	31%	West Virginia	20%
Indiana	30%	California	19%
U.S.*	29%	New Mexico	18%
Missouri	28%	Alabama	17%
New York, Virginia, Washington	27%	South Carolina	17%
Rhode Island	26%	Hawaii	15%
Maryland	25%	Louisiana	13%
North Carolina	24%	Mississippi	12%
Arizona, Kentucky, Texas	23%	Guam	7%
Arkansas, Tennessee	22%	District of Columbia	5%

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

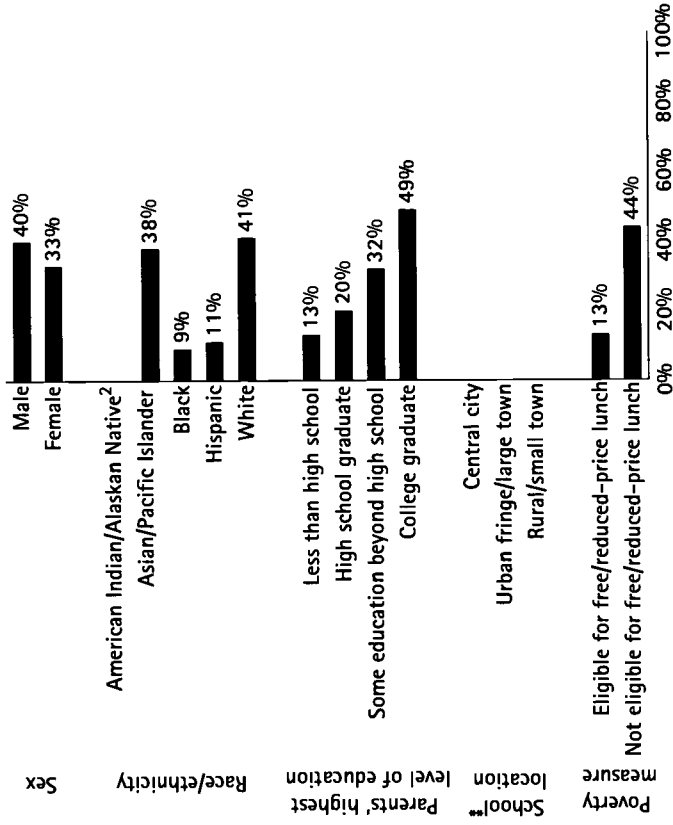
¹ See explanation on pp. 3-4.

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

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

3. Subgroup Performance

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



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

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

** No school location data for science in 1996.

International Comparisons

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 Massachusetts participated in the TIMSS mathematics assessment, how would their average performance compare to that of students who took TIMSS in these nations?

8 nations[†] would be expected to perform significantly higher:¹

Belgium – Flemish²
Czech Republic
Hong Kong
Japan
Korea
Singapore
Slovak Republic
(Switzerland)

22 nations[†] would be expected to perform similarly:¹

(Australia)
(Austria)
(Belgium – French)²
(Bulgaria)
Canada
(Denmark)
(England)
France
(Germany)
Hungary
Ireland
(Israel)
(Latvia – LSS)³
Massachusetts
(Netherlands)
New Zealand
Norway
Russian Federation
(Scotland)
(Slovenia)
Sweden
(Thailand)
United States

11 nations[†] would be expected to perform significantly lower:¹

(Colombia)
Cyprus
(Greece)
Iceland
Iran, Islamic Republic
(Kuwait)
(Lithuania)
Portugal
(Romania)
(South Africa)
Spain

[†] The term "nation" is used to refer to nations, states, or jurisdictions. Performance for nations is based on public school data only. Nations not meeting international guidelines are shown in parentheses.

¹ See explanation on pp. 3–4.

² The Flemish and French educational systems in Belgium participated separately.

³ Latvia is designated LSS because only Latvian-speaking schools were tested, which represent less than 65% of the population.

Massachusetts

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 Massachusetts participated in the TIMSS science assessment, how would their average performance compare to that of students who took TIMSS in these nations?

1 nation[†] would be expected to perform significantly higher:¹

Singapore

17 nations[†] would be expected to perform similarly:¹

(Australia)
(Austria)
Belgium – Flemish²
(Bulgaria)
Czech Republic
(England)
(Germany)
Hungary
Ireland
Japan
Korea
Massachusetts
(Netherlands)
Russian Federation
Slovak Republic
(Slovenia)
Sweden
United States

23 nations[†] would be expected to perform significantly lower:¹

(Belgium – French)²
Canada
(Colombia)
Cyprus
(Denmark)
France
(Greece)
Hong Kong
Iceland
Iran, Islamic Republic
(Israel)
(Kuwait)
(Latvia – LSS)³
(Lithuania)
New Zealand
Norway
Portugal
(Romania)
(Scotland)
(South Africa)
Spain
(Switzerland)
(Thailand)

[†] The term "nation" is used to refer to nations, states, or jurisdictions. Performance for nations is based on public school data only. Nations not meeting international guidelines are shown in parentheses.

¹ See explanation on pp. 3–4.

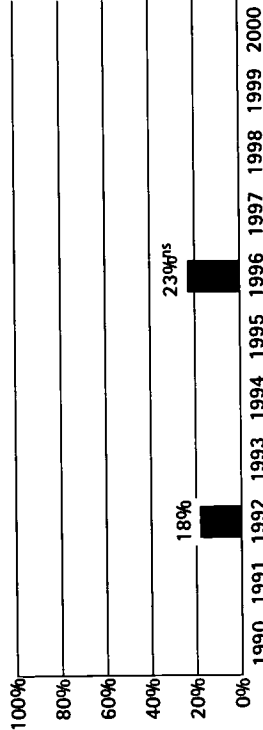
² The Flemish and French educational systems in Belgium participated separately.

³ Latvia is designated LSS because only Latvian-speaking schools were tested, which represent less than 65% of the population.

1. Improvement Over Time

Have Michigan'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[†]

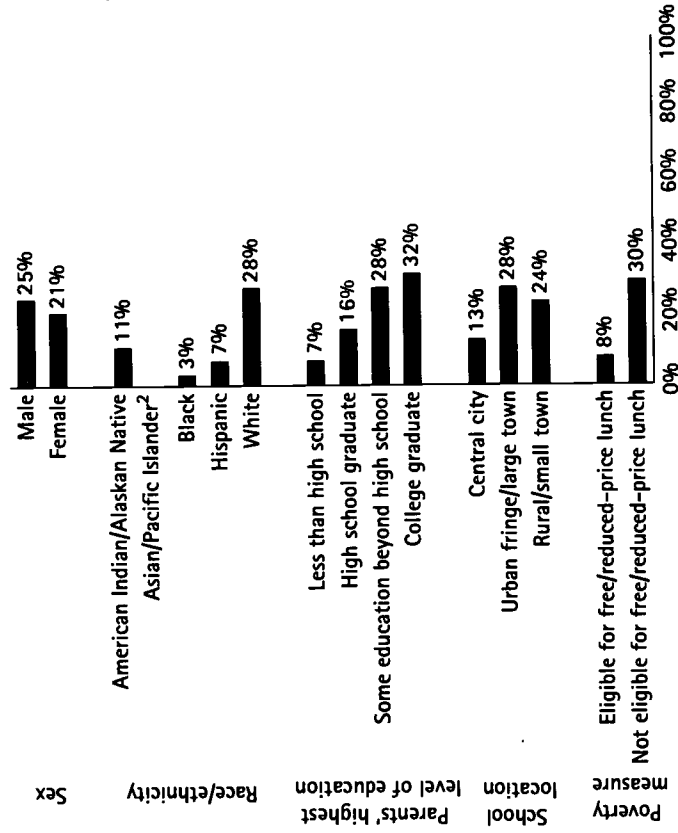
How did Michigan compare with other states in 4th grade mathematics achievement in public schools in 1996?

1 state had a significantly higher ¹ percentage of students who were at or above Proficient on NAEP:	31%
Connecticut	
25 states had similar ¹ percentages of students who were at or above Proficient on NAEP:	
Minnesota	29%
Maine, Wisconsin	27%
New Jersey, Texas	25%
Indiana, Massachusetts, Nebraska, North Dakota	24%
Michigan, Utah, Vermont	23%
Colorado, Iowa, Maryland, Montana	22%
U.S., ² Alaska, North Carolina, Oregon, Washington	21%
Missouri, New York, Pennsylvania, Virginia, West Virginia, Wyoming	20%
18 states had significantly lower ¹ percentages of students who were at or above Proficient on NAEP:	
Rhode Island, Tennessee	17%
Delaware, Hawaii, Kentucky	16%
Arizona, Florida	15%
Nevada	14%
Arkansas, Georgia, New Mexico	13%
South Carolina	12%
Alabama, California	11%
Louisiana, Mississippi	8%
District of Columbia	5%
Guam	3%

[†] The term "state" is used to refer to the 50 states, the District of Columbia, and the territories.
¹ See explanation on pp. 3-4.
² 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 subgroups¹ in Michigan 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.
² Characteristics of the sample do not permit a reliable estimate.

1. Improvement Over Time

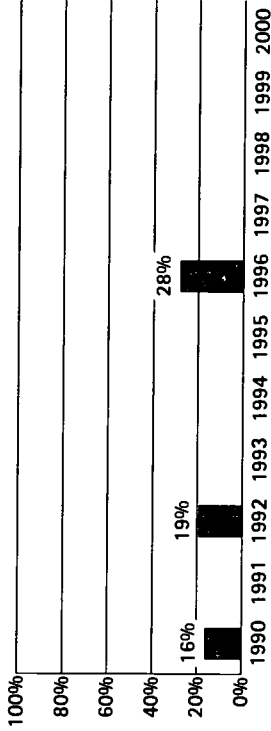


Have Michigan's 8th graders improved in mathematics achievement?

Yes. *The percentage of Michigan's public school 8th graders who met the Goals Panel's performance standard in mathematics increased from 16% in 1990, to 28% in 1996.*

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



Mathematics performance will be tested again in 2000.

2. State Comparisons[†]

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

17 states had similar¹ percentages of students who were at or above Proficient on NAEP:

Minnesota	34%	Michigan , Massachusetts	28%
North Dakota	33%	Vermont	27%
Montana, Wisconsin	32%	Oregon, Washington	26%
Connecticut, Iowa, Maine, Nebraska	31%	Colorado	25%
Alaska	30%	U.S. , ² Indiana, Maryland, Utah	24%

24 states had significantly lower¹ percentages of students who were at or above Proficient on NAEP:

Missouri, New York, Wyoming	22%	New Mexico, South Carolina,	14%
Texas, Virginia	21%	West Virginia	13%
North Carolina, Rhode Island	20%	Arkansas	12%
Delaware	19%	Alabama	7%
Arizona	18%	Louisiana, Mississippi	6%
California, Florida	17%	Guam	5%
Georgia, Hawaii, Kentucky	16%	District of Columbia	15%
Tennessee	15%		

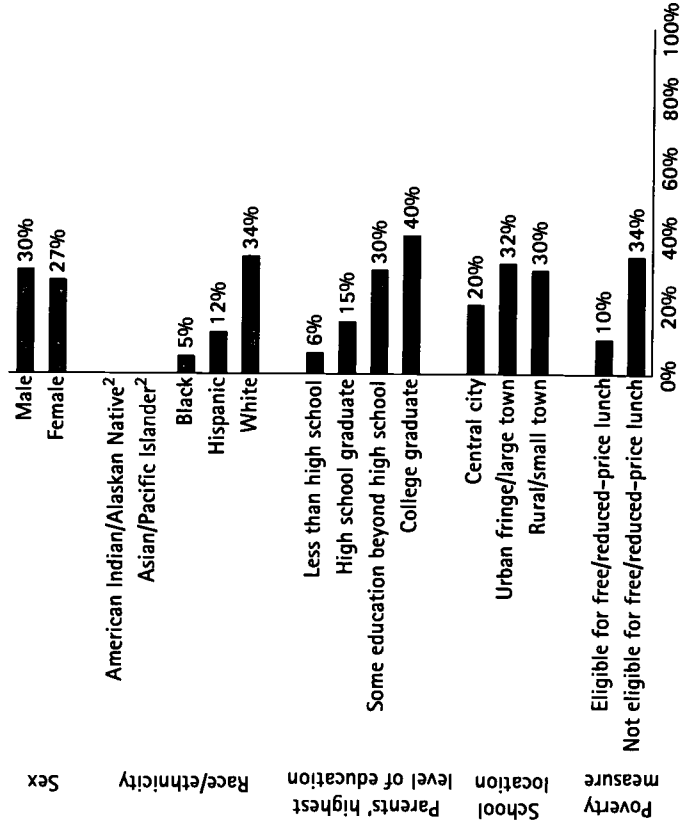
[†] The term "state" is used to refer to the 50 states, the District of Columbia, and the territories.

¹ See explanation on pp. 3-4.

² Figure shown for the U.S. includes both public and nonpublic school data.

3. Subgroup Performance

What percentages of public school 8th graders in different subgroups¹ in Michigan 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.

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

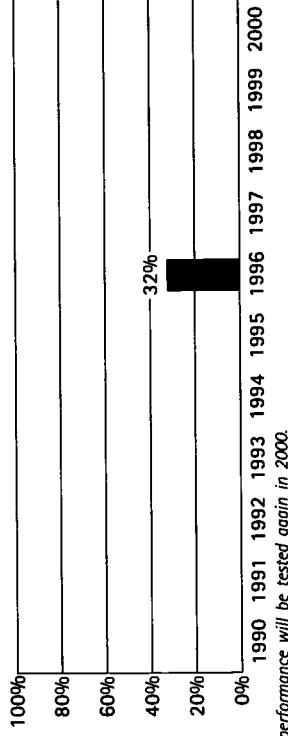
1. Improvement Over Time

Have Michigan's 8th graders improved in science achievement?

In 1996, 32% of Michigan's public school 8th graders met the Goals Panel's performance standard in science. The Goals Panel will report whether science performance has improved over time when science is assessed again in 2000.

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 science assessment



Science performance will be tested again in 2000.

2. State Comparisons[†]

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

3 states had significantly higher¹ percentages of students who were at or above Proficient on NAEP:

Maine, Montana, North Dakota 41%

17 states had similar¹ percentages of students who were at or above Proficient on NAEP:

Wisconsin	39%	Alaska	31%
Massachusetts, Minnesota	37%	Indiana	30%
Connecticut, Iowa	36%	U.S.*	29%
Nebraska	35%	Missouri	28%
Vermont, Wyoming	34%	New York, Virginia, Washington	27%
Michigan , Colorado, Oregon, Utah	32%		

21 states had significantly lower¹ percentages of students who were at or above Proficient on NAEP:

Rhode Island	26%	New Mexico	19%
Maryland	25%	Alabama	18%
North Carolina	24%	South Carolina	17%
Arizona, Kentucky, Texas	23%	Hawaii	15%
Arkansas, Tennessee	22%	Louisiana	13%
Delaware, Florida, Georgia,	21%	Mississippi	12%
West Virginia	20%	Guam	7%
California	20%	District of Columbia	5%

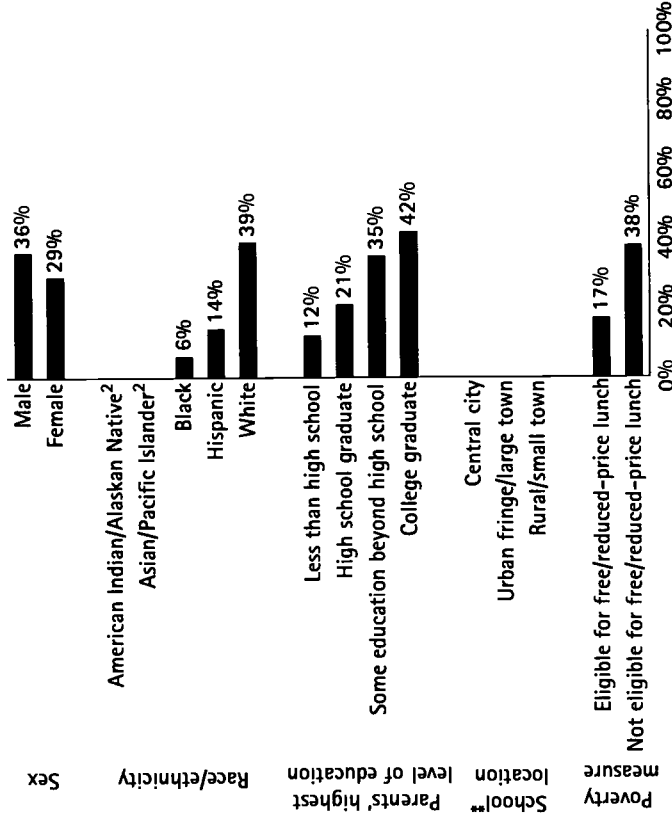
[†] The term "state" is used to refer to the 50 states, the District of Columbia, and the territories.

¹ See explanation on pp. 3-4.

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

3. Subgroup Performance

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



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

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

** No school location data for science in 1996.

International Comparisons

Michigan

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 Michigan participated in the TIMSS mathematics assessment, how would their average performance compare to that of students who took TIMSS in these nations?

10 nations[†] would be expected to perform significantly higher:¹

(Austria)
Belgium – Flemish²
Czech Republic
Hong Kong
Japan
Korea
Singapore
Slovak Republic
(Slovenia)
(Switzerland)

21 nations[†] would be expected to perform similarly:¹

(Australia)
(Belgium – French)²
(Bulgaria)
Canada
(Denmark)
(England)
France
(Germany)
Hungary
Iceland
Ireland
(Israel)
(Belgium – LSS)³
Michigan
(Netherlands)
New Zealand
Norway
Russian Federation
(Scotland)
Sweden
(Thailand)
United States

10 nations[†] would be expected to perform significantly lower:¹

(Colombia)
Cyprus
(Greece)
Iran, Islamic Republic
(Kuwait)
(Lithuania)
Portugal
(Romania)
(South Africa)
Spain

[†] The term "nation" is used to refer to nations, states, or jurisdictions. Performance for nations is based on public school data only. Nations not meeting international guidelines are shown in parentheses.
¹ See explanation on pp. 3-4.

² The Flemish and French educational systems in Belgium participated separately.

³ Latvia is designated LSS because only Latvian-speaking schools were tested, which represent less than 65% of the population.

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 Michigan participated in the TIMSS science assessment, how would their average performance compare to that of students who took TIMSS in these nations?

2 nations[†] would be expected to perform significantly higher:¹

Czech Republic
Singapore

23 nations[†] would be expected to perform similarly:¹

(Australia)
(Austria)
Belgium – Flemish²
(Bulgaria)
Canada
(England)
(Germany)
Hong Kong
Hungary
Ireland
(Israel)
Japan
Korea
Michigan
(Netherlands)
New Zealand
Norway
Russian Federation
Slovak Republic
(Slovenia)
Sweden
(Switzerland)
(Thailand)
United States

16 nations[†] would be expected to perform significantly lower:¹

(Belgium – French)²
(Colombia)
Cyprus
(Denmark)
France
(Greece)
Iceland
Iran, Islamic Republic
(Kuwait)
(Latvia – LSS)³
(Lithuania)
Portugal
(Romania)
(Scotland)
(South Africa)
Spain

[†] The term "nation" is used to refer to nations, states, or jurisdictions. Performance for nations is based on public school data only. Nations not meeting international guidelines are shown in parentheses.
¹ See explanation on pp. 3-4.

² The Flemish and French educational systems in Belgium participated separately.

³ Latvia is designated LSS because only Latvian-speaking schools were tested, which represent less than 65% of the population.

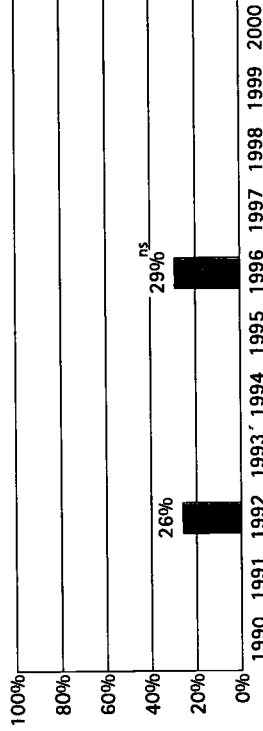
1. Improvement Over Time

Have Minnesota'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 Panels' 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 Minnesota compare with other states in 4th grade mathematics achievement in public schools in 1996?

9 states had similar¹ percentages of students who were at or above Proficient on NAEP:

Connecticut	31%	New Jersey, Texas	25%
Minnesota	29%	Indiana, Massachusetts, Nebraska,	24%
Maine, Wisconsin	27%	North Dakota	

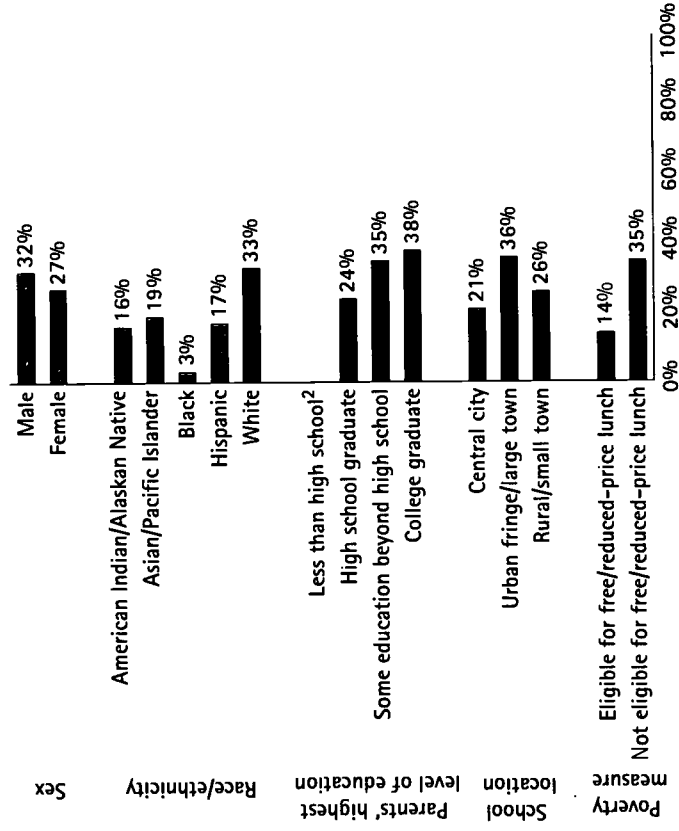
35 states had significantly lower² percentages of students who were at or above Proficient on NAEP:

Michigan, Utah, Vermont	23%	Arizona, Florida	15%
Colorado, Iowa, Maryland, Montana	22%	Nevada	14%
U.S.,* Alaska, North Carolina, Oregon,	21%	Arkansas, Georgia, New Mexico	13%
Washington	12%	South Carolina	12%
Missouri, New York, Pennsylvania	20%	Alabama, California	11%
Virginia, West Virginia, Wyoming	19%	Louisiana, Mississippi	8%
Rhode Island, Tennessee	17%	District of Columbia	5%
Delaware, Hawaii, Kentucky	16%	Guam	3%

[†] The term "state" is used to refer to the 50 states, the District of Columbia, and the territories.
¹ See explanation on pp. 3-4.
^{*} 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 subgroups¹ in Minnesota 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.
² Characteristics of the sample do not permit a reliable estimate.

1. Improvement Over Time

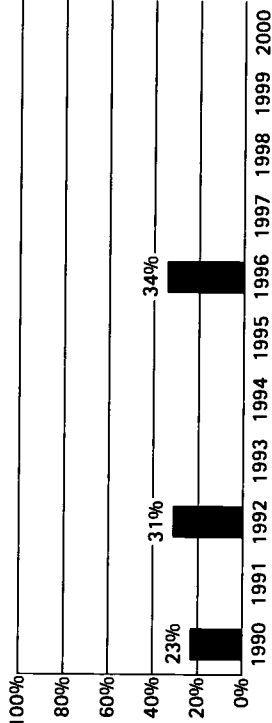


Have Minnesota's 8th graders improved in mathematics achievement?

Yes. The percentage of Minnesota's public school 8th graders who met the Goals Panel's performance standard in mathematics increased from 23% in 1990, to 34% in 1996.

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



Mathematics performance will be tested again in 2000.

2. State Comparisons[†]

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

10 states had similar¹ percentages of students who were at or above Proficient on NAEP:

Minnesota	34%	Connecticut, Iowa, Maine, Nebraska	31%
North Dakota	33%	Alaska	30%
Montana, Wisconsin	32%	Massachusetts, Michigan	28%

31 states had significantly lower¹ percentages of students who were at or above Proficient on NAEP:

Vermont	27%	Georgia, Hawaii, Kentucky	16%
Oregon, Washington	26%	Tennessee	15%
Colorado	25%	New Mexico, South Carolina,	14%
U.S., Indiana, Maryland, Utah	24%	West Virginia	
Missouri, New York, Wyoming	22%	Arkansas	13%
Texas, Virginia	21%	Alabama	12%
North Carolina, Rhode Island	20%	Louisiana, Mississippi	7%
Delaware	19%	Guam	6%
Arizona	18%	District of Columbia	5%
California, Florida	17%		

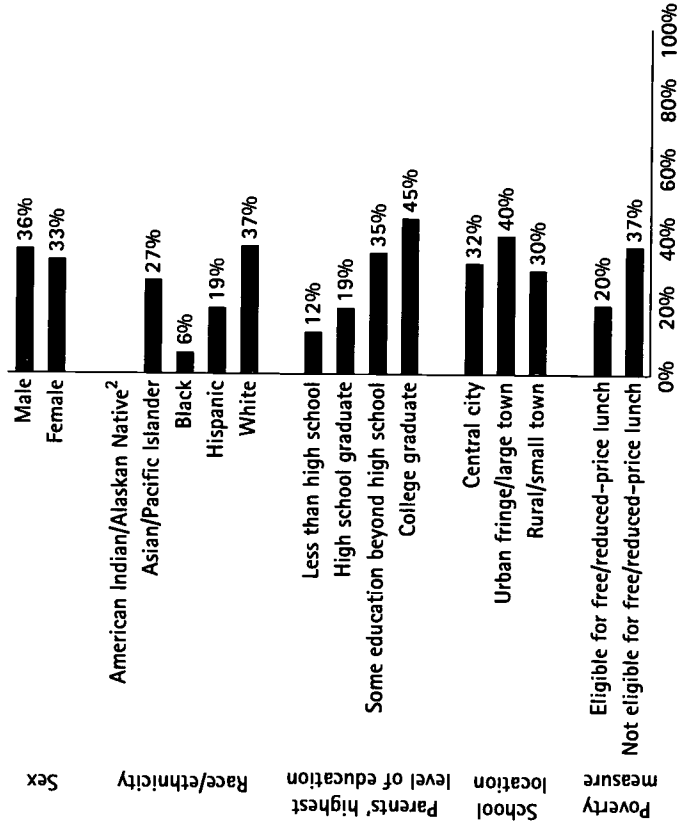
[†] The term "state" is used to refer to the 50 states, the District of Columbia, and the territories.

¹ See explanation on pp. 3-4.

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

3. Subgroup Performance

What percentages of public school 8th graders in different subgroups¹ in Minnesota 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.

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

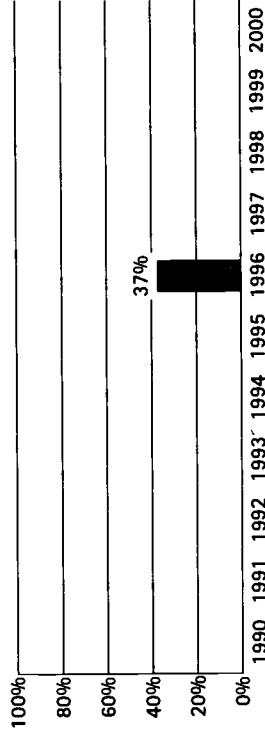
1. Improvement Over Time

Have Minnesota's 8th graders improved in science achievement?

In 1996, 37% of Minnesota's public school 8th graders met the Goals Panel's performance standard in science. The Goals Panel will report whether science performance has improved over time when science is assessed again in 2000.

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 science assessment



Science performance will be tested again in 2000.

2. State Comparisons[†]

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

13 states had similar¹ percentages of students who were at or above Proficient on NAEP:

Maine, Montana, North Dakota	41%	Nebraska	35%
Wisconsin	39%	Vermont, Wyoming	34%
Minnesota , Massachusetts	37%	Colorado, ² Michigan, ² Oregon ²	32%
Connecticut, Iowa	36%		

28 states had significantly lower¹ percentages of students who were at or above Proficient on NAEP:

Utah [†]	32%	Delaware, Florida, Georgia,	21%
Alaska	31%	West Virginia	20%
Indiana	30%	California	19%
U.S.*	29%	New Mexico	18%
Missouri	28%	Alabama	17%
New York, Virginia, Washington	27%	South Carolina	15%
Rhode Island	26%	Hawaii	15%
Maryland	25%	Louisiana	13%
North Carolina	24%	Mississippi	12%
Arizona, Kentucky, Texas	23%	Guam	7%
Arkansas, Tennessee	22%	District of Columbia	5%

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

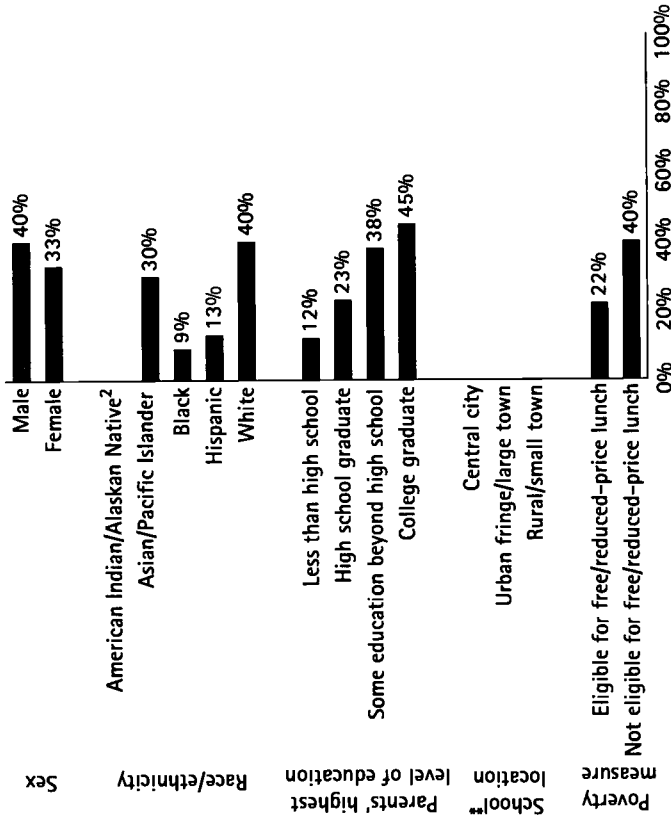
¹ See explanation on pp. 3-4.

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

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

3. Subgroup Performance

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



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

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

** No school location data for science in 1996.

International Comparisons

Mathematics Grade 8

Forty-one nations[†] participated in the Third International Mathematics and Science Study (TIMSS) in 8th grade mathematics in 1995. Students in Minnesota took the same test so that their results could be compared directly to the results of students in other countries. How did public school 8th graders in Minnesota compare to students in the other participating countries?

6 nations[†] performed significantly higher:¹

Belgium – Flemish²
Czech Republic
Hong Kong
Japan
Korea
Singapore

19 nations[†] performed similarly:¹

(Australia)
(Austria)
(Belgium – French)²
(Bulgaria)
Canada
(England)
France
(Germany)
Hungary
Ireland
(Israel)
Minnesota
(Netherlands)
New Zealand
Russian Federation
Slovak Republic
(Slovenia)
Sweden
(Switzerland)
(Thailand)

16 nations[†] performed significantly lower:¹

(Colombia)
Cyprus
(Denmark)
(Greece)
Iceland
Iran, Islamic Republic
(Kuwait)
(Latvia – LSS)³
(Lithuania)
Norway
Portugal
(Romania)
(Scotland)
(South Africa)
Spain
United States

[†] The term "nation" is used to refer to nations, states, or jurisdictions. Performance for nations is based on public school data only. Nations not meeting international guidelines are shown in parentheses.

¹ See explanation on pp. 3-4.

² The Flemish and French educational systems in Belgium participated separately.

³ Latvia is designated LSS because only Latvian-speaking schools were tested, which represent less than 65% of the population.

Minnesota

Science Grade 8 ☆

Forty-one nations[†] participated in the Third International Mathematics and Science Study (TIMSS) in 8th grade science in 1995. Students in Minnesota took the same test so that their results could be compared directly to the results of students in other countries. How did public school 8th graders in Minnesota compare to students in the other participating countries?

1 nation[†] performed significantly higher:¹

Singapore

12 nations[†] performed similarly:¹

(Australia)
(Austria)
Belgium – Flemish²
(Bulgaria)
Czech Republic
(England)
Hungary
Japan
Korea
Minnesota
(Netherlands)
Slovak Republic
(Slovenia)

28 nations[†] performed significantly lower:¹

(Belgium – French)²
Canada
(Colombia)
Cyprus
(Denmark)
France
(Germany)
(Greece)
Hong Kong
Iceland
Iran, Islamic Republic
Ireland
(Israel)
(Kuwait)
(Latvia – LSS)³
(Lithuania)
New Zealand
Norway
Portugal
(Romania)
Russian Federation
(Scotland)
(South Africa)
Spain
Sweden
(Switzerland)
(Thailand)
United States

[†] The term "nation" is used to refer to nations, states, or jurisdictions. Performance for nations is based on public school data only. Nations not meeting international guidelines are shown in parentheses.

¹ See explanation on pp. 3-4.

² The Flemish and French educational systems in Belgium participated separately.

³ Latvia is designated LSS because only Latvian-speaking schools were tested, which represent less than 65% of the population.

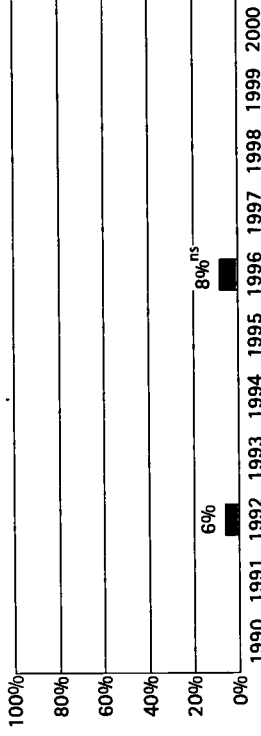
1. Improvement Over Time

Have Mississippi'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 Mississippi compare with other states in 4th grade mathematics achievement in public schools in 1996?

40 states had significantly higher¹ percentages of students who were at or above Proficient on NAEP:

Connecticut	31%	Missouri, New York, Pennsylvania	20%
Minnesota	29%	Virginia, West Virginia, Wyoming	19%
Maine, Wisconsin	27%	Rhode Island, Tennessee	17%
New Jersey, Texas	25%	Delaware, Hawaii, Kentucky	16%
Indiana, Massachusetts, Nebraska, North Dakota	24%	Arizona, Florida, Nevada	15%
Michigan, Utah, Vermont	23%	Arkansas, Georgia, New Mexico	14%
Colorado, Iowa, Maryland, Montana	22%	South Carolina	13%
U.S.,* Alaska, North Carolina, Oregon, Washington	21%	Alabama ²	12%
			11%

2 states had similar¹ percentages of students who were at or above Proficient on NAEP:

California ²	11%	Mississippi, Louisiana	8%
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2 states had significantly lower¹ percentages of students who were at or above Proficient on NAEP:

District of Columbia	5%	Guam	3%
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[†] The term "state" is used to refer to the 50 states, the District of Columbia, and the territories.

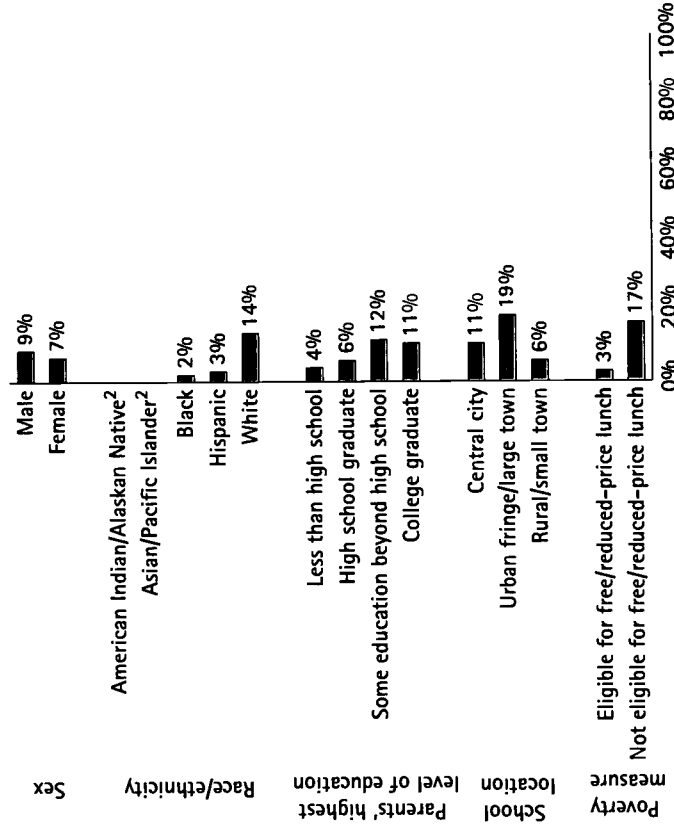
¹ See explanation on pp. 3-4.

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

* 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 subgroups¹ in Mississippi 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.

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

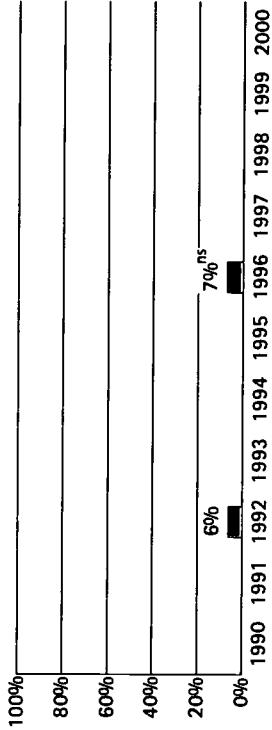
1. Improvement Over Time

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

Not yet. Between 1992 and 1996, 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 Mississippi compare with other states in 8th grade mathematics achievement in public schools in 1996?

38 states had significantly higher¹ percentages of students who were at or above Proficient on NAEP:

Minnesota	34%	Texas, Virginia	21%
North Dakota	33%	North Carolina, Rhode Island	20%
Montana, Wisconsin	32%	Delaware	19%
Connecticut, Iowa, Maine, Nebraska	31%	Arizona	18%
Alaska	30%	California, Florida	17%
Massachusetts, Michigan	28%	Georgia, Hawaii, Kentucky	16%
Vermont	27%	Tennessee	15%
Oregon, Washington	26%	New Mexico, South Carolina,	14%
Colorado	25%	West Virginia	14%
U.S., Indiana, Maryland, Utah	24%	Arkansas	13%
Missouri, New York, Wyoming	22%	Alabama	12%

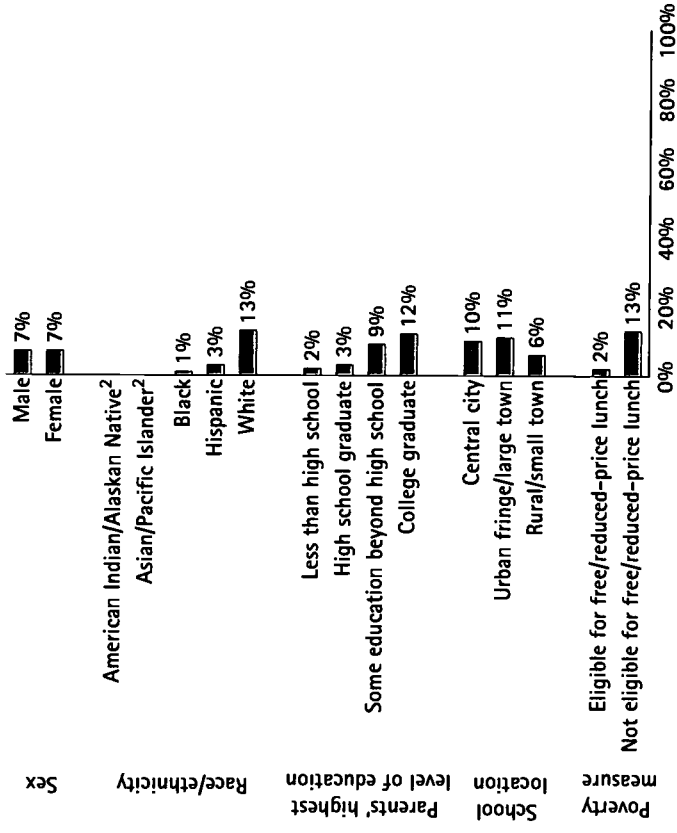
3 states had similar¹ percentages of students who were at or above Proficient on NAEP:

Mississippi, Louisiana	7%	District of Columbia	5%
Guam	6%		

[†] The term "state" is used to refer to the 50 states, the District of Columbia, and the territories.
¹ See explanation on pp. 3-4.
 * Figure shown for the U.S. includes both public and nonpublic school data.

3. Subgroup Performance

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



¹ Interpret differences between subgroups with caution. See pp. 3-4 and Appendix O.
² Characteristics of the sample do not permit a reliable estimate.

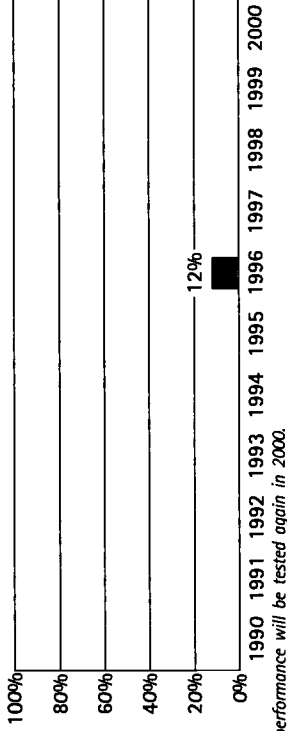
1. Improvement Over Time

Have Mississippi's 8th graders improved in science achievement?

In 1996, 12% of Mississippi's public school 8th graders met the Goals Panel's performance standard in science. The Goals Panel will report whether science performance has improved over time when science is assessed again in 2000.

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 science assessment



2. State Comparisons[†]

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

38 states had significantly higher¹ percentages of students who were at or above Proficient on NAEP:

Maine, Montana, North Dakota	41%	Rhode Island	26%
Wisconsin	39%	Maryland	25%
Massachusetts, Minnesota	37%	North Carolina	24%
Connecticut, Iowa	36%	Arizona, Kentucky, Texas	23%
Nebraska	35%	Arkansas, Tennessee	22%
Vermont, Wyoming	34%	Delaware, Florida, Georgia,	21%
Colorado, Michigan, Oregon, Utah	32%	West Virginia	
Alaska	31%	California	20%
Indiana	30%	New Mexico	19%
U.S.*	29%	Alabama	18%
Missouri	28%	South Carolina	17%
New York, Virginia, Washington	27%	Hawaii	15%

1 state had a similar¹ percentage of students who were at or above Proficient on NAEP:

Louisiana,	13%	Mississippi	12%
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2 states had significantly lower¹ percentages of students who were at or above Proficient on NAEP:

Guam	7%	District of Columbia	5%
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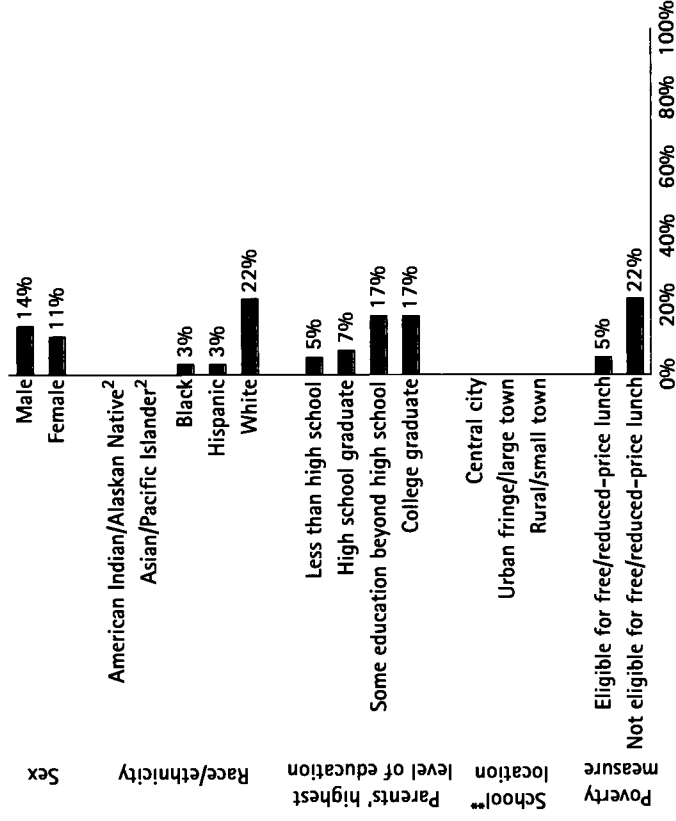
[†] The term "state" is used to refer to the 50 states, the District of Columbia, and the territories.

¹ See explanation on pp. 3-4.

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

3. Subgroup Performance

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



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

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

** No school location data for science in 1996.

International Comparisons

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 Mississippi participated in the TIMSS mathematics assessment, how would their average performance compare to that of students who took TIMSS in these nations?

36 nations[†] would be expected to perform significantly higher:¹

(Australia)
(Austria)
Belgium – Flemish²
(Belgium – French)²
(Bulgaria)
Canada
Cyprus
Czech Republic
(Denmark)
(England)
France
(Germany)
(Greece)
Hong Kong
Hungary
Iceland
Ireland
(Israel)
Japan
Korea
(Latvia – LSS)³
(Lithuania)
(Netherlands)
New Zealand
Norway
(Romania)
Russian Federation
(Scotland)
Singapore
Slovak Republic
(Slovenia)
Spain
Sweden
(Switzerland)
(Thailand)
United States

2 nations[†] would be expected to perform similarly:¹

Iran, Islamic Republic
Mississippi
Portugal

3 nations[†] would be expected to perform significantly lower:¹

(Colombia)
(Kuwait)
(South Africa)

[†] The term "nation" is used to refer to nations, states, or jurisdictions. Performance for nations is based on public school data only. Nations not meeting international guidelines are shown in parentheses.

¹ See explanation on pp. 3–4.

² The Flemish and French educational systems in Belgium participated separately.

³ Latvia is designated LSS because only Latvian-speaking schools were tested, which represent less than 65% of the population.

Mississippi

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 Mississippi participated in the TIMSS science assessment, how would their average performance compare to that of students who took TIMSS in these nations?

27 nations[†] would be expected to perform significantly higher:¹

(Australia)
(Austria)
Belgium – Flemish²
(Bulgaria)
Canada
Czech Republic
(England)
(Germany)
Hong Kong
Hungary
Ireland
(Israel)
Japan
Korea
(Netherlands)
New Zealand
Norway
Russian Federation
(Scotland)
Singapore
Slovak Republic
(Slovenia)
Spain
Sweden
(Switzerland)
(Thailand)
United States

11 nations[†] would be expected to perform similarly:¹

(Belgium – French)²
Cyprus
(Denmark)
France
(Greece)
Iceland
Iran, Islamic Republic
(Latvia – LSS)³
(Lithuania)
Mississippi
Portugal
(Romania)

3 nations[†] would be expected to perform significantly lower:¹

(Colombia)
(Kuwait)
(South Africa)

[†] The term "nation" is used to refer to nations, states, or jurisdictions. Performance for nations is based on public school data only. Nations not meeting international guidelines are shown in parentheses.

¹ See explanation on pp. 3–4.

² The Flemish and French educational systems in Belgium participated separately.

³ Latvia is designated LSS because only Latvian-speaking schools were tested, which represent less than 65% of the population.

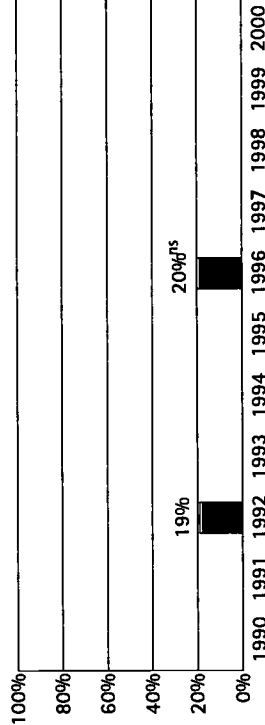
1. Improvement Over Time

Have Missouri'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 Missouri compare with other states in 4th grade mathematics achievement in public schools in 1996?

4 states had significantly higher¹ percentages of students who were at or above Proficient on NAEP:

Connecticut	31%	Maine, Wisconsin	27%
Minnesota	29%		

24 states had similar¹ percentages of students who were at or above Proficient on NAEP:

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

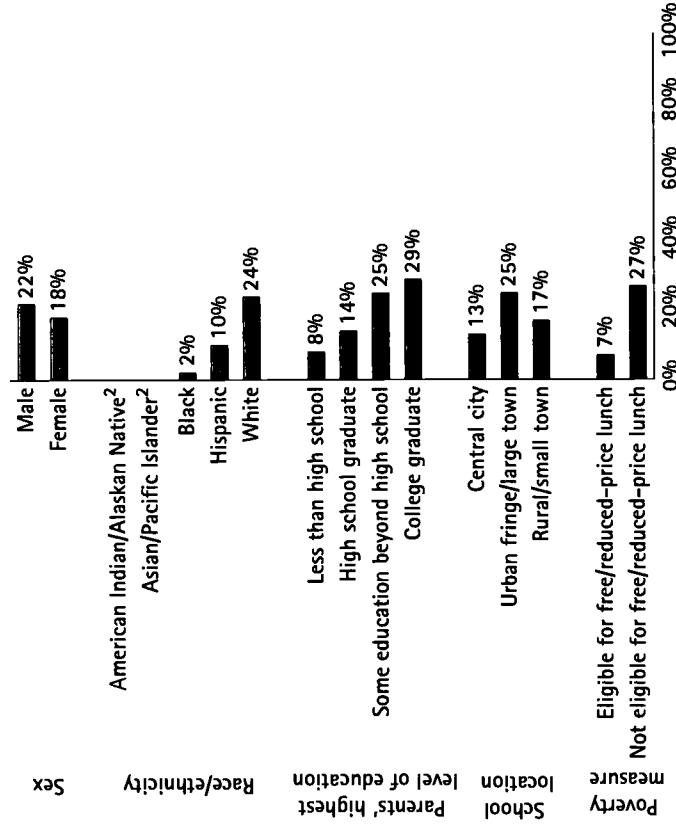
16 states had significantly lower¹ percentages of students who were at or above Proficient on NAEP:

Delaware, Hawaii, Kentucky	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.
¹ See explanation on pp. 3-4.
^{*} 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 subgroups¹ in Missouri 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.
² Characteristics of the sample do not permit a reliable estimate.

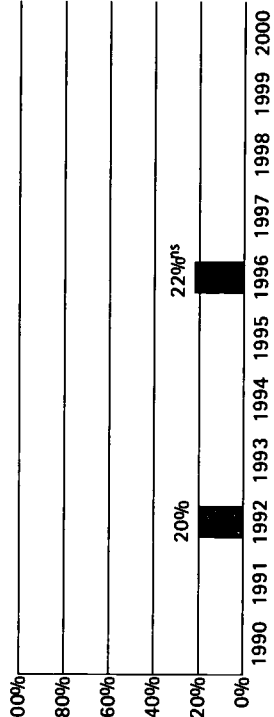
1. Improvement Over Time

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

Not yet. Between 1992 and 1996, 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 Missouri compare with other states in 8th grade mathematics achievement in public schools in 1996?

12 states had significantly higher¹ percentages of students who were at or above Proficient on NAEP:

Minnesota	34%	Alaska	30%
North Dakota	33%	Massachusetts, Michigan	28%
Montana, Wisconsin	32%	Vermont	27%
Connecticut, Iowa, Maine, Nebraska	31%		

13 states had similar¹ percentages of students who were at or above Proficient on NAEP:

Oregon, Washington	26%	Texas, Virginia	21%
Colorado	25%	North Carolina, Rhode Island	20%
U.S., ² Indiana, Maryland, Utah	24%	Delaware	19%
Missouri , New York, Wyoming	22%		

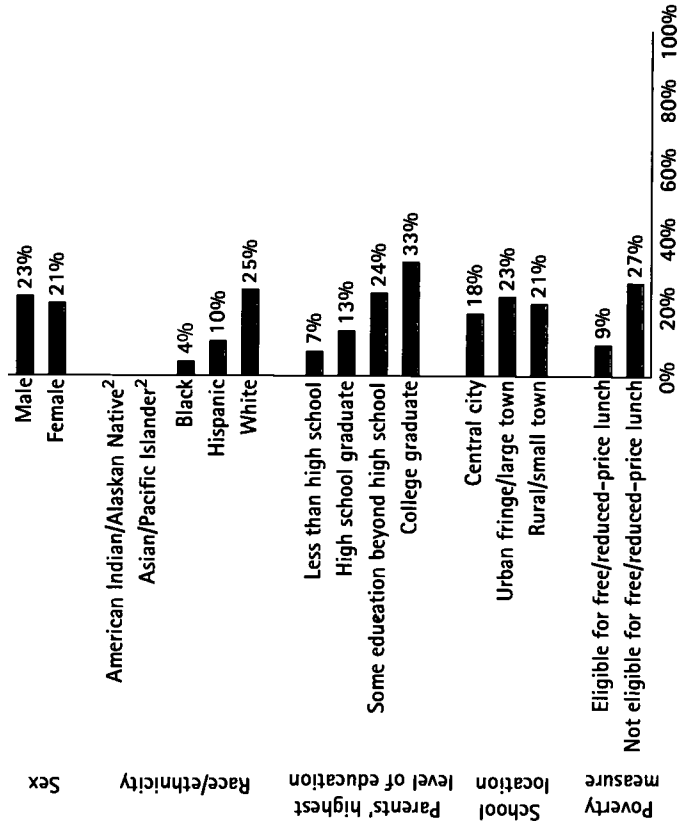
16 states had significantly lower¹ percentages of students who were at or above Proficient on NAEP:

Arizona	18%	Arkansas	13%
California, Florida	17%	Alabama	12%
Georgia, Hawaii, Kentucky	16%	Louisiana, Mississippi	7%
Tennessee	15%	Guam	6%
New Mexico, South Carolina, West Virginia	14%	District of Columbia	5%

[†] The term "state" is used to refer to the 50 states, the District of Columbia, and the territories.
¹ See explanation on pp. 3-4.
² Figure shown for the U.S. includes both public and nonpublic school data.

3. Subgroup Performance

What percentages of public school 8th graders in different subgroups¹ in Missouri 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.
² Characteristics of the sample do not permit a reliable estimate.

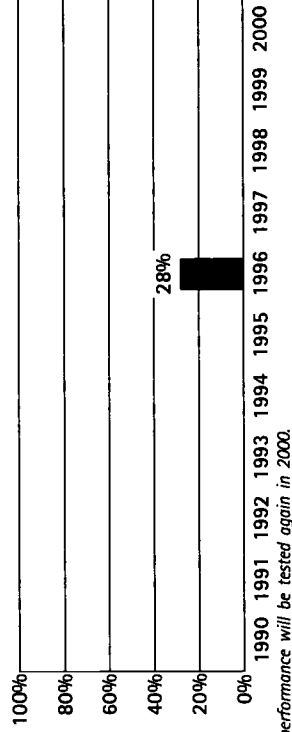
1. Improvement Over Time

Have Missouri's 8th graders improved in science achievement?

In 1996, 28% of Missouri's public school 8th graders met the Goals Panel's performance standard in science. The Goals Panel will report whether science performance has improved over time when science is assessed again in 2000.

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 science assessment



Science performance will be tested again in 2000.

2. State Comparisons[†]

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

11 states had significantly higher¹ percentages of students who were at or above Proficient on NAEP:

Maine, Montana, North Dakota	41%	Connecticut, Iowa	36%
Wisconsin	39%	Nebraska	35%
Massachusetts, Minnesota	37%	Vermont, Wyoming	34%

12 states had similar¹ percentages of students who were at or above Proficient on NAEP:

Colorado, Michigan, Oregon, Utah	32%	New York, Virginia, Washington	27%
Alaska	31%	Rhode Island	26%
Indiana	30%	Maryland	25%
U.S.*	29%	North Carolina	24%
Missouri	28%		

18 states had significantly lower¹ percentages of students who were at or above Proficient on NAEP:

Arizona, Kentucky, Texas	23%	South Carolina	17%
Arkansas, Tennessee	22%	Hawaii	15%
Delaware, Florida, Georgia, West Virginia	21%	Louisiana	13%
California	20%	Mississippi	12%
New Mexico	19%	Guam	7%
Alabama	18%	District of Columbia	5%

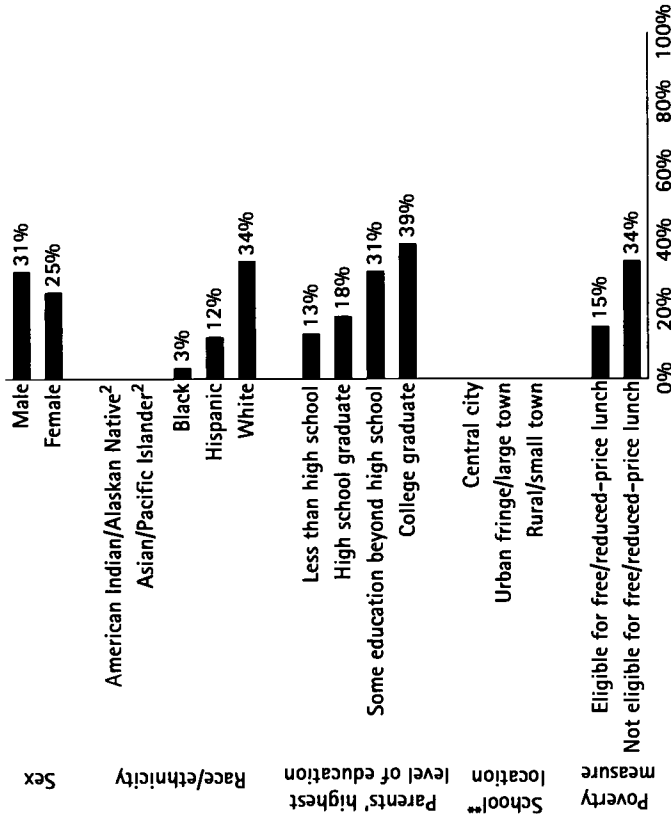
[†] The term "state" is used to refer to the 50 states, the District of Columbia, and the territories.

¹ See explanation on pp. 3-4.

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

3. Subgroup Performance

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



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

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

** No school location data for science in 1996.

Mathematics Grade 8

Forty-one nations¹ participated in the Third International Mathematics and Science Study (TIMSS) in 8th grade mathematics in 1995. If public school 8th graders in Missouri participated in the TIMSS mathematics assessment, how would their average performance compare to that of students who took TIMSS in these nations?

15 nations¹ would be expected to perform significantly higher:¹

(Austria)
Belgium – Flemish²
(Bulgaria)
Czech Republic
France
Hong Kong
Hungary
Japan
Korea
(Netherlands)
Russian Federation
Singapore
Slovak Republic
(Slovenia)
(Switzerland)

19 nations¹ would be expected to perform similarly:¹

(Australia)
(Belgium – French)²
Canada
(Denmark)
(England)
(Germany)
(Greece)
Iceland
Ireland
(Israel)
(Latvia – LSS)³
Missouri
New Zealand
Norway
(Romania)
(Scotland)
Spain
Sweden
(Thailand)
United States

7 nations¹ would be expected to perform significantly lower:¹

(Colombia)
Cyprus
Iran, Islamic Republic
(Kuwait)
(Lithuania)
Portugal
(South Africa)

[†] The term "nation" is used to refer to nations, states, or jurisdictions. Performance for nations is based on public school data only. Nations not meeting international guidelines are shown in parentheses.

¹ See explanation on pp. 3-4.

² The Flemish and French educational systems in Belgium participated separately.

³ Latvia is designated LSS because only Latvian-speaking schools were tested, which represent less than 65% of the population.

Science Grade 8

Forty-one nations¹ participated in the Third International Mathematics and Science Study (TIMSS) in 8th grade science in 1995. If public school 8th graders in Missouri participated in the TIMSS science assessment, how would their average performance compare to that of students who took TIMSS in these nations?

4 nations¹ would be expected to perform significantly higher:¹

Czech Republic
Japan
Korea
Singapore

23 nations¹ would be expected to perform similarly:¹

(Australia)
(Austria)
Belgium – Flemish²
(Bulgaria)
Canada
(England)
(Germany)
Hong Kong
Hungary
Ireland
(Israel)
Missouri
(Netherlands)
New Zealand
Norway
Russian Federation
(Scotland)
Slovak Republic
(Slovenia)
Spain
Sweden
(Switzerland)
(Thailand)
United States

14 nations¹ would be expected to perform significantly lower:¹

(Belgium – French)²
(Colombia)
Cyprus
(Denmark)
France
(Greece)
Iceland
Iran, Islamic Republic
(Kuwait)
(Latvia – LSS)³
(Lithuania)
Portugal
(Romania)
(South Africa)

[†] The term "nation" is used to refer to nations, states, or jurisdictions. Performance for nations is based on public school data only. Nations not meeting international guidelines are shown in parentheses.

¹ See explanation on pp. 3-4.

² The Flemish and French educational systems in Belgium participated separately.

³ Latvia is designated LSS because only Latvian-speaking schools were tested, which represent less than 65% of the population.

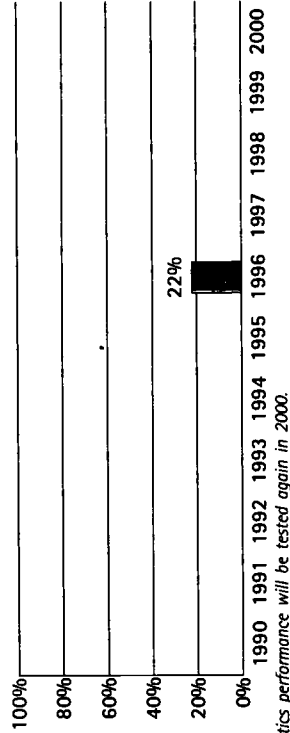
1. Improvement Over Time

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

In 1996, 22% of Montana's public school 4th graders met the Goals Panel's performance standard in mathematics. The Goals Panel will report whether mathematics performance has improved over time when mathematics is assessed again in 2000.

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



2. State Comparisons[†]

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

2 states had significantly higher¹ percentages of students who were at or above Proficient on NAEP:

Connecticut	31%	Minnesota	29%
-------------	-----	-----------	-----

24 states had similar¹ percentages of students who were at or above Proficient on NAEP:

Maine, Wisconsin	27%	Montana, Colorado, Iowa, Maryland	22%
New Jersey, Texas	25%	U.S., [*] Alaska, North Carolina, Oregon,	21%
Indiana, Massachusetts, Nebraska,	24%	Washington	
North Dakota		Missouri, New York, Pennsylvania	20%
Michigan, Utah, Vermont	23%	Virginia, West Virginia, Wyoming	19%

18 states had significantly lower¹ percentages of students who were at or above Proficient on NAEP:

Rhode Island, Tennessee	17%	South Carolina	12%
Delaware, Hawaii, Kentucky	16%	Alabama, California	11%
Arizona, Florida	15%	Louisiana, Mississippi	8%
Nevada	14%	District of Columbia	5%
Arkansas, Georgia, New Mexico	13%	Guam	3%

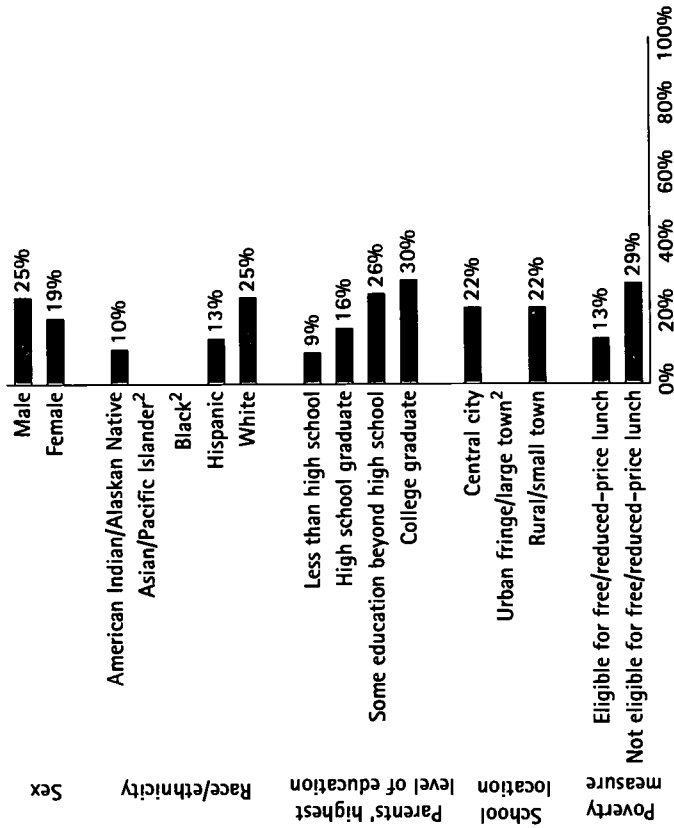
[†] The term "state" is used to refer to the 50 states, the District of Columbia, and the territories.

¹ See explanation on pp. 3-4.

* 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 subgroups¹ in Montana 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.

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

1. Improvement Over Time

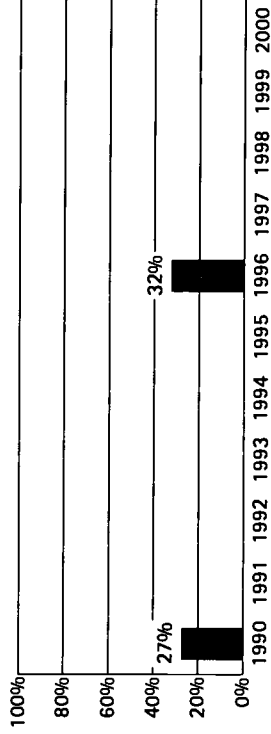


Have Montana's 8th graders improved in mathematics achievement?

Yes. The percentage of Montana's public school 8th graders who met the Goals Panel's performance standard in mathematics increased from 27% in 1990, to 32% in 1996.

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



Mathematics performance will be tested again in 2000.

2. State Comparisons[†]

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

11 states had similar¹ percentages of students who were at or above Proficient on NAEP:

Minnesota	34%	Alaska	30%
North Dakota	33%	Massachusetts, Michigan	28%
Montana , Wisconsin	32%	Vermont	27%
Connecticut, Iowa, Maine, Nebraska	31%		

30 states had significantly lower¹ percentages of students who were at or above Proficient on NAEP:

Oregon, Washington	26%	Tennessee	15%
Colorado	25%	New Mexico, South Carolina,	14%
U.S. , [*] Indiana, Maryland, Utah	24%	West Virginia	
Missouri, New York, Wyoming	22%	Arkansas	13%
Texas, Virginia	21%	Alabama	12%
North Carolina, Rhode Island	20%	Louisiana, Mississippi	7%
Delaware	19%	Guam	6%
Arizona	18%	District of Columbia	5%
California, Florida	17%		
Georgia, Hawaii, Kentucky	16%		

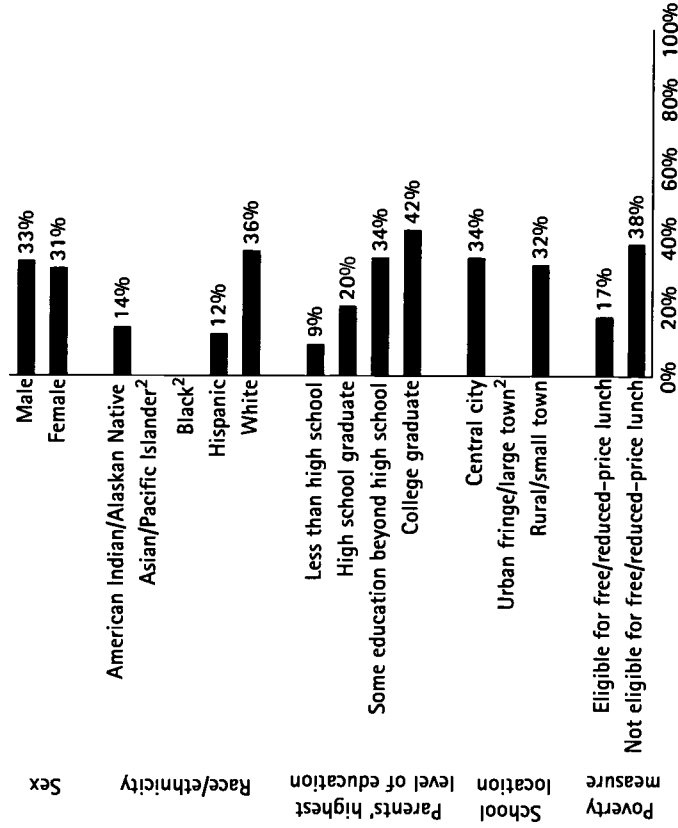
[†] The term "state" is used to refer to the 50 states, the District of Columbia, and the territories.

¹ See explanation on pp. 3-4.

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

3. Subgroup Performance

What percentages of public school 8th graders in different subgroups¹ in Montana 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.

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

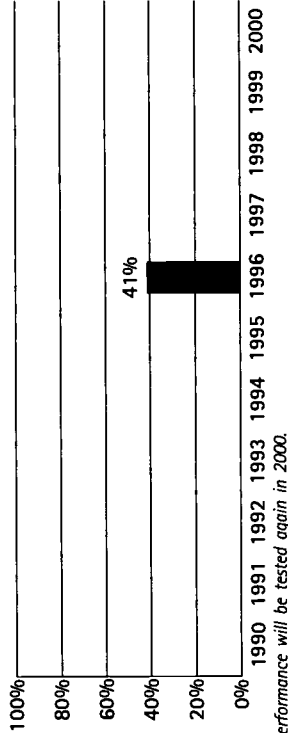
1. Improvement Over Time

Have Montana's 8th graders improved in science achievement?

In 1996, 41% of Montana's public school 8th graders met the Goals Panel's performance standard in science. The Goals Panel will report whether science performance has improved over time when science is assessed again in 2000.

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 science assessment



Science performance will be tested again in 2000.

2. State Comparisons[†]

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

8 states had similar¹ percentages of students who were at or above Proficient on NAEP:

Montana , Maine, North Dakota	41%	Connecticut, Iowa	36%
Wisconsin	39%	Nebraska	35%
Massachusetts, Minnesota	37%		

33 states had significantly lower¹ percentages of students who were at or above Proficient on NAEP:

Vermont, Wyoming	34%	Delaware, Florida, Georgia,	21%
Colorado, Michigan, Oregon, Utah	32%	West Virginia	20%
Alaska	31%	California	19%
Indiana	30%	New Mexico	18%
U.S.*	29%	Alabama	17%
Missouri	28%	South Carolina	15%
New York, Virginia, Washington	27%	Hawaii	13%
Rhode Island	26%	Louisiana	12%
Maryland	25%	Mississippi	7%
North Carolina	24%	Guam	5%
Arizona, Kentucky, Texas	23%	District of Columbia	
Arkansas, Tennessee	22%		

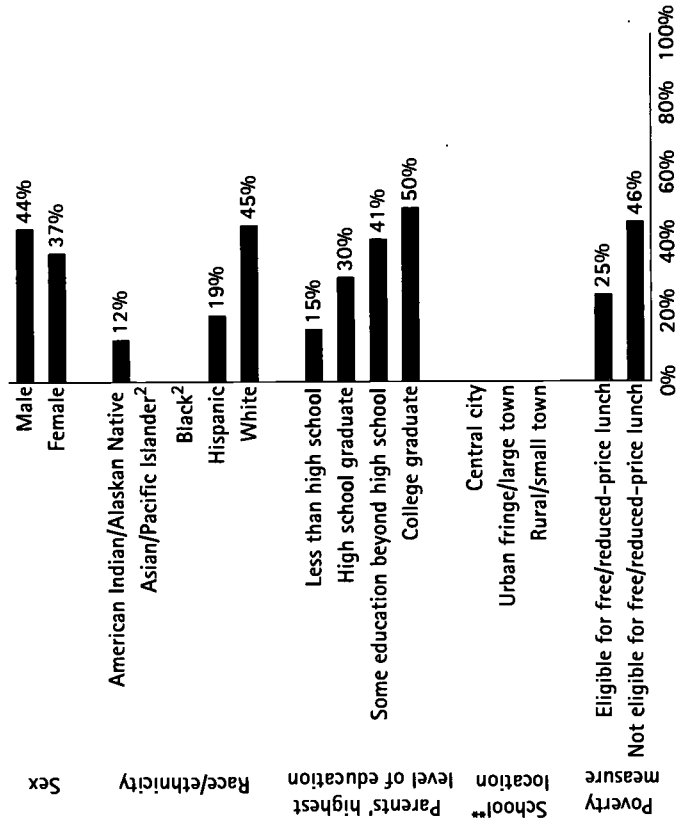
[†] The term "state" is used to refer to the 50 states, the District of Columbia, and the territories.

¹ See explanation on pp. 3-4.

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

3. Subgroup Performance

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



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

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

^{††} No school location data for science in 1996.

International Comparisons

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 Montana participated in the TIMSS mathematics assessment, how would their average performance compare to that of students who took TIMSS in these nations?

6 nations[†] would be expected to perform significantly higher:¹

Belgium – Flemish²
Czech Republic
Hong Kong
Japan
Korea
Singapore

18 nations[†] would be expected to perform similarly:¹

(Australia)
(Austria)
(Belgium – French)²
(Bulgaria)
Canada
France
(Germany)
Hungary
Ireland
(Israel)
Montana
(Netherlands)
New Zealand
Russian Federation
Slovak Republic
(Slovenia)
Sweden
(Switzerland)
(Thailand)

17 nations[†] would be expected to perform significantly lower:¹

(Colombia)
Cyprus
(Denmark)
(England)
(Greece)
Iceland
Iran, Islamic Republic
(Kuwait)
(Latvia – LSS)³
(Lithuania)
Norway
Portugal
(Romania)
(Scotland)
(South Africa)
Spain
United States

[†] The term "nation" is used to refer to nations, states, or jurisdictions. Performance for nations is based on public school data only. Nations not meeting international guidelines are shown in parentheses.

¹ See explanation on pp. 3–4.

² The Flemish and French educational systems in Belgium participated separately.

³ Latvia is designated LSS because only Latvian-speaking schools were tested, which represent less than 65% of the population.

Montana

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 Montana participated in the TIMSS science assessment, how would their average performance compare to that of students who took TIMSS in these nations?

1 nation[†] would be expected to perform significantly higher:¹

Singapore

10 nations[†] would be expected to perform similarly:¹

(Austria)
Belgium – Flemish²
(Bulgaria)
Czech Republic
(England)
Hungary
Japan
Korea
Montana
(Netherlands)
(Slovenia)

30 nations[†] would be expected to perform significantly lower:¹

(Australia)
(Belgium – French)²
Canada
(Colombia)
Cyprus
(Denmark)
France
(Germany)
(Greece)
Hong Kong
Iceland
Iran, Islamic Republic
Ireland
(Israel)
(Kuwait)
(Latvia – LSS)³
(Lithuania)
New Zealand
Norway
Portugal
(Romania)
Russian Federation
(Scotland)
Slovak Republic
(South Africa)
Spain
Sweden
(Switzerland)
(Thailand)
United States

[†] The term "nation" is used to refer to nations, states, or jurisdictions. Performance for nations is based on public school data only. Nations not meeting international guidelines are shown in parentheses.

¹ See explanation on pp. 3–4.

² The Flemish and French educational systems in Belgium participated separately.

³ Latvia is designated LSS because only Latvian-speaking schools were tested, which represent less than 65% of the population.

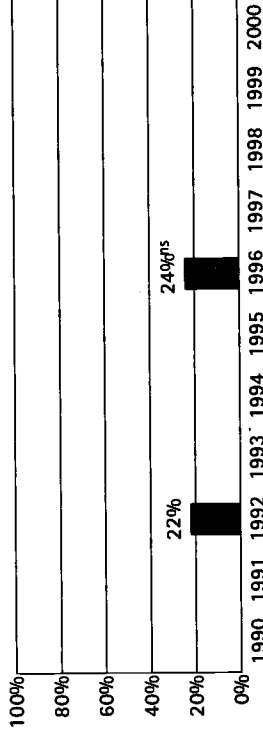
1. Improvement Over Time

Have Nebraska'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 Nebraska compare with other states in 4th grade mathematics achievement in public schools in 1996?

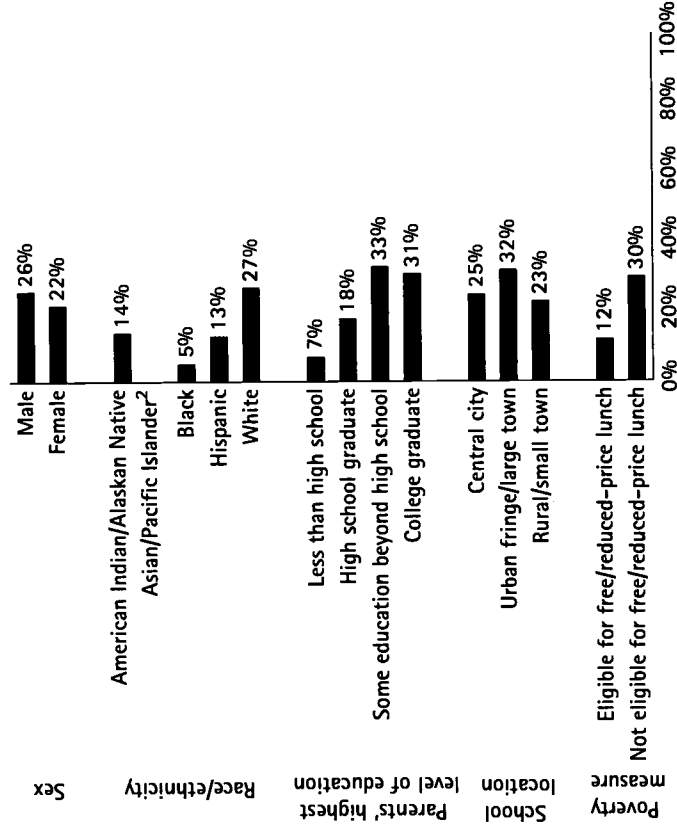
23 states had similar [†] percentages of students who were at or above Proficient on NAEP:	
Connecticut	31%
Minnesota	29%
Maine, Wisconsin	27%
New Jersey, Texas	25%
Nebraska , Indiana, Massachusetts, North Dakota	24%
Michigan, Utah, Vermont	23%
Colorado, Iowa, Maryland, Montana	22%
U.S. , [*] Alaska, North Carolina, Oregon, Washington	21%
Missouri, New York, Pennsylvania	20%

21 states had significantly lower [†] percentages of students who were at or above Proficient on NAEP:	
Virginia, West Virginia, Wyoming	19%
Rhode Island, Tennessee	17%
Delaware, Hawaii, Kentucky	16%
Arizona, Florida	15%
Nevada	14%
Arkansas, Georgia, New Mexico	13%
South Carolina	12%
Alabama, California	11%
Louisiana, Mississippi	8%
District of Columbia	5%
Guam	3%

[†] The term "state" is used to refer to the 50 states, the District of Columbia, and the territories.
¹ See explanation on pp. 3-4.
^{*} 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 subgroups¹ in Nebraska 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.
² Characteristics of the sample do not permit a reliable estimate.

1. Improvement Over Time

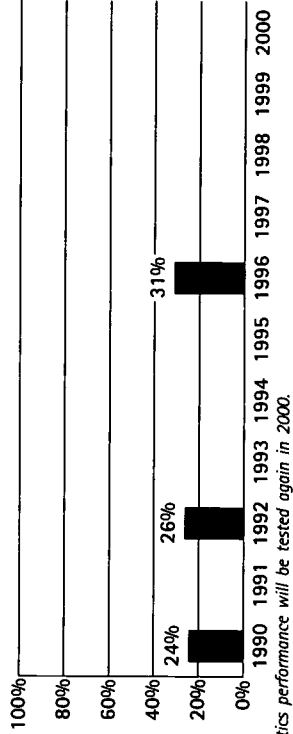


Have Nebraska's 8th graders improved in mathematics achievement?

Yes. The percentage of Nebraska's public school 8th graders who met the Goals Panel's performance standard in mathematics increased from 24% in 1990, to 31% in 1996.

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



Mathematics performance will be tested again in 2000.

2. State Comparisons[†]

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

12 states had similar¹ percentages of students who were at or above Proficient on NAEP:

Minnesota	34%	Alaska	30%
North Dakota	33%	Massachusetts, Michigan	28%
Montana, Wisconsin	32%	Vermont	27%
Nebraska, Connecticut, Iowa, Maine	31%	Oregon ²	26%

29 states had significantly lower¹ percentages of students who were at or above Proficient on NAEP:

Washington ²	26%	Georgia, Hawaii, Kentucky	16%
Colorado	25%	Tennessee	15%
U.S., [*] Indiana, Maryland, Utah	24%	New Mexico, South Carolina,	14%
Missouri, New York, Wyoming	22%	West Virginia	13%
Texas, Virginia	21%	Arkansas	12%
North Carolina, Rhode Island	20%	Alabama	7%
Delaware	19%	Louisiana, Mississippi	6%
Arizona	18%	Guam	5%
California, Florida	17%	District of Columbia	5%

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

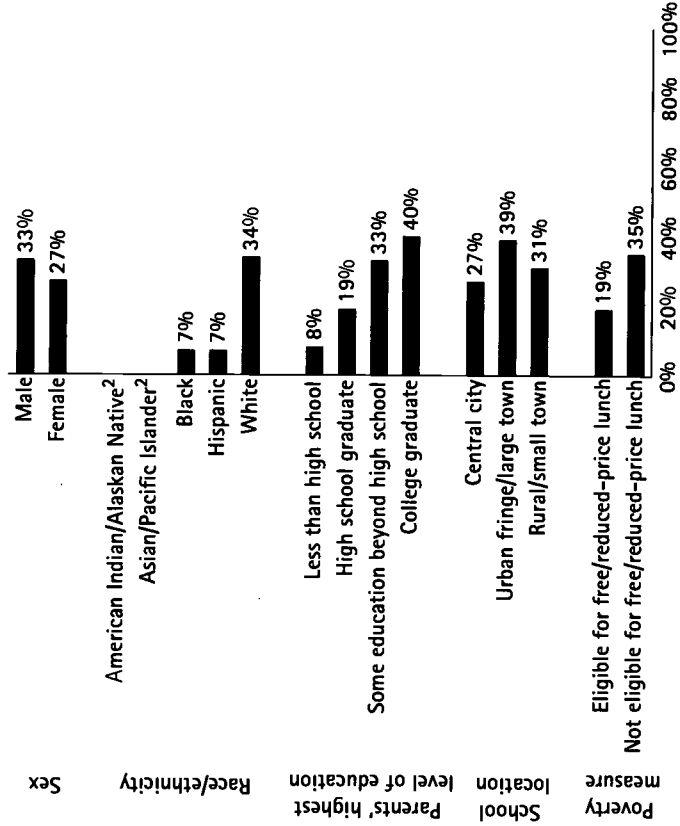
¹ See explanation on pp. 3-4.

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

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

3. Subgroup Performance

What percentages of public school 8th graders in different subgroups¹ in Nebraska 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.

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

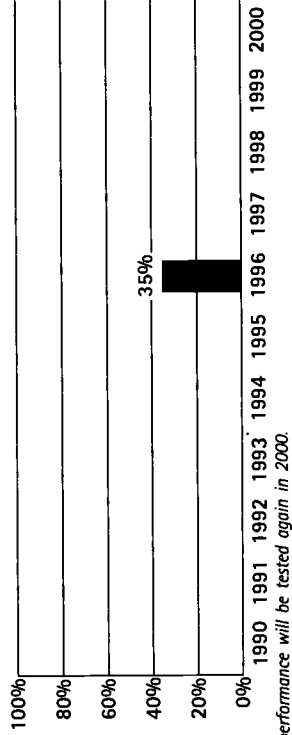
1. Improvement Over Time

Have Nebraska's 8th graders improved in science achievement?

In 1996, 35% of Nebraska's public school 8th graders met the Goals Panel's performance standard in science. The Goals Panel will report whether science performance has improved over time when science is assessed again in 2000.

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 science assessment



Science performance will be tested again in 2000.

2. State Comparisons[†]

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

16 states had similar¹ percentages of students who were at or above Proficient on NAEP:

Maine, Montana, North Dakota	41%	Vermont, Wyoming	34%
Wisconsin	39%	Colorado, Michigan, Oregon, Utah	32%
Massachusetts, Minnesota	37%	Alaska	31%
Connecticut, Iowa	36%	Indiana	30%
Nebraska	35%		

25 states had significantly lower¹ percentages of students who were at or above Proficient on NAEP:

U.S.*	29%	California	20%
Missouri	28%	New Mexico	19%
New York, Virginia, Washington	27%	Alabama	18%
Rhode Island	26%	South Carolina	17%
Maryland	25%	Hawaii	15%
North Carolina	24%	Louisiana	13%
Arizona, Kentucky, Texas	23%	Mississippi	12%
Arkansas, Tennessee	22%	Guam	7%
Delaware, Florida, Georgia, West Virginia	21%	District of Columbia	5%

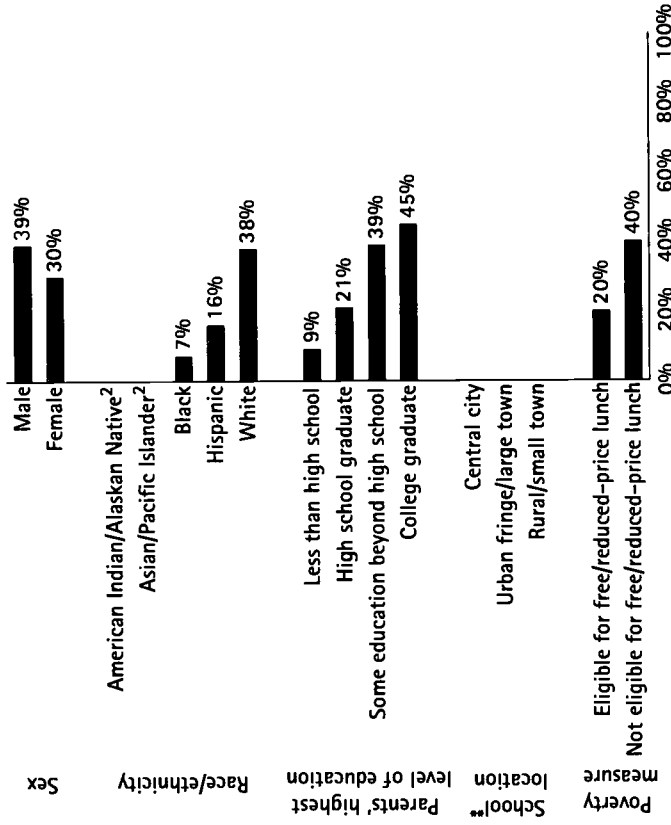
[†] The term "state" is used to refer to the 50 states, the District of Columbia, and the territories.

¹ See explanation on pp. 3-4.

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

3. Subgroup Performance

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



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

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

** No school location data for science in 1996.

International Comparisons

Mathematics Grade 8

Forty-one nations¹ participated in the Third International Mathematics and Science Study (TIMSS) in 8th grade mathematics in 1995. If public school 8th graders in Nebraska participated in the TIMSS mathematics assessment, how would their average performance compare to that of students who took TIMSS in these nations?

6 nations¹ would be expected to perform significantly higher:¹

Belgium – Flemish²
Czech Republic
Hong Kong
Japan
Korea
Singapore

18 nations¹ would be expected to perform similarly:¹

(Australia)
(Austria)
(Belgium – French)²
(Bulgaria)
Canada
France
(Germany)
Hungary
Ireland
(Israel)
Nebraska
(Netherlands)
New Zealand
Russian Federation
Slovak Republic
(Slovenia)
Sweden
(Switzerland)
(Thailand)

17 nations¹ would be expected to perform significantly lower:¹

(Colombia)
Cyprus
(Denmark)
(England)
(Greece)
Iceland
Iran, Islamic Republic
(Kuwait)
(Latvia – LSS)³
(Lithuania)
Norway
Portugal
(Romania)
(Scotland)
(South Africa)
Spain
United States

¹ The term "nation" is used to refer to nations, states, or jurisdictions. Performance for nations is based on public school data only. Nations not meeting international guidelines are shown in parentheses.
² See explanation on pp. 3–4.

² The Flemish and French educational systems in Belgium participated separately.

³ Latvia is designated LSS because only Latvian-speaking schools were tested, which represent less than 65% of the population.

Nebraska

Science Grade 8 ☆

Forty-one nations¹ participated in the Third International Mathematics and Science Study (TIMSS) in 8th grade science in 1995. If public school 8th graders in Nebraska participated in the TIMSS science assessment, how would their average performance compare to that of students who took TIMSS in these nations?

1 nation¹ would be expected to perform significantly higher:¹

Singapore

15 nations¹ would be expected to perform similarly:¹

(Australia)
(Austria)
Belgium – Flemish²
(Bulgaria)
Czech Republic
(England)
Hungary
Ireland
Japan
Korea
Nebraska
(Netherlands)
Russian Federation
Slovak Republic
(Slovenia)
United States

25 nations¹ would be expected to perform significantly lower:¹

(Belgium – French)²
Canada
(Colombia)
Cyprus
(Denmark)
France
(Germany)
(Greece)
Hong Kong
Iceland
Iran, Islamic Republic
(Israel)
(Kuwait)
(Latvia – LSS)³
(Lithuania)
New Zealand
Norway
Portugal
(Romania)
(Scotland)
(South Africa)
Spain
Sweden
(Switzerland)
(Thailand)

¹ The term "nation" is used to refer to nations, states, or jurisdictions. Performance for nations is based on public school data only. Nations not meeting international guidelines are shown in parentheses.
² See explanation on pp. 3–4.

² The Flemish and French educational systems in Belgium participated separately.

³ Latvia is designated LSS because only Latvian-speaking schools were tested, which represent less than 65% of the population.

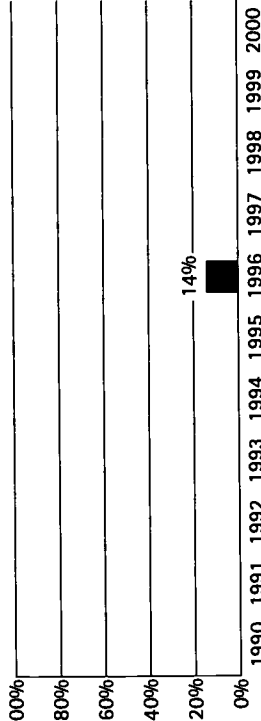
1. Improvement Over Time

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

In 1996, 14% of Nevada's public school 4th graders met the Goals Panel's performance standard in mathematics. The Goals Panel will report whether mathematics performance has improved over time when mathematics is assessed again in 2000.

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



Mathematics performance will be tested again in 2000.

2. State Comparisons[†]

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

27 states had significantly higher[†] percentages of students who were at or above Proficient on NAEP:

Connecticut	31%	Michigan, Utah, Vermont	23%
Minnesota	29%	Colorado, Iowa, Maryland, Montana	22%
Maine, Wisconsin	27%	U.S.,* Alaska, North Carolina, Oregon,	21%
New Jersey, Texas	25%	Washington	
Indiana, Massachusetts, Nebraska,	24%	Missouri, New York, Pennsylvania	20%
North Dakota		Virginia, West Virginia, Wyoming	19%

13 states had similar[†] percentages of students who were at or above Proficient on NAEP:

Rhode Island, Tennessee	17%	Arkansas, Georgia, New Mexico	13%
Delaware, Hawaii, Kentucky	16%	South Carolina	12%
Arizona, Florida	15%	Alabama, California	11%
Nevada	14%		

4 states had significantly lower[†] percentages of students who were at or above Proficient on NAEP:

Louisiana, Mississippi	8%	Guam	3%
District of Columbia	5%		

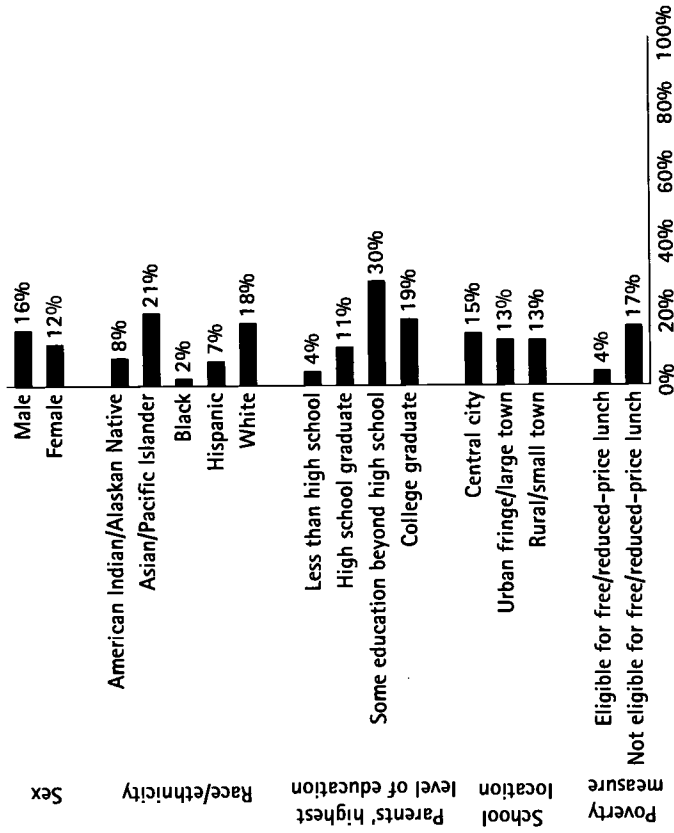
[†] The term "state" is used to refer to the 50 states, the District of Columbia, and the territories.

¹ See explanation on pp. 3-4.

* 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 subgroups¹ in Nevada were at or above Proficient on the 1996 NAEP mathematics assessment?



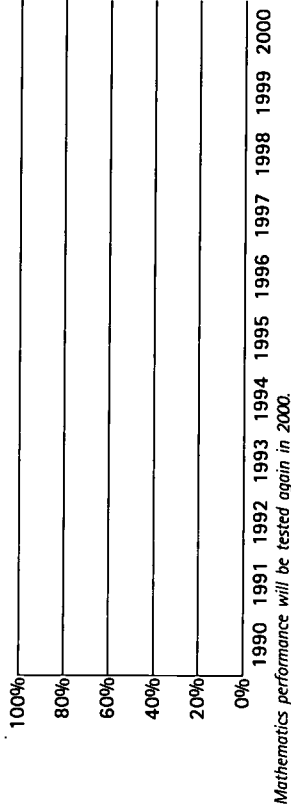
¹ Interpret differences between subgroups with caution. See pp. 3-4 and Appendix D.

1. Improvement Over Time

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

Nevada did not participate in 8th grade NAEP mathematics in 1990 or 1992. Nevada did participate in NAEP mathematics in 1996, but did not meet the minimum school participation guidelines for public schools. Therefore, Nevada's results were not released.

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



2. State Comparisons

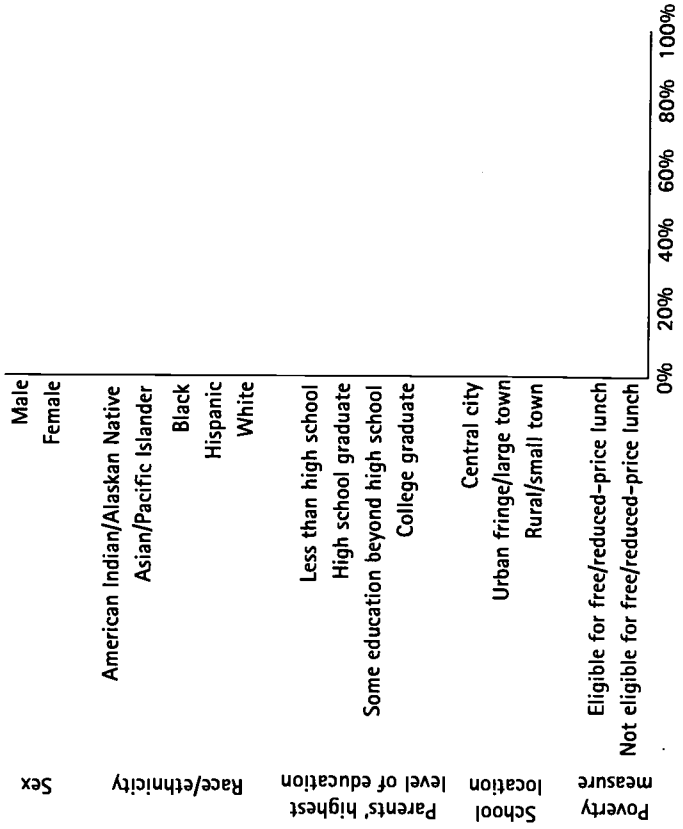
How did Nevada compare with other states in 8th grade mathematics achievement in public schools in 1996?

Nevada did participate in NAEP mathematics in 1996, but did not meet the minimum school participation guidelines for public schools. Therefore, Nevada's results were not released.

3. Subgroup Performance

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

Nevada did participate in NAEP mathematics in 1996, but did not meet the minimum school participation guidelines for public schools. Therefore, Nevada's results were not released.

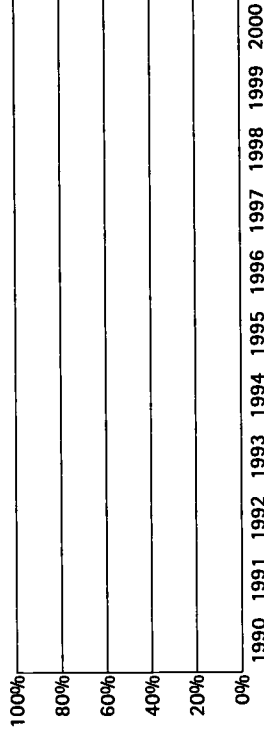


1. Improvement Over Time

Have Nevada's 8th graders improved in science achievement?

Nevada did participate in NAEP science in 1996, but did not meet the minimum school participation guidelines for public schools. Therefore, Nevada's results were not released.

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

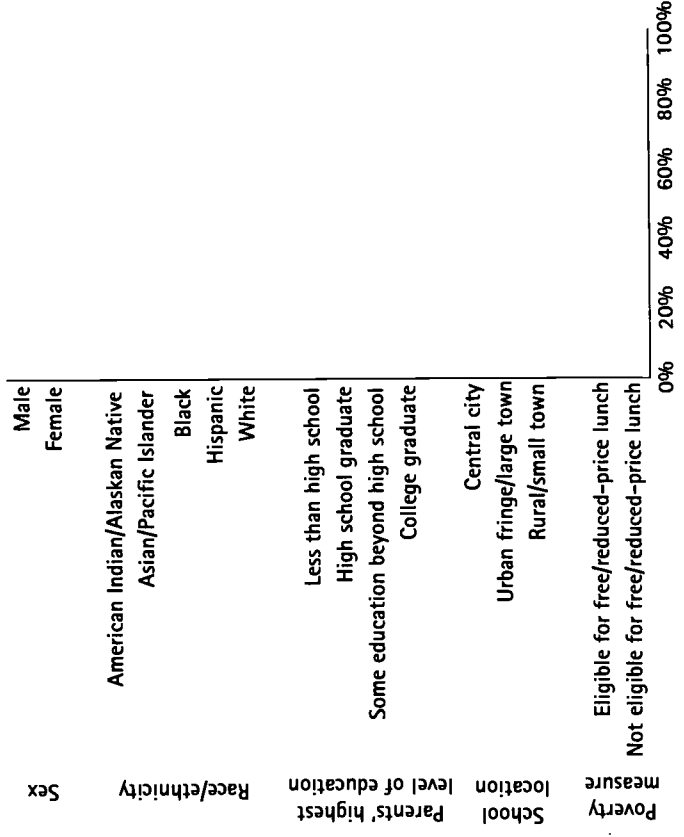
How did Nevada compare with other states in 8th grade science achievement in public schools in 1996?

Nevada did participate in NAEP science in 1996, but did not meet the minimum school participation guidelines for public schools. Therefore, Nevada's results were not released.

3. Subgroup Performance

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

Nevada did participate in NAEP science in 1996, but did not meet the minimum school participation guidelines for public schools. Therefore, Nevada's results were not released.



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 Nevada 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 Nevada would have performed on TIMSS, because the estimate is based on scores from the 1996 NAEP mathematics assessment. Nevada did not participate in NAEP mathematics 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 Nevada 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 Nevada would have performed on TIMSS, because the estimate is based on scores from the 1996 NAEP science assessment. Nevada did not participate in NAEP science in 1996.

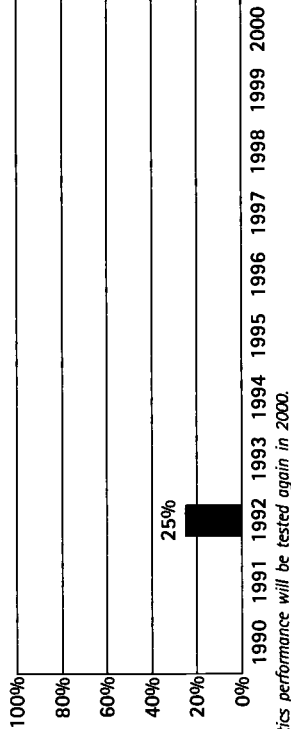
[†] The term "nation" is used to refer to nations, states, or jurisdictions.

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

1. Improvement Over Time

Have New Hampshire's 4th graders improved in mathematics achievement?
 In 1992, 25% of New Hampshire's public school 4th graders met the Goals Panel's performance standard in mathematics. The Goals Panel will report whether mathematics performance has improved over time when mathematics is assessed again in 2000.
 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



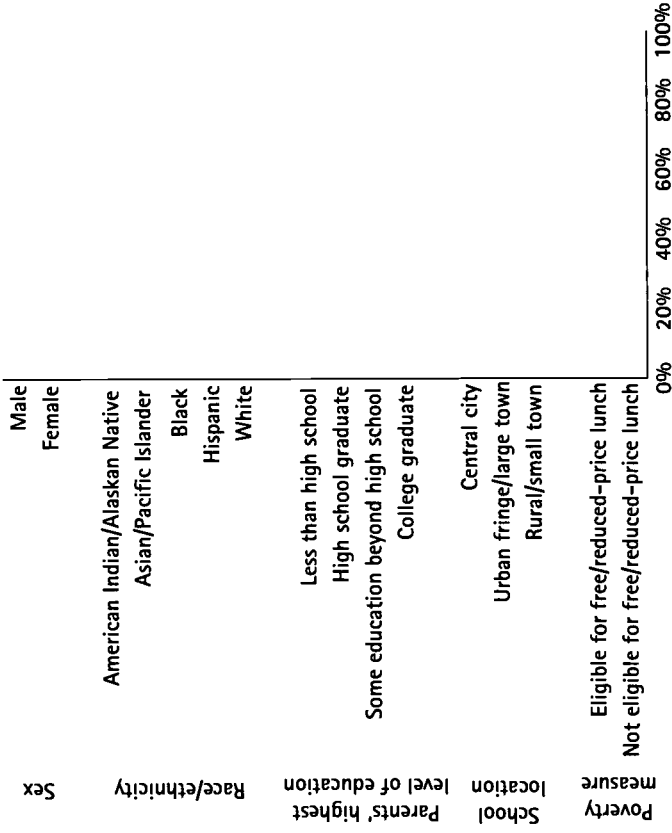
Mathematics performance will be tested again in 2000.

2. State Comparisons

How did New Hampshire compare with other states in 4th grade mathematics achievement in public schools in 1996?
 New Hampshire did not participate in NAEP mathematics in Grade 4 in 1996.

3. Subgroup Performance

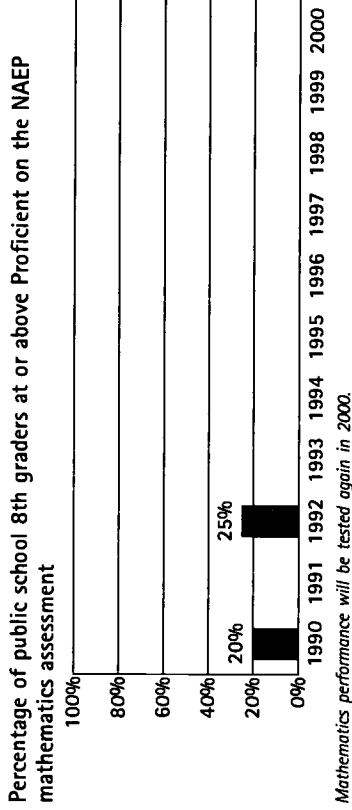
What percentages of public school 4th graders in different subgroups in New Hampshire were at or above Proficient on the 1996 NAEP mathematics assessment?
 New Hampshire did not participate in NAEP mathematics in Grade 4 in 1996.



1. Improvement Over Time

Have New Hampshire's 8th graders improved in mathematics achievement?
 Yes. The percentage of New Hampshire's public school 8th graders who met the Goals Panel's performance standard in mathematics increased from 20% in 1990, to 25% in 1992.

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.

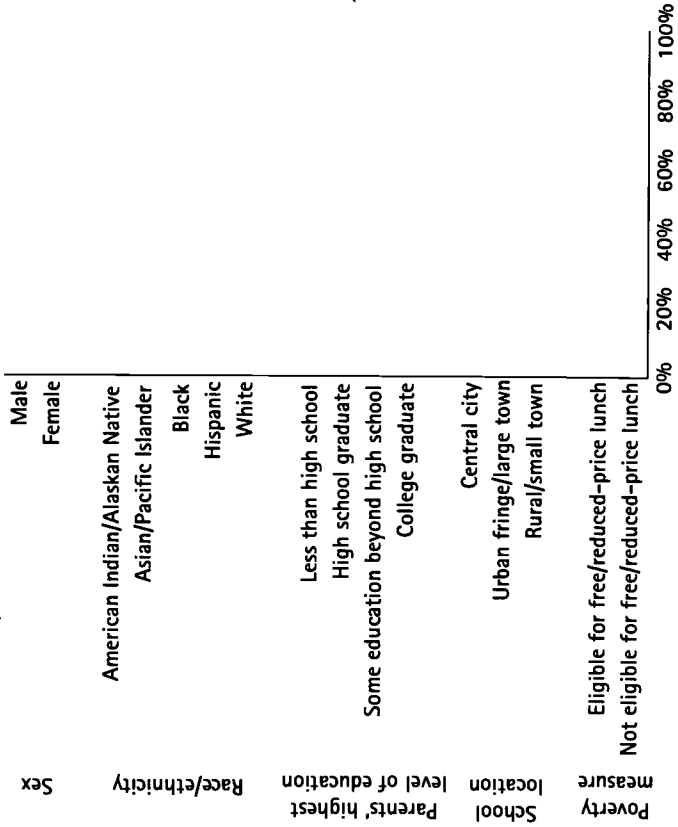


2. State Comparisons

How did New Hampshire compare with other states in 8th grade mathematics achievement in public schools in 1996?
 New Hampshire did participate in NAEP mathematics in Grade 8 in 1996, but did not meet the minimum school participation guidelines for public schools. Therefore, New Hampshire's results were not released.

3. Subgroup Performance

What percentages of public school 8th graders in different subgroups in New Hampshire were at or above Proficient on the 1996 NAEP mathematics assessment?
 New Hampshire did participate in NAEP mathematics in Grade 8 in 1996, but did not meet the minimum school participation guidelines for public schools. Therefore, New Hampshire's results were not released.

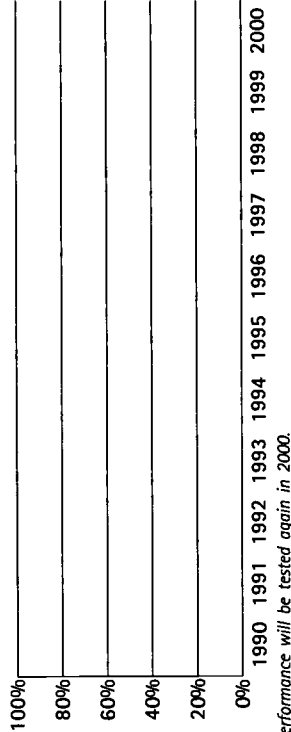


1. Improvement Over Time

Have New Hampshire's 8th graders improved in science achievement?

New Hampshire did participate in NAEP science in 1996, but did not meet the minimum school participation guidelines for public schools. Therefore, New Hampshire's results were not released.

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



2. State Comparisons

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

New Hampshire did participate in NAEP science in 1996, but did not meet the minimum school participation guidelines for public schools. Therefore, New Hampshire's results were not released.

3. Subgroup Performance

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

New Hampshire did participate in NAEP science in 1996, but did not meet the minimum school participation guidelines for public schools. Therefore, New Hampshire's results were not released.

Subgroup	Percentage of public school 8th graders at or above Proficient on the NAEP science assessment
Sex	Male Female
Race/ethnicity	American Indian/Alaskan Native Asian/Pacific Islander Black Hispanic White
Parents' highest level of education	Less than high school High school graduate Some education beyond high school College graduate
School location	Central city Urban fringe/large town Rural/small town
Poverty measure	Eligible for free/reduced-price lunch Not eligible for free/reduced-price lunch

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 New Hampshire 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 New Hampshire would have performed on TIMSS, because the estimate is based on scores from the 1996 NAEP mathematics assessment. New Hampshire did participate in NAEP mathematics in Grade 8 in 1996, but did not meet the minimum school participation guidelines for public schools. Therefore, New Hampshire's results were not released.

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

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 New Hampshire participated in the TIMSS science assessment, how would their average performance compare to that of students who took TIMSS in these nations?

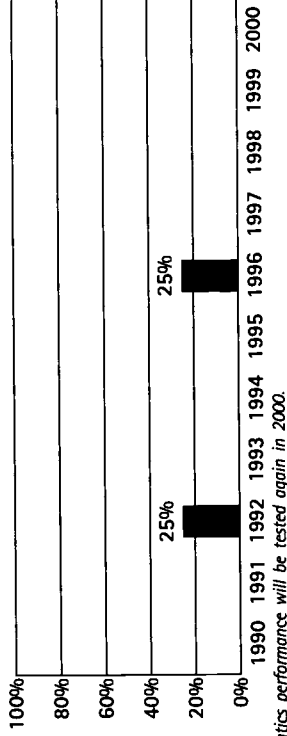
It is not possible to predict how students in New Hampshire would have performed on TIMSS, because the estimate is based on scores from the 1996 NAEP science assessment. New Hampshire did participate in NAEP science in 1996, but did not meet the minimum school participation guidelines for public schools. Therefore, New Hampshire's results were not released.

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

1. Improvement Over Time

Have New Jersey'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



Mathematics performance will be tested again in 2000.

2. State Comparisons[†]

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

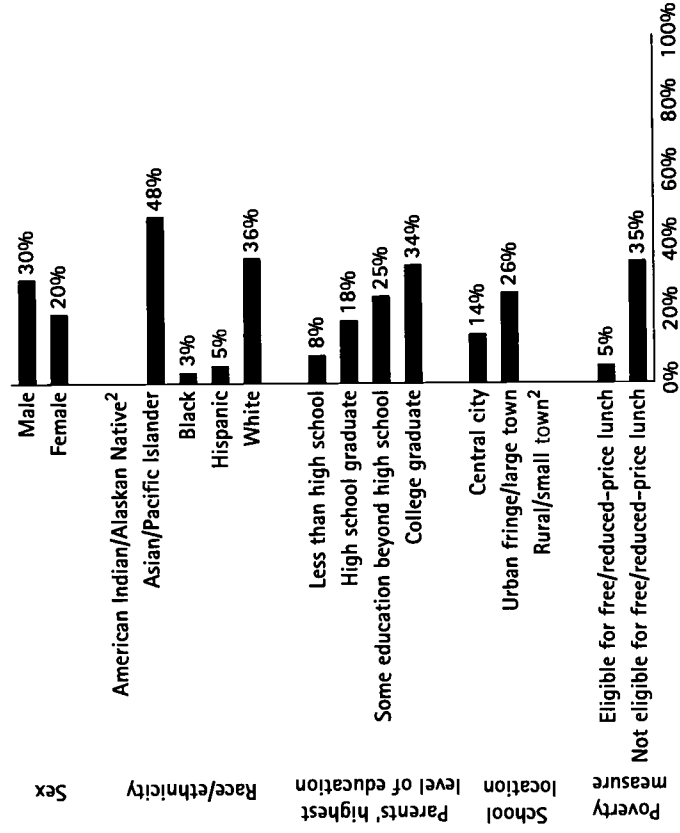
21 states had similar ¹ percentages of students who were at or above Proficient on NAEP:	
Connecticut	31%
Michigan, Utah, Vermont	23%
Minnesota	29%
Colorado, Iowa, Maryland, Montana	22%
Maine, Wisconsin	27%
U.S.,* Alaska, North Carolina, Oregon, 21%	
New Jersey, Texas	25%
Washington	20%
Indiana, Massachusetts, Nebraska, Pennsylvania ²	24%
North Dakota	

23 states had significantly lower ¹ percentages of students who were at or above Proficient on NAEP:	
Missouri, ² New York ²	20%
Arkansas, Georgia, New Mexico	13%
Virginia, West Virginia, Wyoming	12%
South Carolina	11%
Rhode Island, Tennessee	17%
Alabama, California	11%
Delaware, Hawaii, Kentucky	8%
Louisiana, Mississippi	16%
Arizona, Florida	15%
District of Columbia	5%
Nevada	14%
Guam	3%

[†] The term "state" is used to refer to the 50 states, the District of Columbia, and the territories.
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.
 * 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 subgroups¹ in New Jersey 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.
² Characteristics of the sample do not permit a reliable estimate.

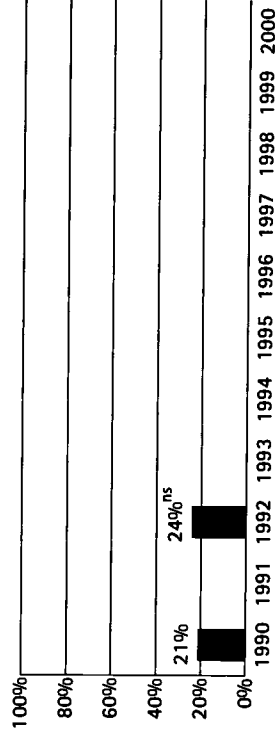
1. Improvement Over Time

Have New Jersey'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

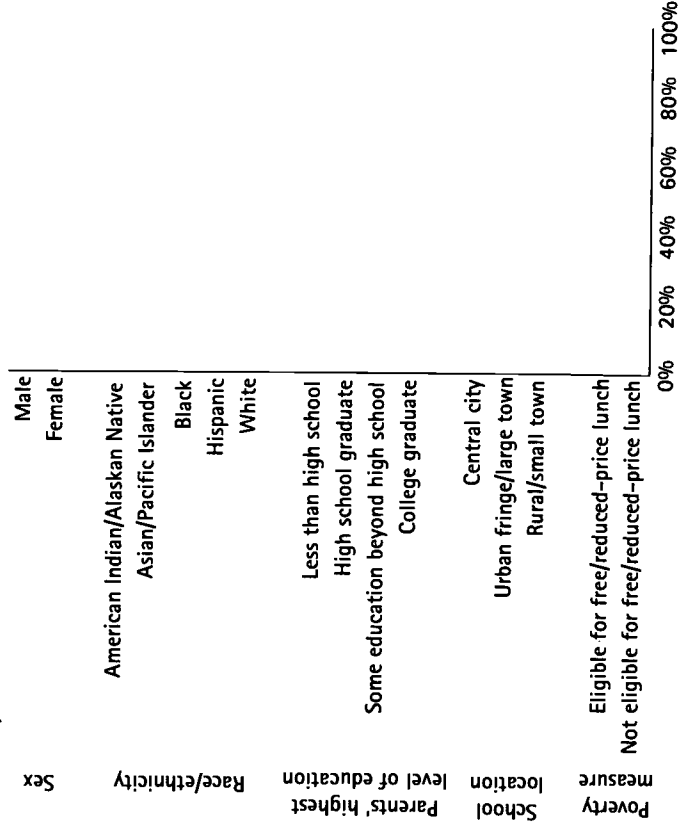
How did New Jersey compare with other states in 8th grade mathematics achievement in public schools in 1996?

New Jersey did participate in NAEP mathematics in 1996, but did not meet the minimum school participation guidelines for public schools. Therefore, New Jersey's results were not released.

3. Subgroup Performance

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

New Jersey did participate in NAEP mathematics in 1996, but did not meet the minimum school participation guidelines for public schools. Therefore, New Jersey's results were not released.

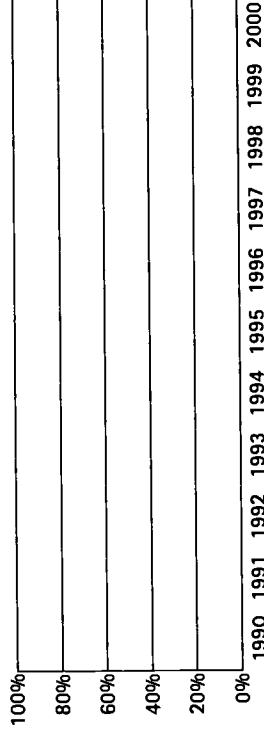


1. Improvement Over Time

Have New Jersey's 8th graders improved in science achievement?

New Jersey did participate in NAEP science in 1996, but did not meet the minimum school participation guidelines for public schools. Therefore, New Jersey's results were not released.

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 New Jersey compare with other states in 8th grade science achievement in public schools in 1996?

New Jersey did participate in NAEP science in 1996, but did not meet the minimum school participation guidelines for public schools. Therefore, New Jersey's results were not released.

3. Subgroup Performance

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

New Jersey did participate in NAEP science in 1996, but did not meet the minimum school participation guidelines for public schools. Therefore, New Jersey's results were not released.

	Male	Female
Sex		
Race/ethnicity	American Indian/Alaskan Native	Asian/Pacific Islander
	Black	Hispanic
	White	
Parents' highest level of education	Less than high school	High school graduate
	Some education beyond high school	College graduate
School location	Central city	Urban fringe/large town
		Rural/small town
Poverty measure	Eligible for free/reduced-price lunch	Not eligible for free/reduced-price lunch

0% 20% 40% 60% 80% 100%

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 New Jersey 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 New Jersey would have performed on TIMSS, because the estimate is based on scores from the 1996 NAEP mathematics assessment. New Jersey did participate in NAEP mathematics in Grade 8 in 1996, but did not meet the minimum school participation guidelines for public schools. Therefore, New Jersey's results were not released.

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 New Jersey 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 New Jersey would have performed on TIMSS, because the estimate is based on scores from the 1996 NAEP science assessment. New Jersey did participate in NAEP science in 1996, but did not meet the minimum school participation guidelines for public schools. Therefore, New Jersey's results were not released.

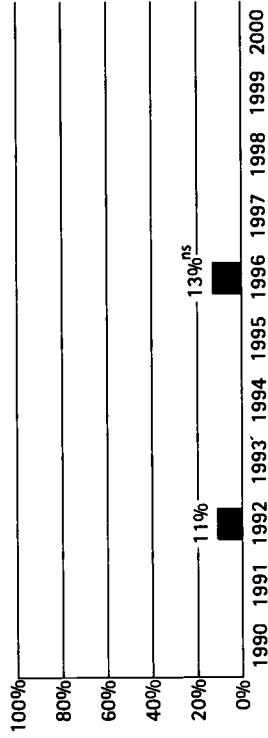
[†] The term "nation" is used to refer to nations, states, or jurisdictions.

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

1. Improvement Over Time

Have New Mexico'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 2002.

2. State Comparisons[†]

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

28 states had significantly higher¹ percentages of students who were at or above Proficient on NAEP:

Connecticut	31%	Colorado, Iowa, Maryland, Montana	22%
Minnesota	29%	U.S.,* Alaska, North Carolina, Oregon,	21%
Maine, Wisconsin	27%	Washington	
New Jersey, Texas	25%	Missouri, New York, Pennsylvania	20%
Indiana, Massachusetts, Nebraska,	24%	Virginia, West Virginia, Wyoming	19%
North Dakota		Rhode Island ²	17%
Michigan, Utah, Vermont	23%		

12 states had similar¹ percentages of students who were at or above Proficient on NAEP:

Tennessee ²	17%	New Mexico, Arkansas, Georgia	13%
Delaware, Hawaii, Kentucky	16%	South Carolina	12%
Arizona, Florida	15%	Alabama, California	11%
Nevada	14%		

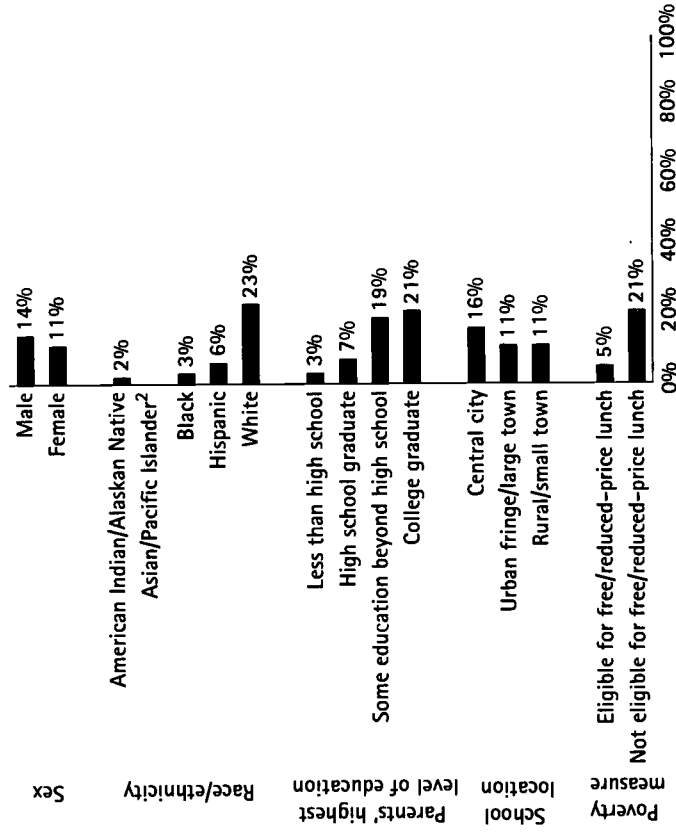
4 states had significantly lower¹ percentages of students who were at or above Proficient on NAEP:

Louisiana, Mississippi	8%	Guam	3%
District of Columbia	5%		

[†] The term "state" is used to refer to the 50 states, the District of Columbia, and the territories.
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.
 * 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 subgroups¹ in New Mexico 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.
² Characteristics of the sample do not permit a reliable estimate.



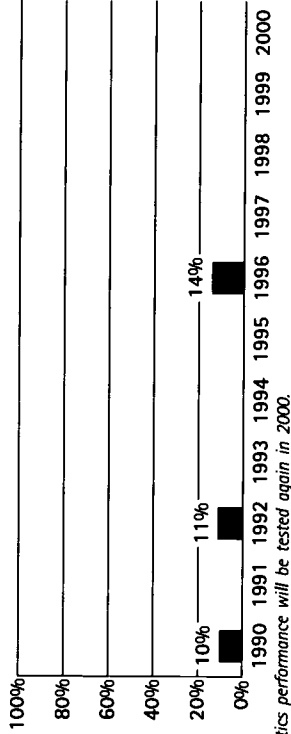
1. Improvement Over Time

Have New Mexico's 8th graders improved in mathematics achievement?

Yes. The percentage of New Mexico's public school 8th graders who met the Goals Panel's performance standard in mathematics increased from 10% in 1990, to 14% in 1996.

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



2. State Comparisons[†]

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

27 states had significantly higher¹ percentages of students who were at or above Proficient on NAEP:

Minnesota	34%	Colorado	25%
North Dakota	33%	U.S. [*]	24%
Montana, Wisconsin	32%	Indiana, Maryland, Utah	22%
Connecticut, Iowa, Maine, Nebraska	31%	Missouri, New York, Wyoming	22%
Alaska	30%	Texas, Virginia	21%
Massachusetts, Michigan	28%	North Carolina, Rhode Island	20%
Vermont	27%	Delaware	19%
Oregon, Washington	26%	Arizona	18%

10 states had similar¹ percentages of students who were at or above Proficient on NAEP:

California, Florida	17%	Arkansas	13%
Georgia, Hawaii, Kentucky	16%	Alabama	12%
Tennessee	15%		
New Mexico, South Carolina, West Virginia	14%		

4 states had significantly lower¹ percentages of students who were at or above Proficient on NAEP:

Louisiana, Mississippi	7%	District of Columbia	5%
Guam	6%		

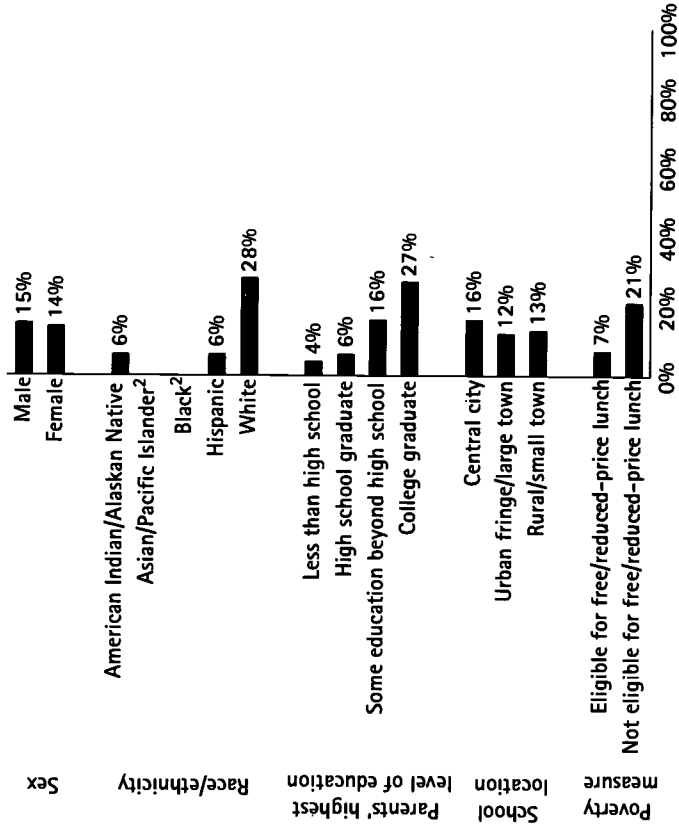
[†] The term "state" is used to refer to the 50 states, the District of Columbia, and the territories.

¹ See explanation on pp. 3-4.

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

3. Subgroup Performance

What percentages of public school 8th graders in different subgroups¹ in New Mexico 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.

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

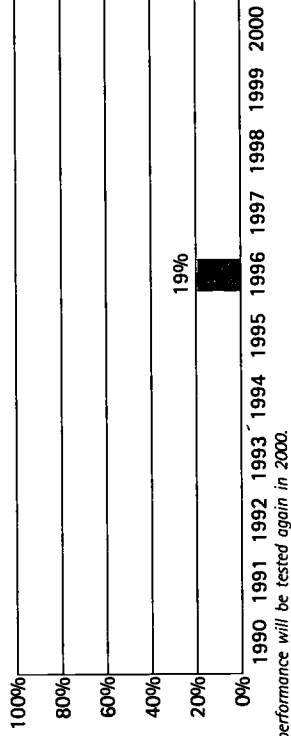
1. Improvement Over Time

Have New Mexico's 8th graders improved in science achievement?

In 1996, 19% of New Mexico's public school 8th graders met the Goals Panel's performance standard in science. The Goals Panel will report whether science performance has improved over time when science is assessed again in 2000.

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 science assessment



2. State Comparisons[†]

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

27 states had significantly higher [†] percentages of students who were at or above Proficient on NAEP:	
Maine, Montana, North Dakota	41%
Wisconsin	39%
Massachusetts, Minnesota	37%
Connecticut, Iowa	36%
Nebraska	35%
Vermont, Wyoming	34%
Colorado, Michigan, Oregon, Utah	32%
Alaska	31%
Indiana	30%
U.S.*	29%
Missouri	28%
New York, Virginia, Washington	27%
Rhode Island	26%
Maryland	25%
North Carolina	24%
Arizona, Kentucky, Texas	23%

9 states had similar [†] percentages of students who were at or above Proficient on NAEP:	
Arkansas, Tennessee	22%
Delaware, Florida, Georgia, West Virginia	21%
California	20%
New Mexico	19%
Alabama	18%
South Carolina	17%

5 states had significantly lower [†] percentages of students who were at or above Proficient on NAEP:	
Hawaii	15%
Louisiana	13%
Mississippi	12%
Guam	7%
District of Columbia	5%

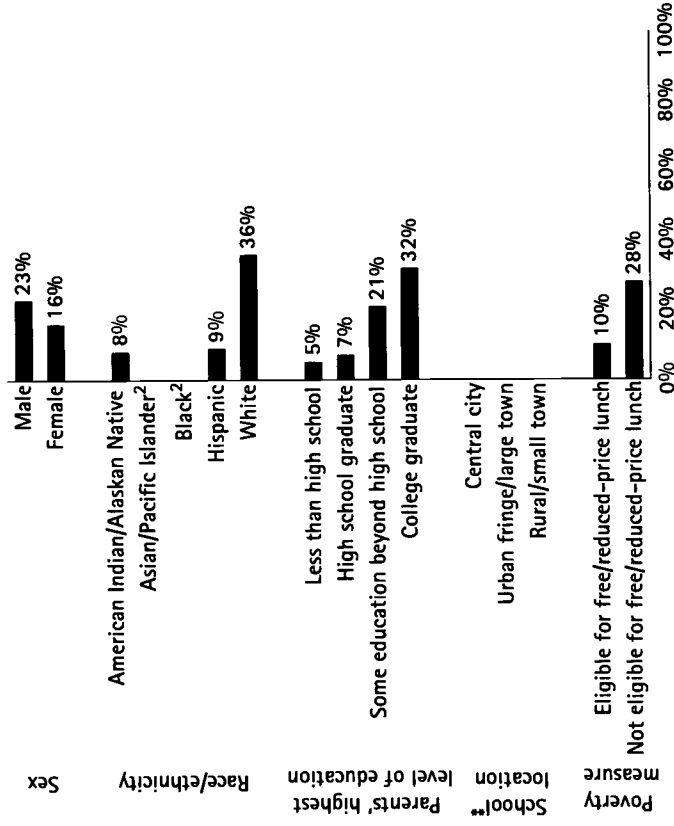
[†] The term "state" is used to refer to the 50 states, the District of Columbia, and the territories.

¹ See explanation on pp. 3-4.

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

3. Subgroup Performance

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



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

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

** No school location data for science in 1996.

International Comparisons

Mathematics Grade 8

Forty-one nations¹ participated in the Third International Mathematics and Science Study (TIMSS) in 8th grade mathematics in 1995. If public school 8th graders in New Mexico participated in the TIMSS mathematics assessment, how would their average performance compare to that of students who took TIMSS in these nations?

27 nations¹ would be expected to perform significantly higher.¹

(Australia)
(Austria)
(Belgium – Flemish²)
(Belgium – French)²
(Bulgaria)
Canada
Czech Republic
(Denmark)
(England)
France
(Germany)
Hong Kong
Hungary
Ireland
(Israel)
Japan
Korea
(Netherlands)
New Zealand
Norway
Russian Federation
Singapore
Slovak Republic
(Slovenia)
Sweden
(Switzerland)
(Thailand)

9 nations¹ would be expected to perform similarly.¹

Cyprus
(Greece)
Iceland
(Latvia – LSS)³
(Lithuania)
New Mexico
(Romania)
(Scotland)
Spain
United States

5 nations¹ would be expected to perform significantly lower.¹

(Colombia)
Iran, Islamic Republic
(Kuwait)
Portugal
(South Africa)

[†] The term "nation" is used to refer to nations, states, or jurisdictions. Performance for nations is based on public school data only. Nations not meeting international guidelines are shown in parentheses.

¹ See explanation on pp. 3-4.

² The Flemish and French educational systems in Belgium participated separately.

³ Latvia is designated LSS because only Latvian-speaking schools were tested, which represent less than 65% of the population.

New Mexico

Science Grade 8

Forty-one nations¹ participated in the Third International Mathematics and Science Study (TIMSS) in 8th grade science in 1995. If public school 8th graders in New Mexico participated in the TIMSS science assessment, how would their average performance compare to that of students who took TIMSS in these nations?

16 nations¹ would be expected to perform significantly higher.¹

(Australia)
(Austria)
Belgium – Flemish²
(Bulgaria)
Czech Republic
(England)
Hungary
Ireland
Japan
Korea
(Netherlands)
Russian Federation
Singapore
Slovak Republic
(Slovenia)
Sweden

15 nations¹ would be expected to perform similarly.¹

Canada
France
(Germany)
(Greece)
Hong Kong
Iceland
(Israel)
New Mexico
New Zealand
Norway
(Romania)
(Scotland)
Spain
(Switzerland)
(Thailand)
United States

10 nations¹ would be expected to perform significantly lower.¹

(Belgium – French)²
(Colombia)
Cyprus
(Denmark)
Iran, Islamic Republic
(Kuwait)
(Latvia – LSS)³
(Lithuania)
Portugal
(South Africa)

[†] The term "nation" is used to refer to nations, states, or jurisdictions. Performance for nations is based on public school data only. Nations not meeting international guidelines are shown in parentheses.

¹ See explanation on pp. 3-4.

² The Flemish and French educational systems in Belgium participated separately.

³ Latvia is designated LSS because only Latvian-speaking schools were tested, which represent less than 65% of the population.

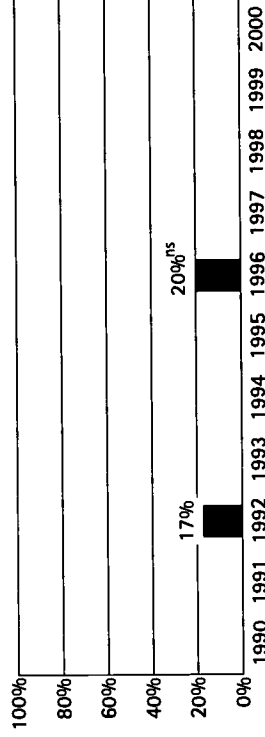
1. Improvement Over Time

Have New York'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 New York compare with other states in 4th grade mathematics achievement in public schools in 1996?

4 states had significantly higher¹ percentages of students who were at or above Proficient on NAEP:

Connecticut	31%	Maine, Wisconsin	27%
Minnesota	29%		

24 states had similar¹ percentages of students who were at or above Proficient on NAEP:

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

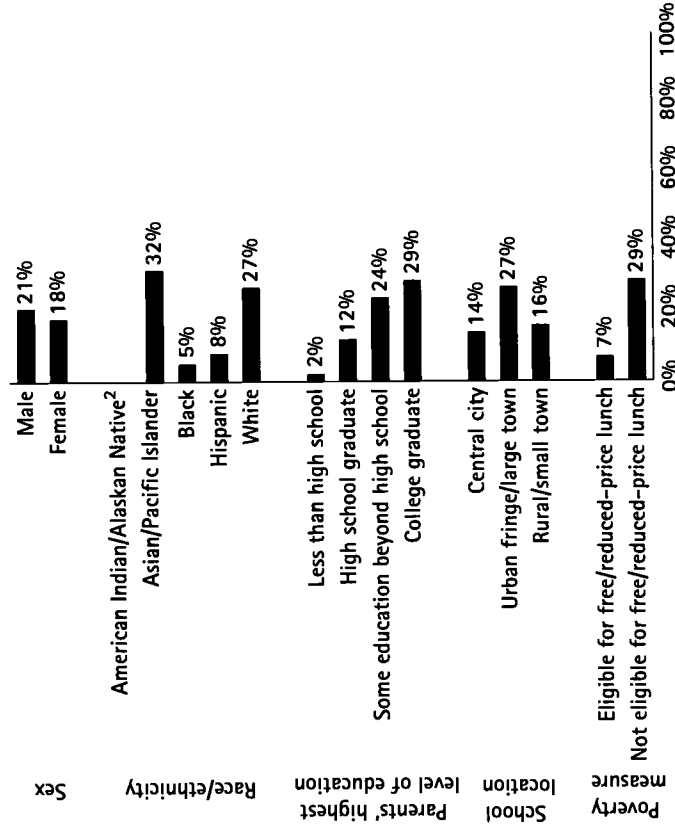
16 states had significantly lower¹ percentages of students who were at or above Proficient on NAEP:

Delaware, Hawaii, Kentucky	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.
¹ See explanation on pp. 3-4.
^{*} 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 subgroups¹ in New York 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.
² Characteristics of the sample do not permit a reliable estimate.



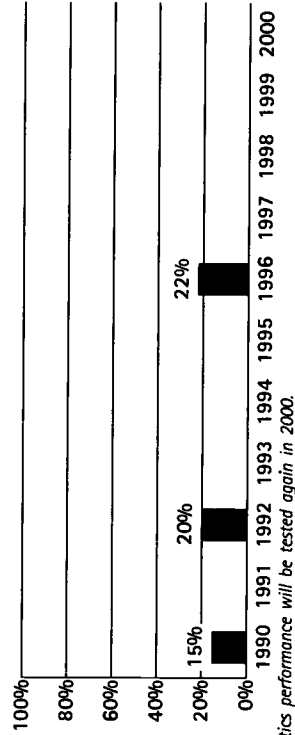
1. Improvement Over Time

Have New York's 8th graders improved in mathematics achievement?

Yes. The percentage of New York's public school 8th graders who met the Goals Panel's performance standard in mathematics increased from 15% in 1990, to 22% in 1996.

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



Mathematics performance will be tested again in 2000.

2. State Comparisons[†]

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

11 states had significantly higher¹ percentages of students who were at or above Proficient on NAEP:

Minnesota	34%	Connecticut, Iowa, Maine, Nebraska	31%
North Dakota	33%	Alaska	30%
Montana, Wisconsin	32%	Massachusetts, Michigan	28%

15 states had similar¹ percentages of students who were at or above Proficient on NAEP:

Vermont	27%	Texas, Virginia	21%
Oregon, Washington	26%	North Carolina, Rhode Island	20%
Colorado	25%	Delaware	19%
U.S., [*] Indiana, Maryland, Utah	24%	Arizona	18%
New York, Missouri, Wyoming	22%		

15 states had significantly lower¹ percentages of students who were at or above Proficient on NAEP:

California, Florida	17%	Arkansas	13%
Georgia, Hawaii, Kentucky	16%	Alabama	12%
Tennessee	15%	Louisiana, Mississippi	7%
New Mexico, South Carolina, West Virginia	14%	Guam	6%
		District of Columbia	5%

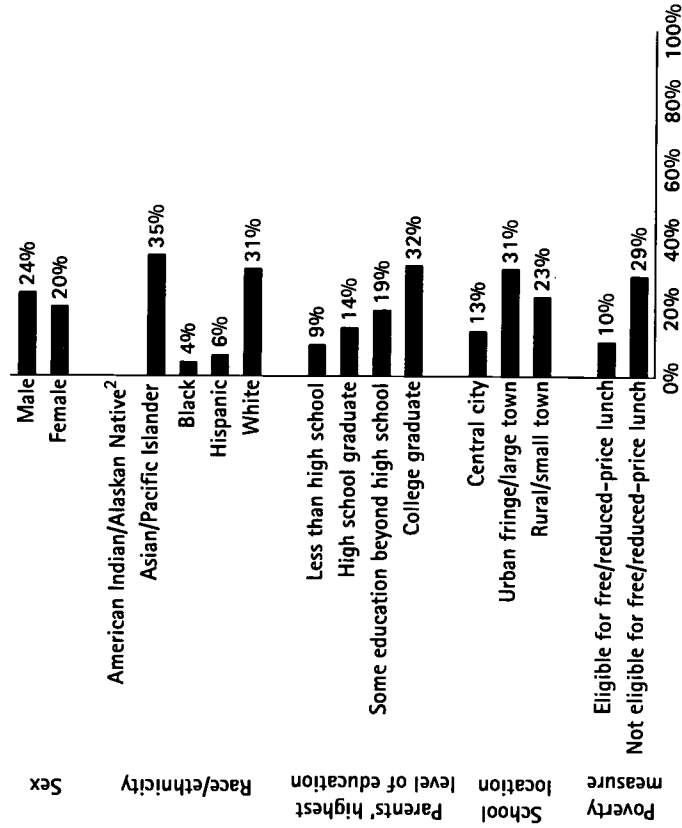
[†] The term "state" is used to refer to the 50 states, the District of Columbia, and the territories.

¹ See explanation on pp. 3-4.

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

3. Subgroup Performance

What percentages of public school 8th graders in different subgroups¹ in New York 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.

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

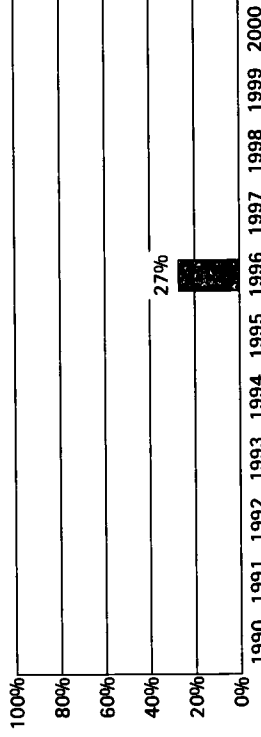
1. Improvement Over Time

Have New York's 8th graders improved in science achievement?

In 1996, 27% of New York's public school 8th graders met the Goals Panel's performance standard in science. The Goals Panel will report whether science performance has improved over time when science is assessed again in 2000.

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 science assessment



Science performance will be tested again in 2000.

2. State Comparisons[†]

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

12 states had significantly higher[†] percentages of students who were at or above Proficient on NAEP:

Maine, Montana, North Dakota	41%	Nebraska	35%
Wisconsin	39%	Vermont, Wyoming	34%
Massachusetts, Minnesota	37%	Utah [‡]	32%
Connecticut, Iowa	36%		

15 states had similar[†] percentages of students who were at or above Proficient on NAEP:

Colorado, [‡] Michigan, [‡] Oregon [‡]	32%	Rhode Island	26%
Alaska	31%	Maryland	25%
Indiana	30%	North Carolina	24%
U.S.*	29%	Arizona, Kentucky, Texas	23%
Missouri	28%	Tennessee [‡]	22%
New York, Virginia, Washington	27%		

14 states had significantly lower[†] percentages of students who were at or above Proficient on NAEP:

Arkansas [‡]	22%	South Carolina	17%
Delaware, Florida, Georgia,	21%	Hawaii	15%
West Virginia	20%	Louisiana	13%
California	19%	Mississippi	12%
New Mexico	18%	Guam	7%
Alabama		District of Columbia	5%

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

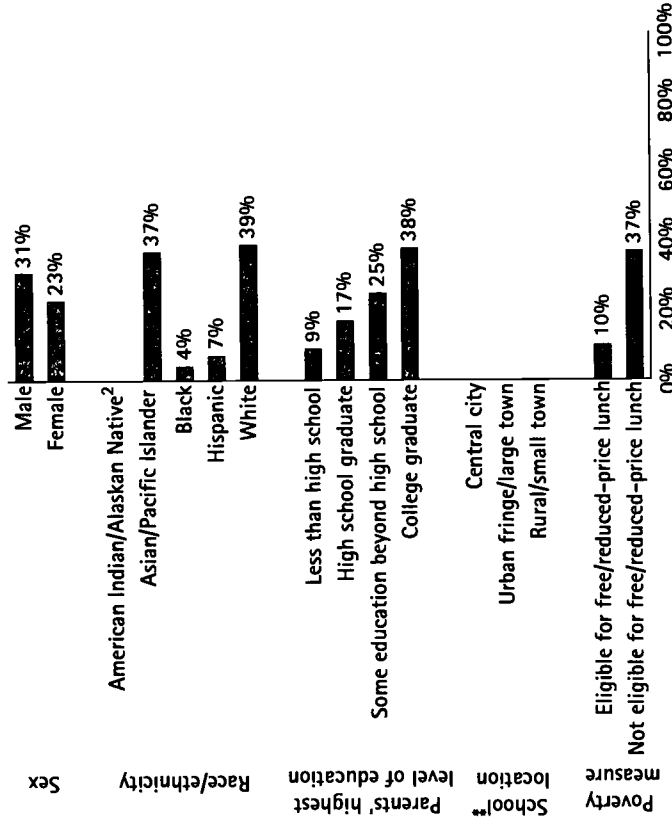
[‡] See explanation on pp. 3-4.

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

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

3. Subgroup Performance

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



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

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

** No school location data for science in 1996.

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 New York participated in the TIMSS mathematics assessment, how would their average performance compare to that of students who took TIMSS in these nations?

19 nations[†] would be expected to perform significantly higher:¹

(Australia)
(Austria)
Belgium – Flemish²
(Belgium – French)²
(Bulgaria)
Canada
Czech Republic
France
Hong Kong
Hungary
Ireland
Japan
Korea
(Netherlands)
Russian Federation
Singapore
Slovak Republic
(Slovenia)
(Switzerland)

17 nations[†] would be expected to perform similarly:¹

Cyprus
(Denmark)
(England)
(Germany)
(Greece)
Iceland
(Israel)
(Latvia – LSS)³
(Lithuania)
New York
New Zealand
Norway
(Romania)
(Scotland)
Spain
Sweden
(Thailand)
United States

5 nations[†] would be expected to perform significantly lower:¹

(Colombia)
Iran, Islamic Republic
(Kuwait)
Portugal
(South Africa)

[†] The term "nation" is used to refer to nations, states, or jurisdictions. Performance for nations is based on public school data only. Nations not meeting international guidelines are shown in parentheses.

¹ See explanation on pp. 3-4.

² The Flemish and French educational systems in Belgium participated separately.

³ Latvia is designated LSS because only Latvian-speaking schools were tested, which represent less than 65% of the population.

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 New York participated in the TIMSS science assessment, how would their average performance compare to that of students who took TIMSS in these nations?

10 nations[†] would be expected to perform significantly higher:¹

(Austria)
(Bulgaria)
Czech Republic
(England)
Hungary
Japan
Korea
(Netherlands)
Singapore
(Slovenia)

17 nations[†] would be expected to perform similarly:¹

(Australia)
Belgium – Flemish²
Canada
(Germany)
Hong Kong
Ireland
(Israel)
New York
New Zealand
Norway
Russian Federation
(Scotland)
Slovak Republic
Spain
Sweden
(Switzerland)
(Thailand)
United States

14 nations[†] would be expected to perform significantly lower:¹

(Belgium – French)²
(Colombia)
Cyprus
(Denmark)
France
(Greece)
Iceland
Iran, Islamic Republic
(Kuwait)
(Latvia – LSS)³
(Lithuania)
Portugal
(Romania)
(South Africa)

[†] The term "nation" is used to refer to nations, states, or jurisdictions. Performance for nations is based on public school data only. Nations not meeting international guidelines are shown in parentheses.

¹ See explanation on pp. 3-4.

² The Flemish and French educational systems in Belgium participated separately.

³ Latvia is designated LSS because only Latvian-speaking schools were tested, which represent less than 65% of the population.



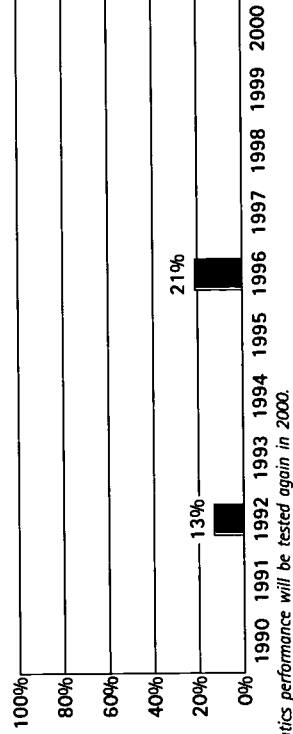
1. Improvement Over Time

Have North Carolina's 4th graders improved in mathematics achievement?

Yes. The percentage of North Carolina's public school 4th graders who met the Goals Panel's performance standard in mathematics increased from 13% in 1992, to 21% in 1996.

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



2. State Comparisons[†]

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

4 states had significantly higher¹ percentages of students who were at or above Proficient on NAEP:

Connecticut	31%	Maine, Wisconsin	27%
Minnesota	29%		

23 states had similar¹ percentages of students who were at or above Proficient on NAEP:

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

17 states had significantly lower¹ percentages of students who were at or above Proficient on NAEP:

Rhode Island [†]	17%	South Carolina	12%
Delaware, Hawaii, Kentucky	16%	Alabama, California	11%
Arizona, Florida	15%	Louisiana, Mississippi	8%
Nevada	14%	District of Columbia	5%
Arkansas, Georgia, New Mexico	13%	Guam	3%

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

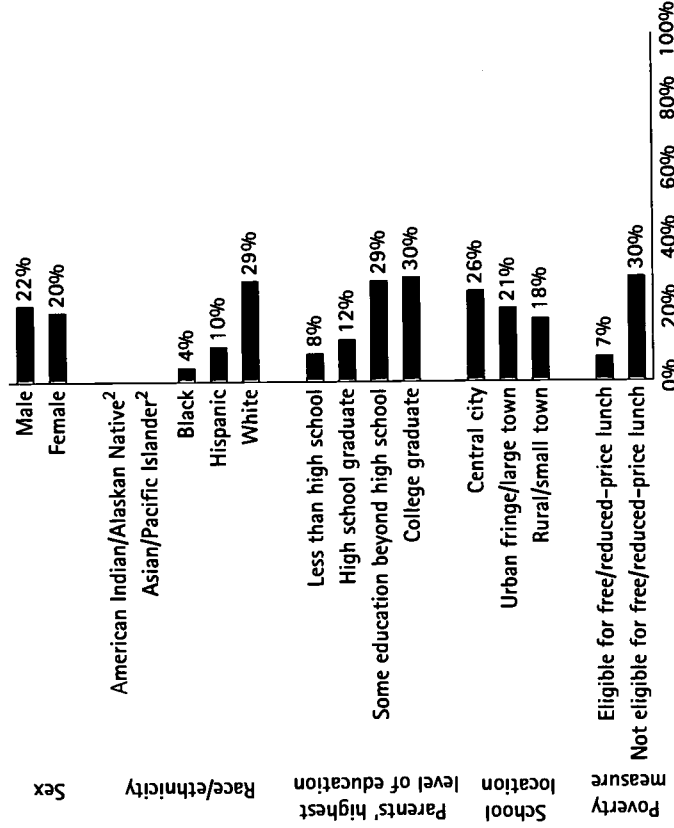
¹ See explanation on pp. 3-4.

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

* 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 subgroups¹ in North Carolina 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.

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

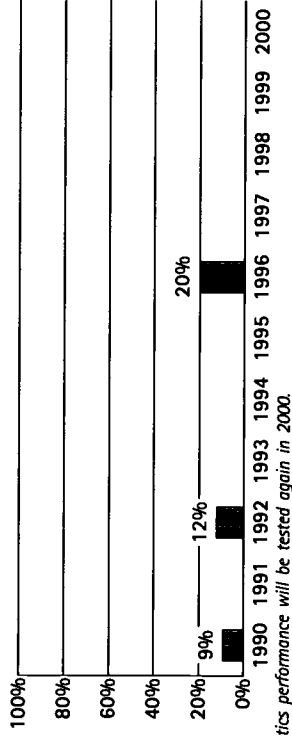
1. Improvement Over Time

Have North Carolina's 8th graders improved in mathematics achievement?

Yes. *The percentage of North Carolina's public school 8th graders who met the Goals Panel's performance standard in mathematics increased from 9% in 1990, to 20% in 1996.*

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



Mathematics performance will be tested again in 2000.

2. State Comparisons[†]

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

15 states had significantly higher¹ percentages of students who were at or above Proficient on NAEP:

Minnesota	34%	Massachusetts, Michigan	28%
North Dakota	33%	Vermont	27%
Montana, Wisconsin	32%	Oregon, Washington	26%
Connecticut, Iowa, Maine, Nebraska	31%	Colorado	25%
Alaska	30%		

14 states had similar¹ percentages of students who were at or above Proficient on NAEP:

U.S.*	24%	Delaware	19%
Missouri, Maryland, Utah	22%	Arizona	18%
Texas, Virginia	21%	California, Florida	17%
North Carolina , Rhode Island	20%	Georgia ²	16%

12 states had significantly lower¹ percentages of students who were at or above Proficient on NAEP:

Hawaii; ² Kentucky ²	16%	Alabama	12%
Tennessee	15%	Louisiana, Mississippi	7%
New Mexico, South Carolina,	14%	Guam	6%
West Virginia		District of Columbia	5%
Arkansas	13%		

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

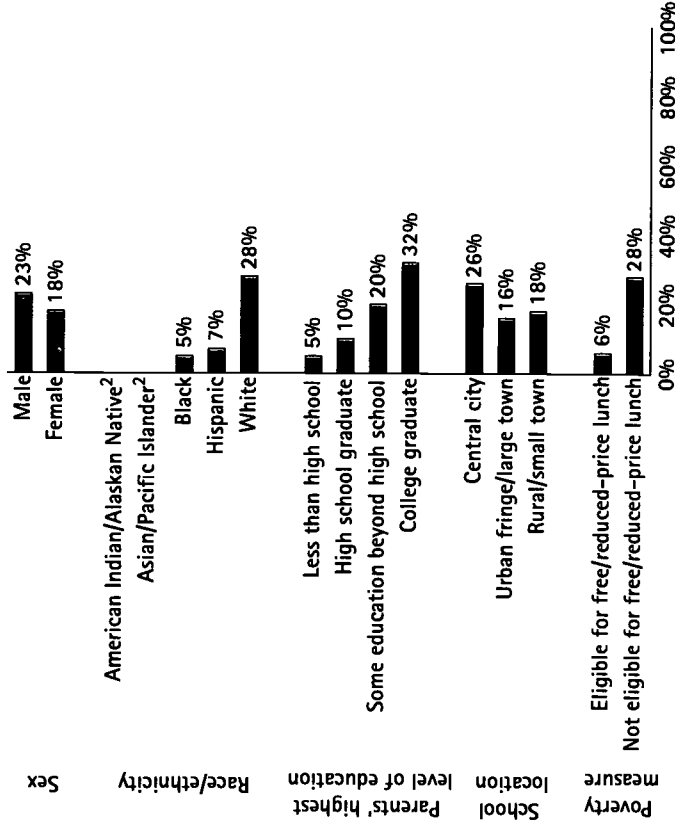
¹ See explanation on pp. 3-4.

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

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

3. Subgroup Performance

What percentages of public school 8th graders in different subgroups¹ in North Carolina 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.

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

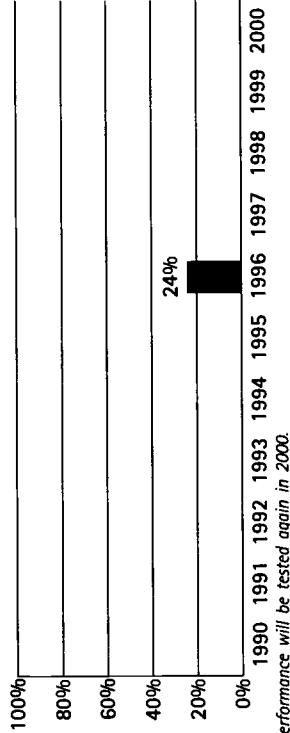
1. Improvement Over Time

Have North Carolina's 8th graders improved in science achievement?

In 1996, 24% of North Carolina's public school 8th graders met the Goals Panel's performance standard in science. The Goals Panel will report whether science performance has improved over time when science is assessed again in 2000.

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 science assessment



2. State Comparisons[†]

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

17 states had significantly higher¹ percentages of students who were at or above Proficient on NAEP:

Maine, Montana, North Dakota	41%	Vermont, Wyoming	34%
Wisconsin	39%	Colorado, Michigan, Oregon, Utah	32%
Massachusetts, Minnesota	37%	Alaska	31%
Connecticut, Iowa	36%	Indiana	30%
Nebraska	35%	U.S.*	29%

16 states had similar¹ percentages of students who were at or above Proficient on NAEP:

Missouri	28%	Arizona, Kentucky, Texas	23%
New York, Virginia, Washington	27%	Arkansas, Tennessee	22%
Rhode Island	26%	Delaware, Florida, Georgia,	21%
Maryland	25%	West Virginia	20%
North Carolina	24%	California	20%

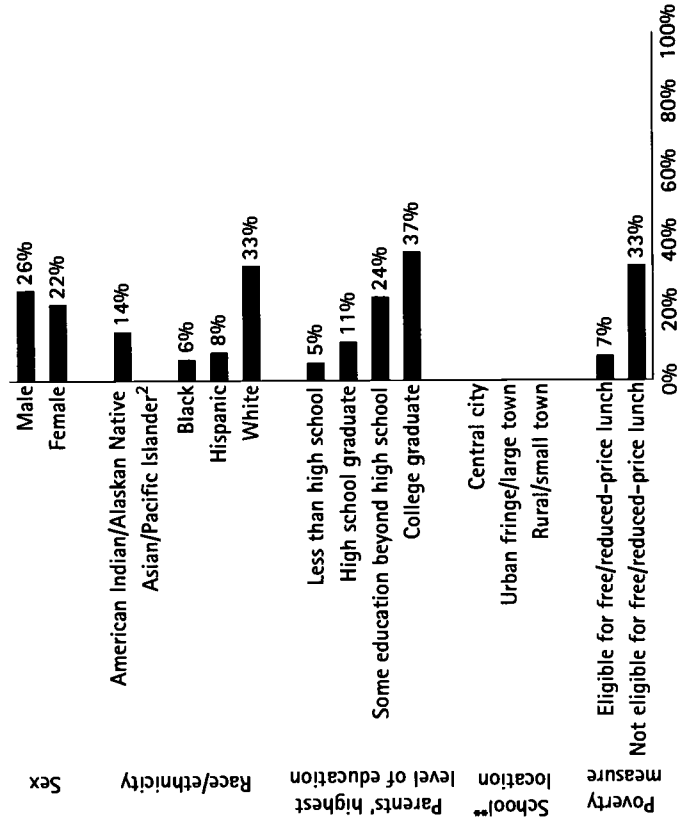
8 states had significantly lower¹ percentages of students who were at or above Proficient on NAEP:

New Mexico	19%	Louisiana	13%
Alabama	18%	Mississippi	12%
South Carolina	17%	Guam	7%
Hawaii	15%	District of Columbia	5%

[†] The term "state" is used to refer to the 50 states, the District of Columbia, and the territories.
¹ See explanation on pp. 3-4.
^{*} Figure shown for the U.S. includes both public and nonpublic school data.

3. Subgroup Performance

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



¹ Interpret differences between subgroups with caution. See pp. 3-4 and Appendix D.
² Characteristics of the sample do not permit a reliable estimate.
^{**} No school location data for science in 1996.

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 North Carolina participated in the TIMSS mathematics assessment, how would their average performance compare to that of students who took TIMSS in these nations?

21 nations[†] would be expected to perform significantly higher:¹

(Australia)
(Austria)
Belgium – Flemish?
(Belgium – French)²
(Bulgaria)
Canada
Czech Republic
France
Hong Kong
Hungary
Ireland
Japan
Korea
(Netherlands)
Russian Federation
Singapore
Slovak Republic
(Slovenia)
Sweden
(Switzerland)
(Thailand)

15 nations[†] would be expected to perform similarly:¹

Cyprus
(Denmark)
(England)
(Germany)
(Greece)
Iceland
(Israel)
(Latvia – LSS)³
(Lithuania)
New Zealand
North Carolina
Norway
(Romania)
(Scotland)
Spain
United States

5 nations[†] would be expected to perform significantly lower:¹

(Colombia)
Iran, Islamic Republic
(Kuwait)
Portugal
(South Africa)

[†] The term "nation" is used to refer to nations, states, or jurisdictions. Performance for nations is based on public school data only. Nations not meeting international guidelines are shown in parentheses.

¹ See explanation on pp. 3-4.

² The Flemish and French educational systems in Belgium participated separately.

³ Latvia is designated LSS because only Latvian-speaking schools were tested, which represent less than 65% of the population.

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 North Carolina participated in the TIMSS science assessment, how would their average performance compare to that of students who took TIMSS in these nations?

10 nations[†] would be expected to perform significantly higher:¹

(Austria)
(Bulgaria)
Czech Republic
(England)
Hungary
Japan
Korea
(Netherlands)
Singapore
(Slovenia)

17 nations[†] would be expected to perform similarly:¹

(Australia)
Belgium – Flemish?
Canada
(Germany)
Hong Kong
Ireland
(Israel)
New Zealand
North Carolina
Norway
Russian Federation
(Scotland)
Slovak Republic
Spain
Sweden
(Switzerland)
(Thailand)
United States

14 nations[†] would be expected to perform significantly lower:¹

(Belgium – French)²
(Colombia)
Cyprus
(Denmark)
France
(Greece)
Iceland
Iran, Islamic Republic
(Kuwait)
(Latvia – LSS)³
(Lithuania)
Portugal
(Romania)
(South Africa)

[†] The term "nation" is used to refer to nations, states, or jurisdictions. Performance for nations is based on public school data only. Nations not meeting international guidelines are shown in parentheses.

¹ See explanation on pp. 3-4.

² The Flemish and French educational systems in Belgium participated separately.

³ Latvia is designated LSS because only Latvian-speaking schools were tested, which represent less than 65% of the population.

1. Improvement Over Time

Have North Dakota'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 Panels' 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.

2. State Comparisons[†]

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

1 state had a significantly higher¹ percentage of students who were at or above Proficient on NAEP:

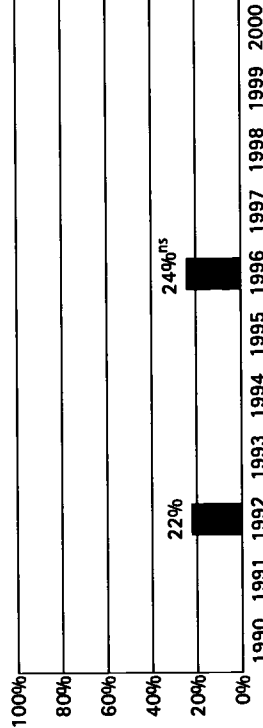
Connecticut	31%
21 states had similar¹ percentages of students who were at or above Proficient on NAEP:	
Minnesota	29%
Maine, Wisconsin	27%
New Jersey, Texas	25%
North Dakota , Indiana, Massachusetts, Nebraska	24%
Washington	23%
Missouri, ² Pennsylvania ²	22%
Michigan, Utah, Vermont	21%
Colorado, Iowa, Maryland, Montana	20%
U.S.,* Alaska, North Carolina, Oregon,	20%

22 states had significantly lower¹ percentages of students who were at or above Proficient on NAEP:

New York ²	20%
Arkansas, Georgia, New Mexico	19%
Virginia, West Virginia, Wyoming	17%
Rhode Island, Tennessee	16%
Delaware, Hawaii, Kentucky	15%
Arizona, Florida	14%
Nevada	13%
South Carolina	12%
Alabama, California	11%
Louisiana, Mississippi	8%
District of Columbia	5%
Guam	3%

[†] The term "state" is used to refer to the 50 states, the District of Columbia, and the territories.
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.
 * Figure shown for the U.S. includes both public and nonpublic school data.

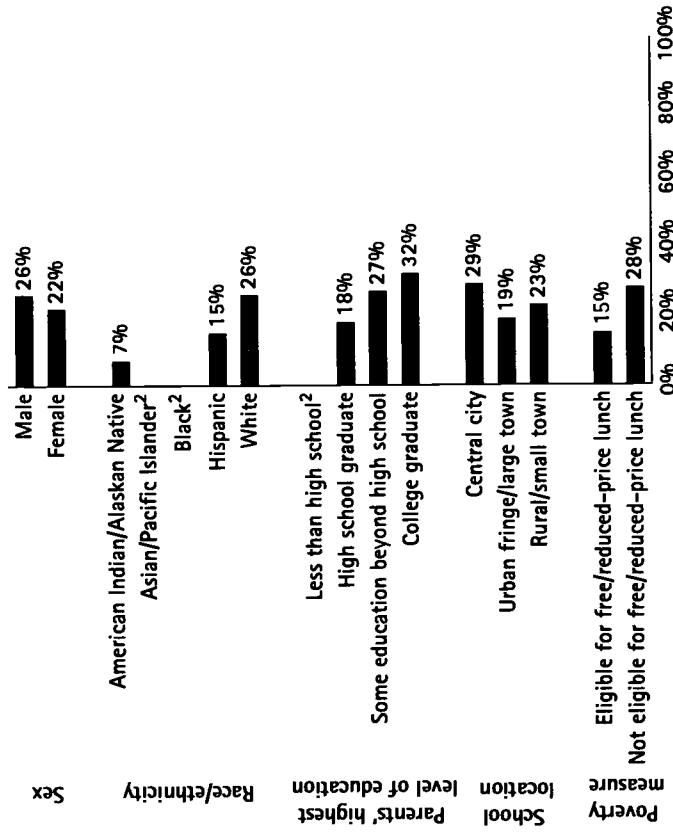
Percentage of public school 4th graders at or above Proficient on the NAEP mathematics assessment



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

3. Subgroup Performance

What percentages of public school 4th graders in different subgroups¹ in North Dakota 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.
² Characteristics of the sample do not permit a reliable estimate.



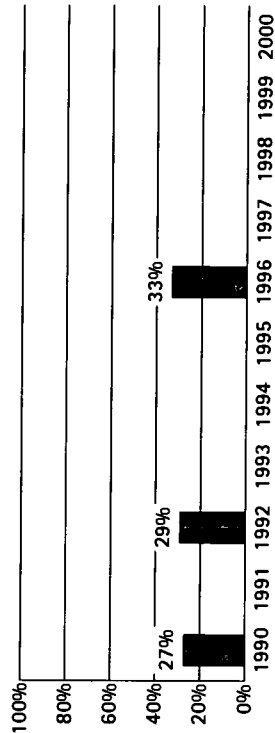
1. Improvement Over Time

Have North Dakota's 8th graders improved in mathematics achievement?

Yes. The percentage of North Dakota's public school 8th graders who met the Goals Panel's performance standard in mathematics increased from 27% in 1990, to 33% in 1996.

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



Mathematics performance will be tested again in 2000.

2. State Comparisons[†]

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

10 states had similar¹ percentages of students who were at or above Proficient on NAEP:

Minnesota	34%	Connecticut, Iowa, Maine, Nebraska	31%
North Dakota	33%	Alaska	30%
Montana, Wisconsin	32%	Massachusetts, Michigan	28%

31 states had significantly lower¹ percentages of students who were at or above Proficient on NAEP:

Vermont	27%	Georgia, Hawaii, Kentucky	16%
Oregon, Washington	26%	Tennessee	15%
Colorado	25%	New Mexico, South Carolina,	14%
U.S.,[*] Indiana, Maryland, Utah	24%	West Virginia	13%
Missouri, New York, Wyoming	22%	Arkansas	12%
Texas, Virginia	21%	Alabama	7%
North Carolina, Rhode Island	20%	Louisiana, Mississippi	7%
Delaware	19%	Guam	6%
Arizona	18%	District of Columbia	5%
California, Florida	17%		

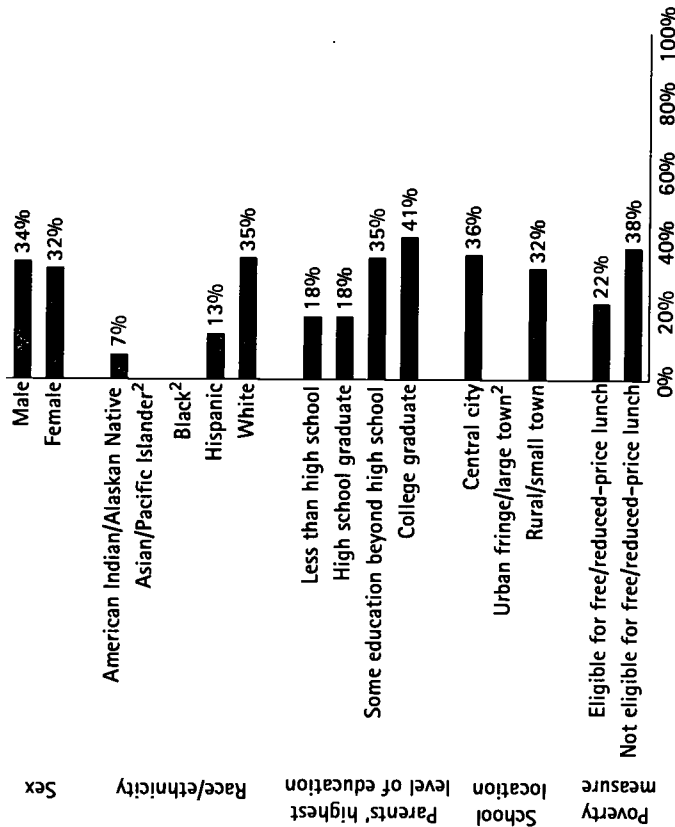
[†] The term "state" is used to refer to the 50 states, the District of Columbia, and the territories.

¹ See explanation on pp. 3-4.

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

3. Subgroup Performance

What percentages of public school 8th graders in different subgroups¹ in North Dakota 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.

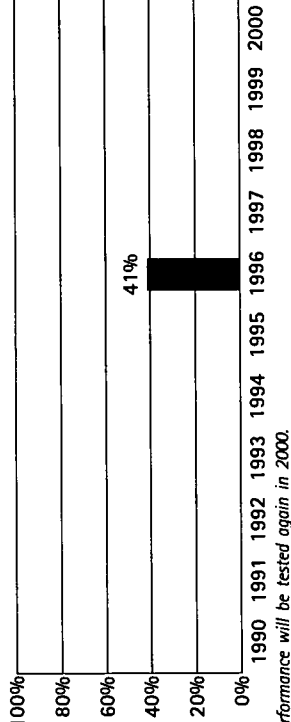
² Characteristics of the sample do not permit a reliable estimate.

1. Improvement Over Time

Have North Dakota's 8th graders improved in science achievement?
In 1996, 41% of North Dakota's public school 8th graders met the Goals Panel's performance standard in science. The Goals Panel will report whether science performance has improved over time when science is assessed again in 2000.

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 science assessment



Science performance will be tested again in 2000.

2. State Comparisons[†]

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

7 states had similar¹ percentages of students who were at or above Proficient on NAEP:

North Dakota, Maine, Montana	41%	Massachusetts, Minnesota	37%
Wisconsin	39%	Connecticut, Iowa	36%

34 states had significantly lower¹ percentages of students who were at or above Proficient on NAEP:

Nebraska	35%	Arkansas, Tennessee	22%
Vermont, Wyoming	34%	Delaware, Florida, Georgia,	21%
Colorado, Michigan, Oregon, Utah	32%	West Virginia	
Alaska	31%	California	20%
Indiana	30%	New Mexico	19%
U.S.*	29%	Alabama	18%
Missouri	28%	South Carolina	17%
New York, Virginia, Washington	27%	Hawaii	15%
Rhode Island	26%	Louisiana	13%
Maryland	25%	Mississippi	12%
North Carolina	24%	Guam	7%
Arizona, Kentucky, Texas	23%	District of Columbia	5%

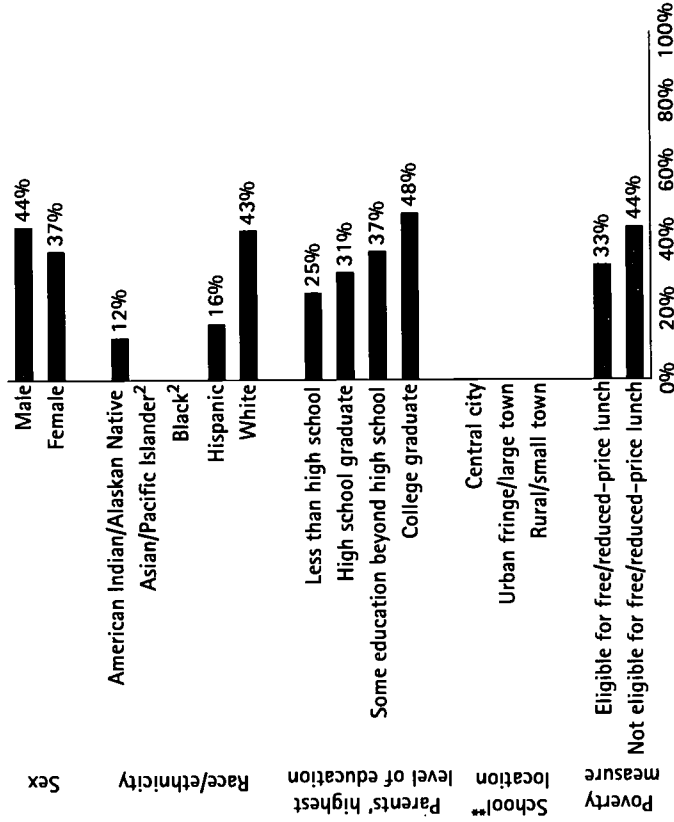
[†] The term "state" is used to refer to the 50 states, the District of Columbia, and the territories.

¹ See explanation on pp. 3-4.

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

3. Subgroup Performance

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



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

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

** No school location data for science in 1996.

International Comparisons

Mathematics Grade 8

Forty-one nations¹ participated in the Third International Mathematics and Science Study (TIMSS) in 8th grade mathematics in 1995. If public school 8th graders in North Dakota participated in the TIMSS mathematics assessment, how would their average performance compare to that of students who took TIMSS in these nations?

6 nations¹ would be expected to perform significantly higher:¹

Belgium – Flemish²
Czech Republic
Hong Kong
Japan
Korea
Singapore

17 nations¹ would be expected to perform similarly:²

(Australia)
(Austria)
(Belgium – French)²
(Bulgaria)
Canada
France
(Germany)
Hungary
Ireland
(Israel)
(Netherlands)
North Dakota
Russian Federation
Slovak Republic
(Slovenia)
Sweden
(Switzerland)
(Thailand)

18 nations¹ would be expected to perform significantly lower:³

(Colombia)
Cyprus
(Denmark)
(England)
(Greece)
Iceland
Iran, Islamic Republic
(Kuwait)
(Latvia – LSS)³
(Lithuania)
New Zealand
Norway
Portugal
(Romania)
(Scotland)
(South Africa)
Spain
United States

¹ The term "nation" is used to refer to nations, states, or jurisdictions. Performance for nations is based on public school data only. Nations not meeting international guidelines are shown in parentheses.

² See explanation on pp. 3-4.

³ The Flemish and French educational systems in Belgium participated separately.

⁴ Latvia is designated LSS because only Latvian-speaking schools were tested, which represent less than 65% of the population.

North Dakota

Science Grade 8

Forty-one nations¹ participated in the Third International Mathematics and Science Study (TIMSS) in 8th grade science in 1995. If public school 8th graders in North Dakota participated in the TIMSS science assessment, how would their average performance compare to that of students who took TIMSS in these nations?

1 nation¹ would be expected to perform significantly higher:¹

Singapore

9 nations¹ would be expected to perform similarly:¹

(Austria)
(Bulgaria)
Czech Republic
(England)
Hungary
Japan
Korea
(Netherlands)
North Dakota
(Slovenia)

31 nations¹ would be expected to perform significantly lower:¹

(Australia)
Belgium – Flemish²
(Belgium – French)²
Canada
(Colombia)
Cyprus
(Denmark)
France
(Germany)
(Greece)
Hong Kong
Iceland
Iran, Islamic Republic
Ireland
(Israel)
(Kuwait)
(Latvia – LSS)³
(Lithuania)
New Zealand
Norway
Portugal
(Romania)
Russian Federation
(Scotland)
Slovak Republic
(South Africa)
Spain
Sweden
(Switzerland)
(Thailand)
United States

¹ The term "nation" is used to refer to nations, states, or jurisdictions. Performance for nations is based on public school data only. Nations not meeting international guidelines are shown in parentheses.

² See explanation on pp. 3-4.

³ The Flemish and French educational systems in Belgium participated separately.

⁴ Latvia is designated LSS because only Latvian-speaking schools were tested, which represent less than 65% of the population.

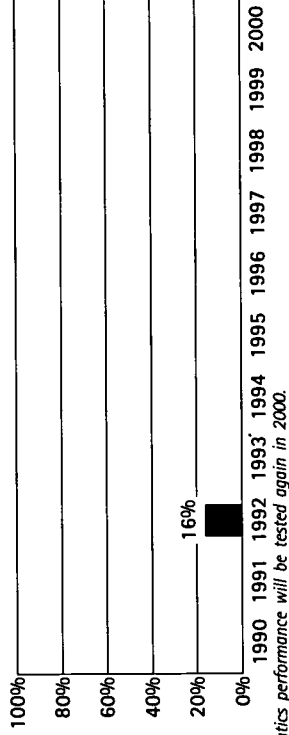
1. Improvement Over Time

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

In 1992, 16% of Ohio's public school 4th graders met the Goals Panel's performance standard in mathematics. The Goals Panel will report whether mathematics performance has improved over time when mathematics is assessed again in 2000.

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



2. State Comparisons

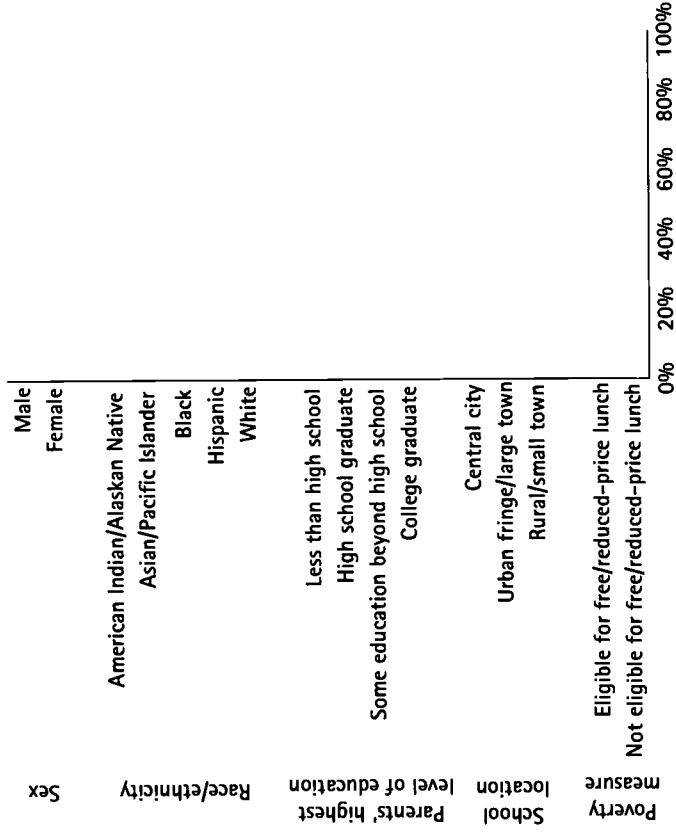
How did Ohio compare with other states in 4th grade mathematics achievement in public schools in 1996?

Ohio did not participate in NAEP mathematics in 1996.

3. Subgroup Performance

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

Ohio did not participate in NAEP mathematics in 1996.



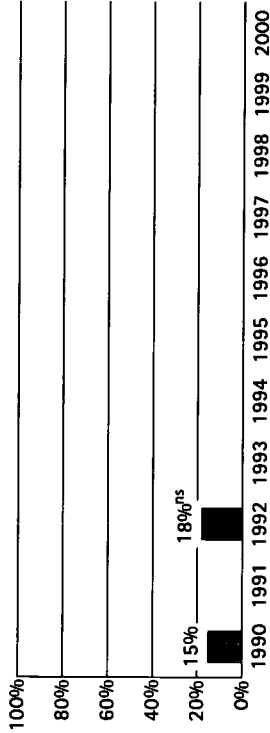
1. Improvement Over Time

Have Ohio'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

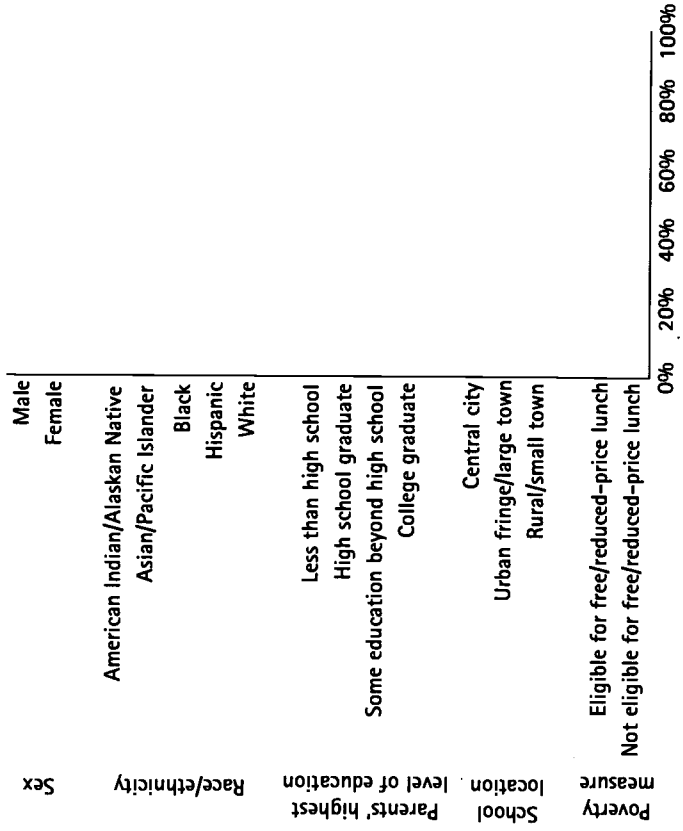
How did Ohio compare with other states in 8th grade mathematics achievement in public schools in 1996?

Ohio did not participate in NAEP mathematics in 1996.

3. Subgroup Performance

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

Ohio did not participate in NAEP mathematics in 1996.

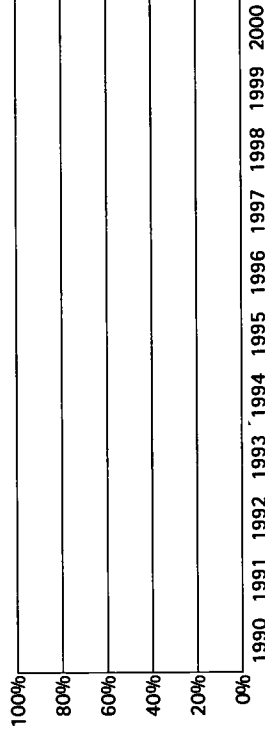


1. Improvement Over Time

Have Ohio's 8th graders improved in science achievement?

Ohio 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

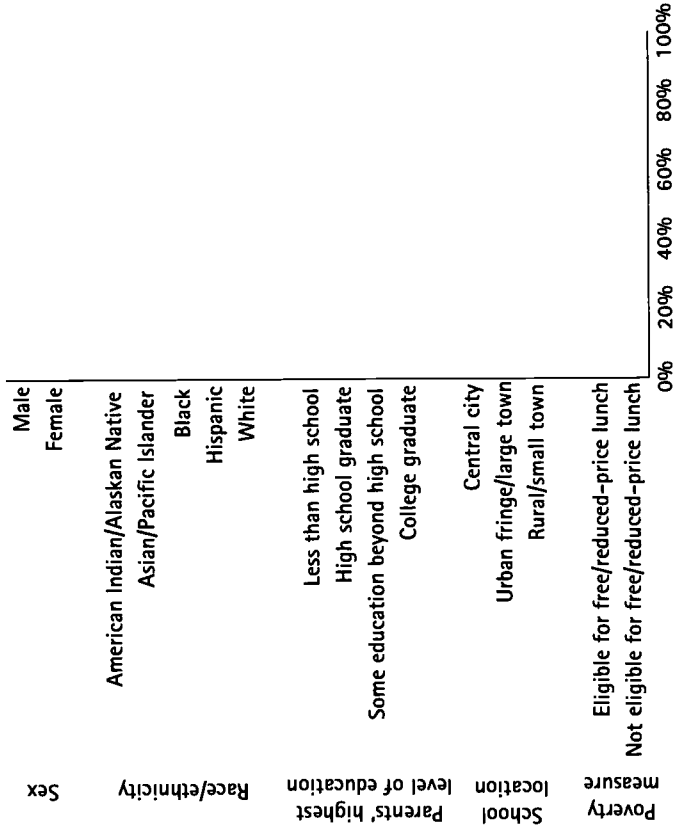
How did Ohio compare with other states in 8th grade science achievement in public schools in 1996?

Ohio did not participate in NAEP science in 1996.

3. Subgroup Performance

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

Ohio did not participate in NAEP science in 1996.



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 Ohio 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 Ohio would have performed on TIMSS, because the estimate is based on scores from the 1996 NAEP mathematics assessment. Ohio 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 Ohio 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 Ohio would have performed on TIMSS, because the estimate is based on scores from the 1996 NAEP science assessment. Ohio did not participate in NAEP science in 1996.

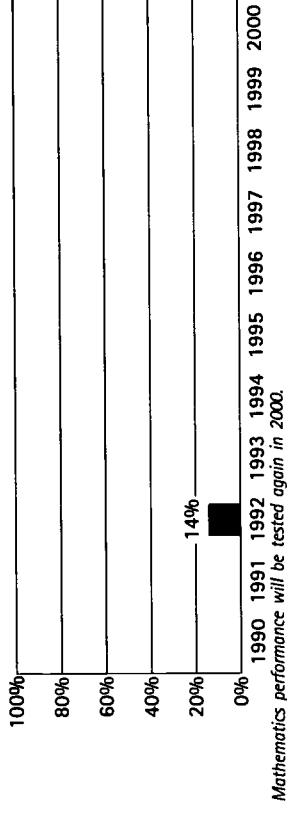
[†] The term "nation" is used to refer to nations, states, or jurisdictions.

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

1. Improvement Over Time

Have Oklahoma's 4th graders improved in mathematics achievement?
 In 1992, 14% of Oklahoma's public school 4th graders met the Goals Panel's performance standard in mathematics. The Goals Panel will report whether mathematics performance has improved over time when mathematics is assessed again in 2000.
 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



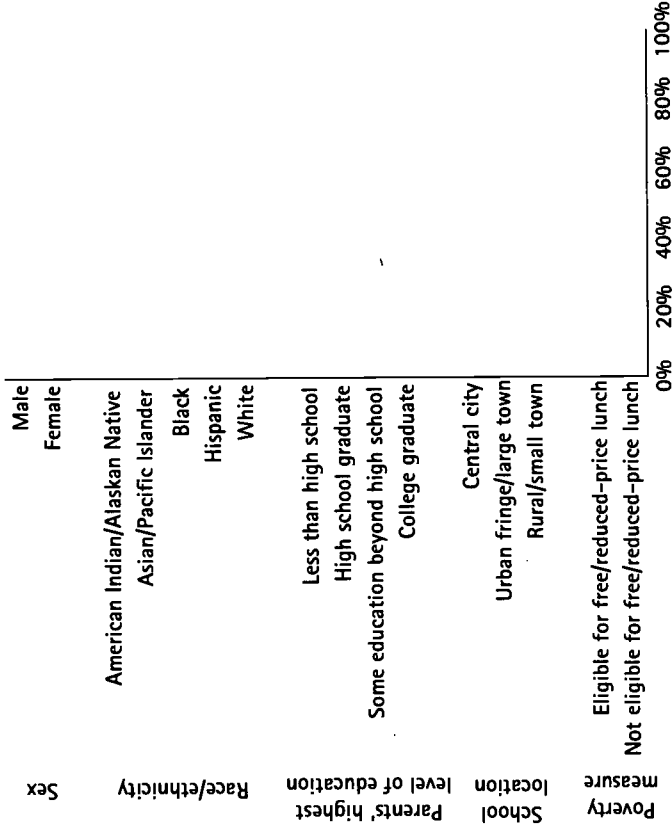
2. State Comparisons

How did Oklahoma compare with other states in 4th grade mathematics achievement in public schools in 1996?
 Oklahoma did not participate in NAEP mathematics in 1996.

3. Subgroup Performance

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

Oklahoma did not participate in NAEP mathematics in 1996.



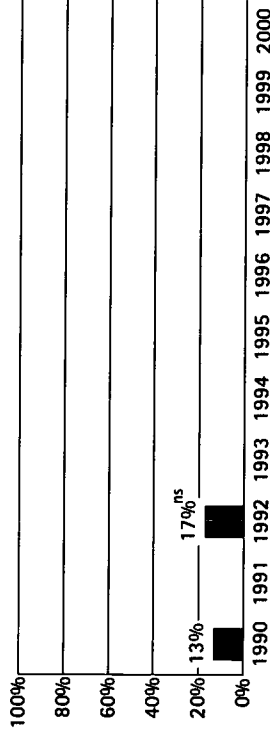
1. Improvement Over Time

Have Oklahoma'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

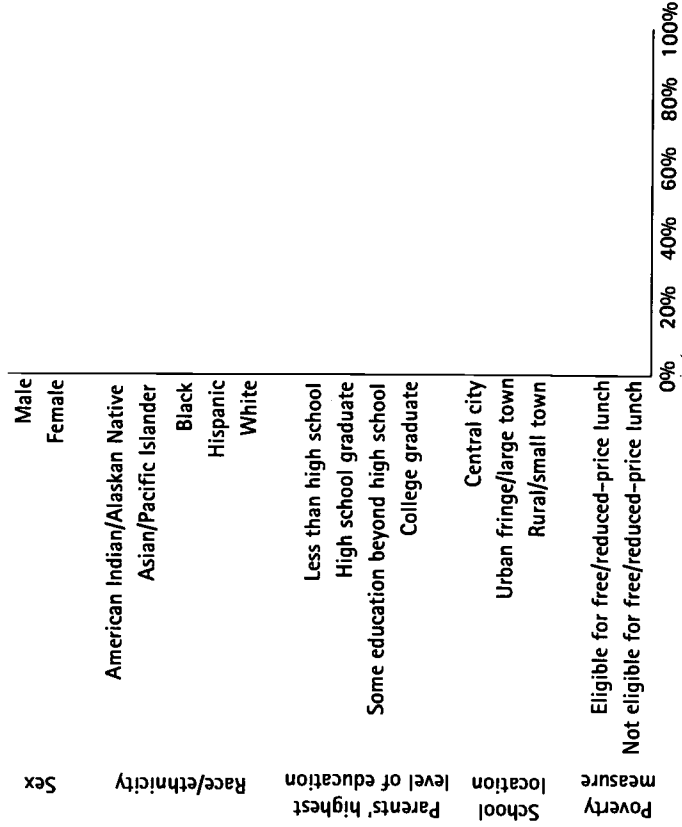
How did Oklahoma compare with other states in 8th grade mathematics achievement in public schools in 1996?

Oklahoma did not participate in NAEP mathematics in 1996.

3. Subgroup Performance

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

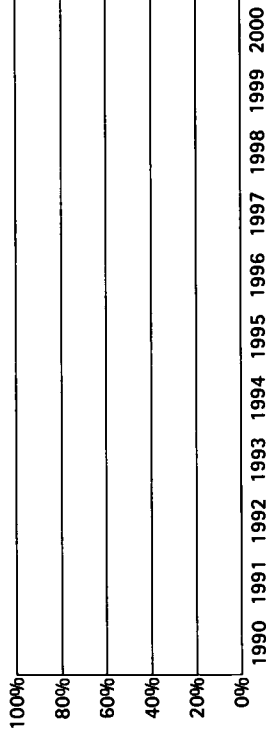
Oklahoma did not participate in NAEP mathematics in 1996.



1. Improvement Over Time

Have Oklahoma's 8th graders improved in science achievement?
Oklahoma 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.

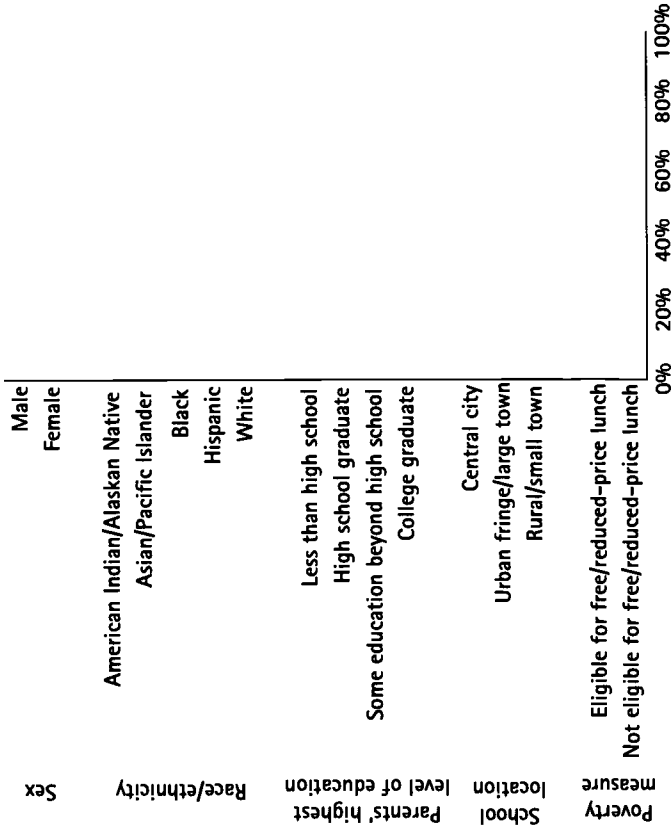
2. State Comparisons

How did Oklahoma compare with other states in 8th grade science achievement in public schools in 1996?
Oklahoma did not participate in NAEP science in 1996.

3. Subgroup Performance

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

Oklahoma did not participate in NAEP science in 1996.



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 Oklahoma 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 Oklahoma would have performed on TIMSS, because the estimate is based on scores from the 1996 NAEP mathematics assessment. Oklahoma 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 Oklahoma 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 Oklahoma would have performed on TIMSS, because the estimate is based on scores from the 1996 NAEP science assessment. Oklahoma did not participate in NAEP science in 1996.

[†] The term "nation" is used to refer to nations, states, or jurisdictions. Performance for nations is based on both public and nonpublic school data. Nations not meeting international guidelines are shown in parentheses.

⁺ The term "nation" is used to refer to nations, states, or jurisdictions. Performance for nations is based on both public and nonpublic school data. Nations not meeting international guidelines are shown in parentheses.

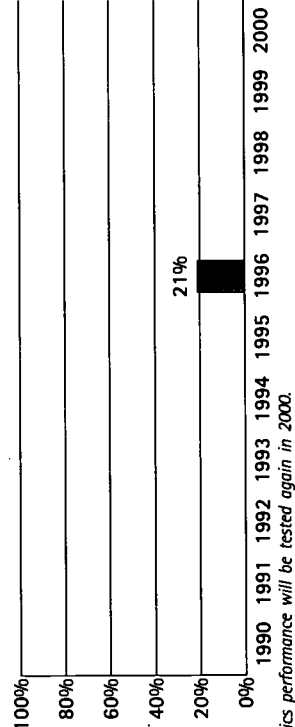
1. Improvement Over Time

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

In 1996, 21% of Oregon's public school 4th graders met the Goals Panel's performance standard in mathematics. The Goals Panel will report whether mathematics performance has improved over time when mathematics is assessed again in 2000.

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



Mathematics performance will be tested again in 2000.

2. State Comparisons[†]

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

4 states had significantly higher¹ percentages of students who were at or above Proficient on NAEP:

Connecticut	31%	Maine, Wisconsin	27%
Minnesota	29%		

23 states had similar¹ percentages of students who were at or above Proficient on NAEP:

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

17 states had significantly lower¹ percentages of students who were at or above Proficient on NAEP:

Rhode Island [†]	17%	South Carolina	12%
Delaware, Hawaii, Kentucky	16%	Alabama, California	11%
Arizona, Florida	15%	Louisiana, Mississippi	8%
Nevada	14%	District of Columbia	5%
Arkansas, Georgia, New Mexico	13%	Guam	3%

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

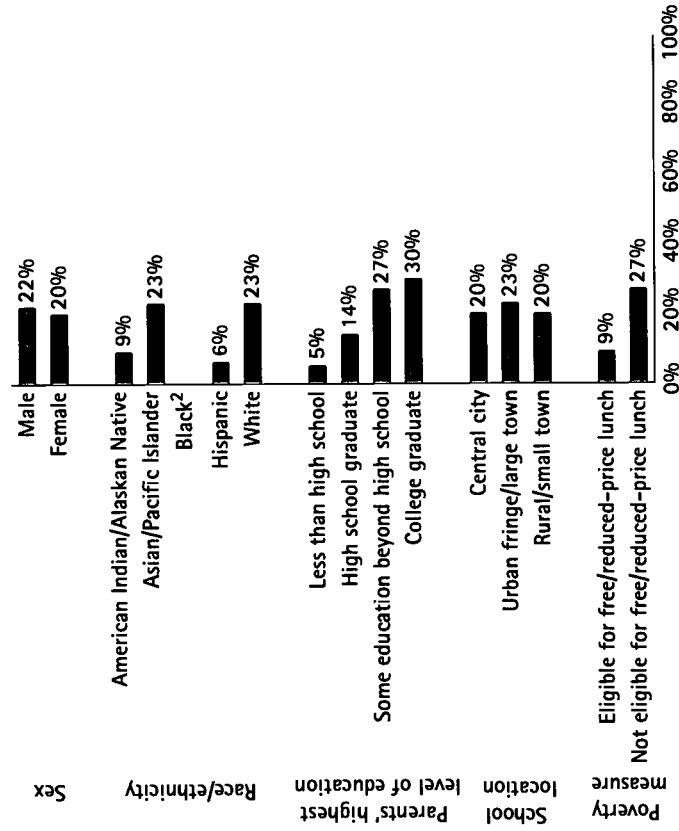
¹ See explanation on pp. 3-4.

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

* 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 subgroups¹ in Oregon 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.

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



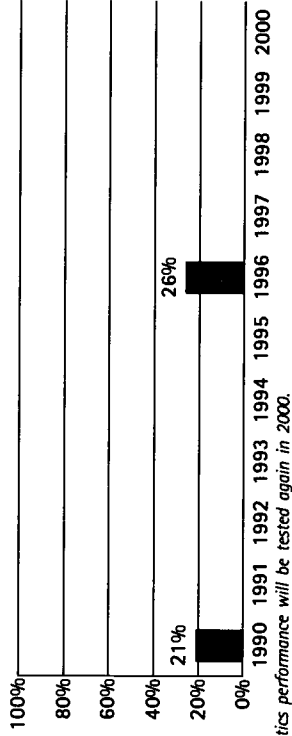
1. Improvement Over Time

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

Yes. *The percentage of Oregon's public school 8th graders who met the Goals Panel's performance standard in mathematics increased from 21% in 1990, to 26% in 1996.*

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



2. State Comparisons[†]

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

2 states had significantly higher¹ percentages of students who were at or above Proficient on NAEP:

Minnesota	34%	North Dakota	33%
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18 states had similar¹ percentages of students who were at or above Proficient on NAEP:

Montana, Wisconsin	32%	Oregon , Washington	26%
Connecticut, Iowa, Maine, Nebraska	31%	Colorado	25%
Alaska	30%	U.S. , [*] Indiana, Maryland, Utah	24%
Massachusetts, Michigan	28%	Missouri, New York, Wyoming	22%
Vermont	27%		

21 states had significantly lower¹ percentages of students who were at or above Proficient on NAEP:

Texas, Virginia	21%	New Mexico, South Carolina,	14%
North Carolina, Rhode Island	20%	West Virginia	13%
Delaware	19%	Arkansas	12%
Arizona	18%	Alabama	7%
California, Florida	17%	Louisiana, Mississippi	6%
Georgia, Hawaii, Kentucky	16%	Guam	5%
Tennessee	15%	District of Columbia	

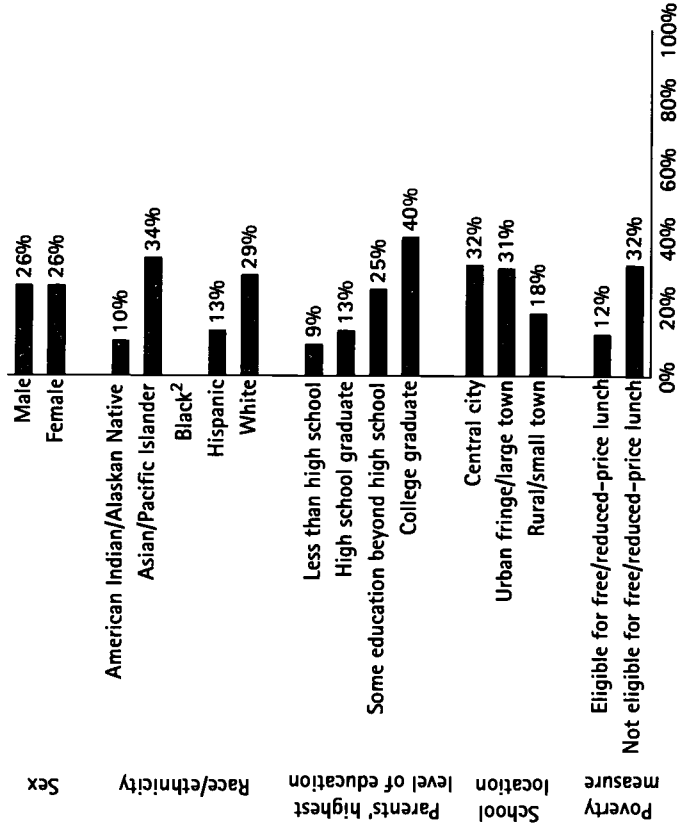
[†] The term "state" is used to refer to the 50 states, the District of Columbia, and the territories.

¹ See explanation on pp. 3-4.

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

3. Subgroup Performance

What percentages of public school 8th graders in different subgroups¹ in Oregon 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.

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

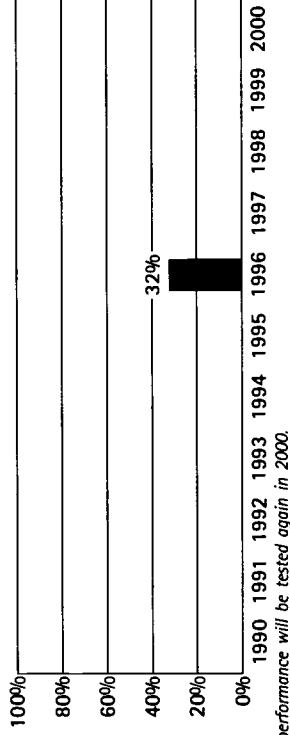
1. Improvement Over Time

Have Oregon's 8th graders improved in science achievement?

In 1996, 32% of Oregon's public school 8th graders met the Goals Panel's performance standard in science. The Goals Panel will report whether science performance has improved over time when science is assessed again in 2000.

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 science assessment



2. State Comparisons[†]

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

3 states had significantly higher¹ percentages of students who were at or above Proficient on NAEP:

Maine, Montana, North Dakota 41%

17 states had similar¹ percentages of students who were at or above Proficient on NAEP:

Wisconsin 39% Alaska 31%
 Massachusetts, Minnesota 37% Indiana 30%
 Connecticut, Iowa 36% U.S.* 29%
 Nebraska 35% Missouri 28%
 Vermont, Wyoming 34% New York, Virginia, Washington 27%
Oregon, Colorado, Michigan, Utah 32%

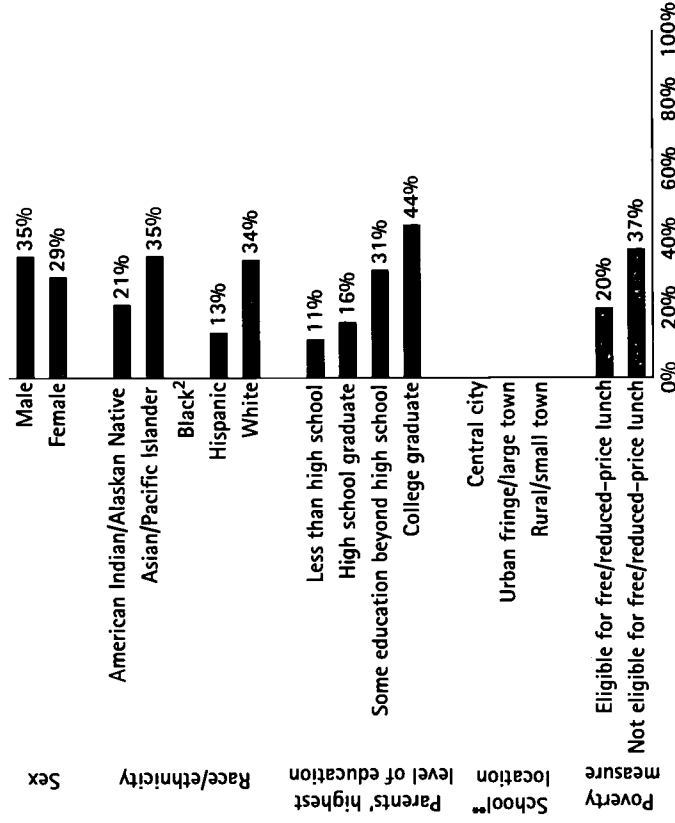
21 states had significantly lower¹ percentages of students who were at or above Proficient on NAEP:

Rhode Island 26% New Mexico 19%
 Maryland 25% Alabama 18%
 North Carolina 24% South Carolina 17%
 Arizona, Kentucky, Texas 23% Hawaii 15%
 Arkansas, Tennessee 22% Louisiana 13%
 Delaware, Florida, Georgia, 21% Mississippi 12%
 West Virginia 20% Guam 7%
 California 20% District of Columbia 5%

[†] The term "state" is used to refer to the 50 states, the District of Columbia, and the territories.
¹ See explanation on pp. 3-4.
 * Figure shown for the U.S. includes both public and nonpublic school data.

3. Subgroup Performance

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



¹ Interpret differences between subgroups with caution. See pp. 3-4 and Appendix D.
² Characteristics of the sample do not permit a reliable estimate.
 ** No school location data for science in 1996.

International Comparisons

Mathematics Grade 8

Forty-one nations¹ participated in the Third International Mathematics and Science Study (TIMSS) in 8th grade mathematics in 1995. If public school 8th graders in Oregon participated in the TIMSS mathematics assessment, how would their average performance compare to that of students who took TIMSS in these nations?

12 nations¹ would be expected to perform significantly higher:¹

(Austria)
Belgium – Flemish²
Czech Republic
France
Hong Kong
Hungary
Japan
Korea
Singapore
Slovak Republic
(Slovenia)
(Switzerland)

19 nations¹ would be expected to perform similarly:¹

(Australia)
(Belgium – French)²
(Bulgaria)
Canada
(Denmark)
(England)
(Germany)
Iceland
Ireland
(Israel)
(Latvia – LSS)³
(Netherlands)
New Zealand
Norway
Oregon
Russian Federation
(Scotland)
Sweden
(Thailand)
United States

10 nations¹ would be expected to perform significantly lower:¹

(Colombia)
Cyprus
(Greece)
Iran, Islamic Republic
(Kuwait)
(Lithuania)
Portugal
(Romania)
(South Africa)
Spain

+ The term "nation" is used to refer to nations, states, or jurisdictions. Performance for nations is based on public school data only. Nations not meeting international guidelines are shown in parentheses.

1 See explanation on pp. 3-4.

2 The Flemish and French educational systems in Belgium participated separately.

3 Latvia is designated LSS because only Latvian-speaking schools were tested, which represent less than 65% of the population.

Oregon

Science Grade 8

Forty-one nations¹ participated in the Third International Mathematics and Science Study (TIMSS) in 8th grade science in 1995. If public school 8th graders in Oregon participated in the TIMSS science assessment, how would their average performance compare to that of students who took TIMSS in these nations?

1 nation¹ would be expected to perform significantly higher:¹

Singapore

22 nations¹ would be expected to perform similarly:¹

(Australia)
(Austria)
Belgium – Flemish²
(Bulgaria)
Canada
Czech Republic
(England)
(Germany)
Hungary
Ireland
(Israel)
Japan
Korea
(Netherlands)
New Zealand
Norway
Oregon
Russian Federation
Slovak Republic
(Slovenia)
Sweden
(Thailand)
United States

18 nations¹ would be expected to perform significantly lower:¹

(Belgium – French)²
(Colombia)
Cyprus
(Denmark)
France
(Greece)
Hong Kong
Iceland
Iran, Islamic Republic
(Kuwait)
(Latvia – LSS)³
(Lithuania)
Portugal
(Romania)
(Scotland)
(South Africa)
Spain
(Switzerland)

+ The term "nation" is used to refer to nations, states, or jurisdictions. Performance for nations is based on public school data only. Nations not meeting international guidelines are shown in parentheses.

1 See explanation on pp. 3-4.

2 The Flemish and French educational systems in Belgium participated separately.

3 Latvia is designated LSS because only Latvian-speaking schools were tested, which represent less than 65% of the population.

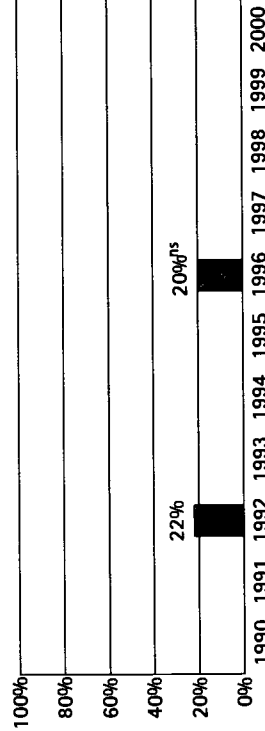
1. Improvement Over Time

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 Panels' 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 higher¹ percentages of students who were at or above Proficient on NAEP:

Connecticut	31%	Maine, Wisconsin	27%
Minnesota	29%		

25 states had similar¹ percentages of students who were at or above Proficient on NAEP:

New Jersey, Texas	25%	Pennsylvania , Missouri, New York	20%
Indiana, Massachusetts, Nebraska,	24%	Virginia, West Virginia, Wyoming	19%
North Dakota	17%	Rhode Island, Tennessee	17%
Michigan, Utah, Vermont	23%	Delaware ²	16%
Colorado, Iowa, Maryland, Montana	22%		
U.S. , ³ Alaska, North Carolina, Oregon,	21%		
Washington			

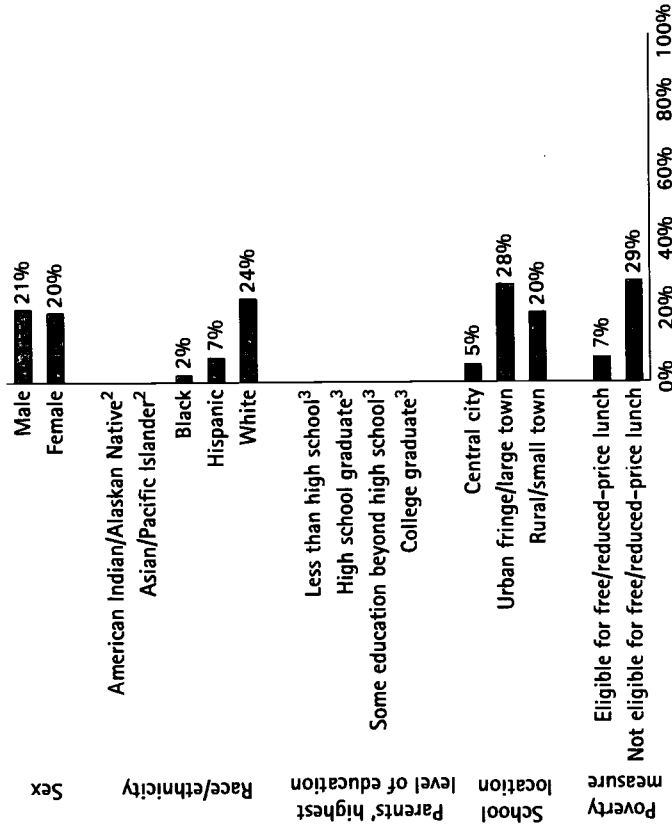
15 states had significantly lower¹ percentages of students who were at or above Proficient on NAEP:

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

[†] The term "state" is used to refer to the 50 states, the District of Columbia, and the territories.
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.
³ 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 subgroups¹ 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.

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.

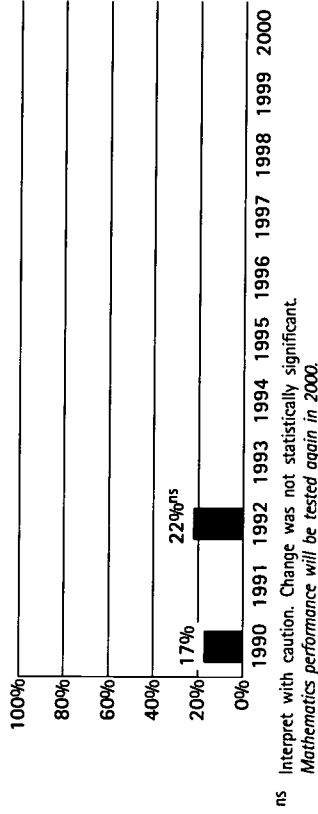
1. Improvement Over Time

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



2. State Comparisons

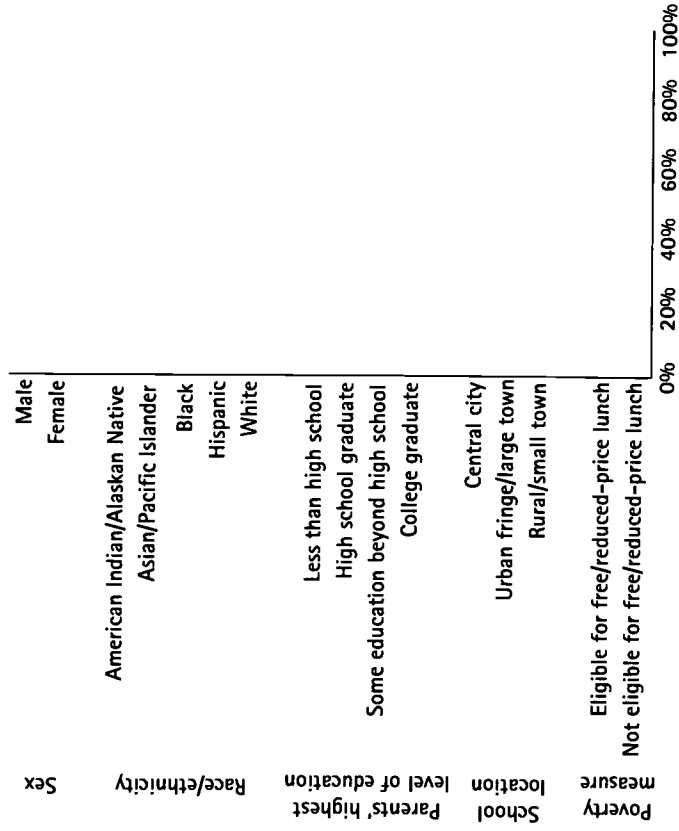
How did Pennsylvania compare with other states in 8th grade mathematics achievement in public schools in 1996?

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?

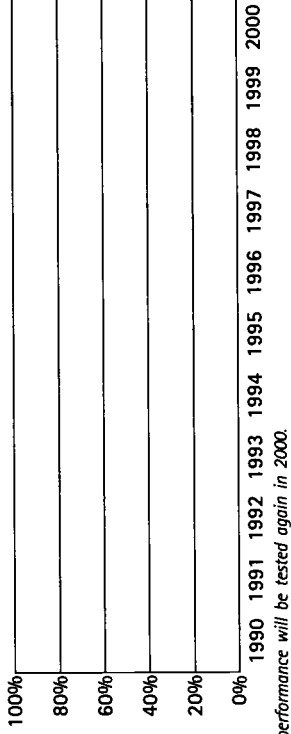
Pennsylvania did not participate in NAEP mathematics in 1996.



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.

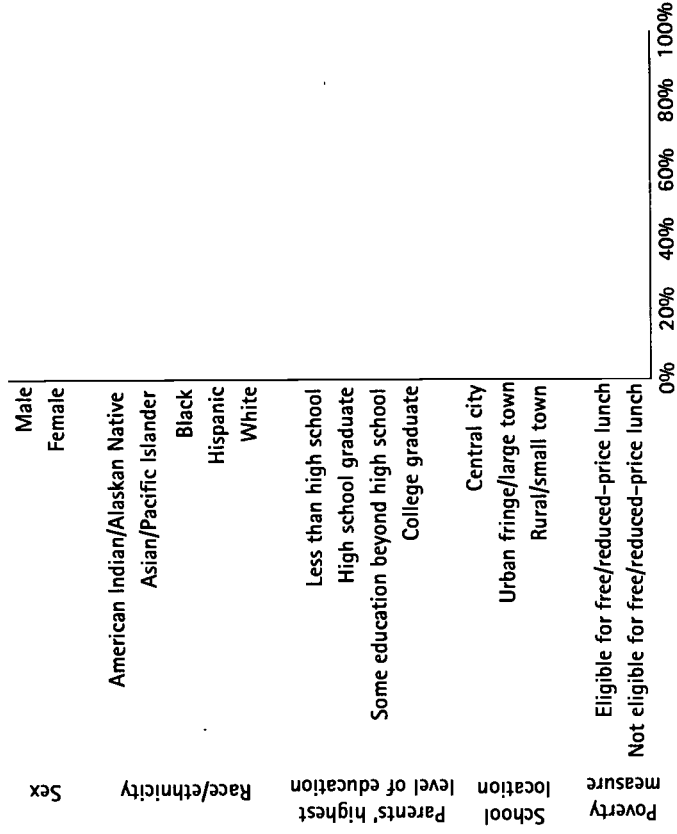
2. State Comparisons

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.



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.

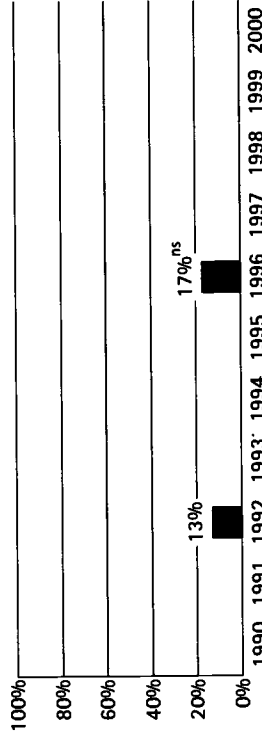
[†] The term "nation" is used to refer to nations, states, or jurisdictions.

1. Improvement Over Time

Have Rhode Island'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 Rhode Island compare with other states in 4th grade mathematics achievement in public schools in 1996?

17 states had significantly higher¹ percentages of students who were at or above Proficient on NAEP:

Connecticut	31%	Michigan, Utah, Vermont	23%
Minnesota	29%	Colorado, ² Iowa, ² Montana ²	22%
Maine, Wisconsin	27%	U.S., ² Washington ²	21%
New Jersey, Texas	25%		
Indiana, Massachusetts, Nebraska, North Dakota	24%		

17 states had similar¹ percentages of students who were at or above Proficient on NAEP:

Maryland [†]	22%	Rhode Island, Tennessee	17%
Alaska, ² North Carolina, ² Oregon ²	21%	Delaware, Hawaii, Kentucky	16%
Missouri, New York, Pennsylvania	20%	Arizona, Florida	15%
Virginia, West Virginia, Wyoming	19%	Nevada	14%

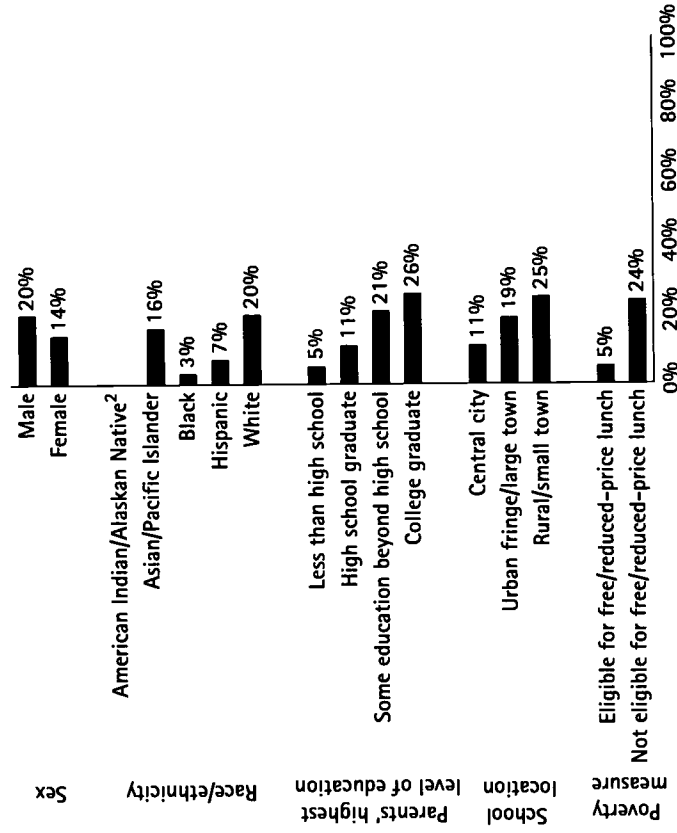
10 states had significantly lower¹ percentages of students who were at or above Proficient on NAEP:

Arkansas, Georgia, New Mexico	13%	Louisiana, Mississippi	8%
South Carolina	12%	District of Columbia	5%
Alabama, California	11%	Guam	3%

[†] The term "state" is used to refer to the 50 states, the District of Columbia, and the territories.
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.
 * 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 subgroups¹ in Rhode Island 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.
² Characteristics of the sample do not permit a reliable estimate.

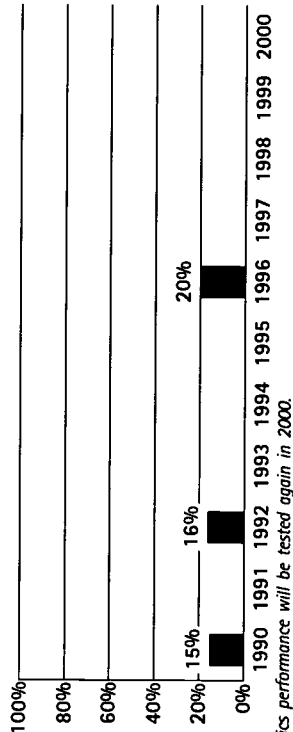
1. Improvement Over Time

Have Rhode Island's 8th graders improved in mathematics achievement?

Yes. The percentage of Rhode Island's public school 8th graders who met the Goals Panel's performance standard in mathematics increased from 15% in 1990, to 20% in 1996.

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



2. State Comparisons[†]

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

15 states had significantly higher¹ percentages of students who were at or above Proficient on NAEP:

Minnesota	34%	Massachusetts, Michigan	28%
North Dakota	33%	Vermont	27%
Montana, Wisconsin	32%	Oregon, Washington	26%
Connecticut, Iowa, Maine, Nebraska	31%	Colorado	25%
Alaska	30%		

14 states had similar¹ percentages of students who were at or above Proficient on NAEP:

U.S. [*]	24%	Delaware	19%
Indiana, Maryland, Utah	22%	Arizona	18%
Missouri, New York, Wyoming	21%	California, Florida	17%
Texas, Virginia	20%	Georgia ²	16%
Rhode Island, North Carolina			

12 states had significantly lower¹ percentages of students who were at or above Proficient on NAEP:

Hawaii [†] , Kentucky ²	16%	Alabama	12%
Tennessee	15%	Louisiana, Mississippi	7%
New Mexico, South Carolina, West Virginia	14%	Guam	6%
Arkansas	13%	District of Columbia	5%

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

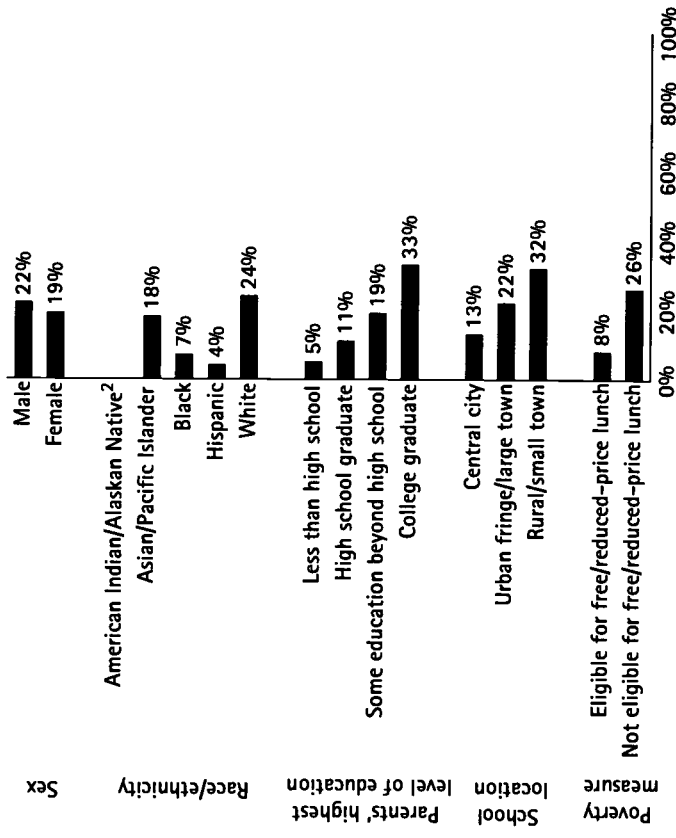
¹ See explanation on pp. 3-4.

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

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

3. Subgroup Performance

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



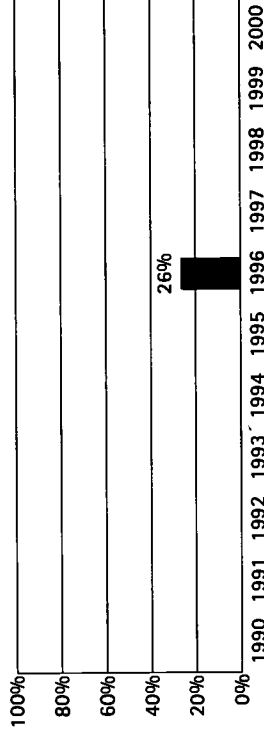
¹ Interpret differences between subgroups with caution. See pp. 3-4 and Appendix D.

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

1. Improvement Over Time

Have Rhode Island's 8th graders improved in science achievement?
 In 1996, 26% of Rhode Island's public school 8th graders met the Goals Panel's performance standard in science. The Goals Panel will report whether science performance has improved over time when science is assessed again in 2000.
 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 science assessment



Science performance will be tested again in 2000.

2. State Comparisons[†]

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

14 states had significantly higher¹ percentages of students who were at or above Proficient on NAEP:

Maine, Montana, North Dakota	41%	Nebraska	35%
Wisconsin	39%	Vermont, Wyoming	34%
Massachusetts, Minnesota	37%	Colorado, ² Oregon, ² Utah ²	32%
Connecticut, Iowa	36%		

14 states had similar¹ percentages of students who were at or above Proficient on NAEP:

Michigan ²	32%	Rhode Island	26%
Alaska	31%	Maryland	25%
Indiana	30%	North Carolina	24%
U.S.*	29%	Arizona, Kentucky, Texas	23%
Missouri	28%	Arkansas, Tennessee	22%
New York, Virginia, Washington	27%		

13 states had significantly lower¹ percentages of students who were at or above Proficient on NAEP:

Delaware, Florida, Georgia, West Virginia	21%	Hawaii	15%
California	20%	Louisiana	13%
New Mexico	19%	Mississippi	12%
Alabama	18%	Guam	7%
South Carolina	17%	District of Columbia	5%

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

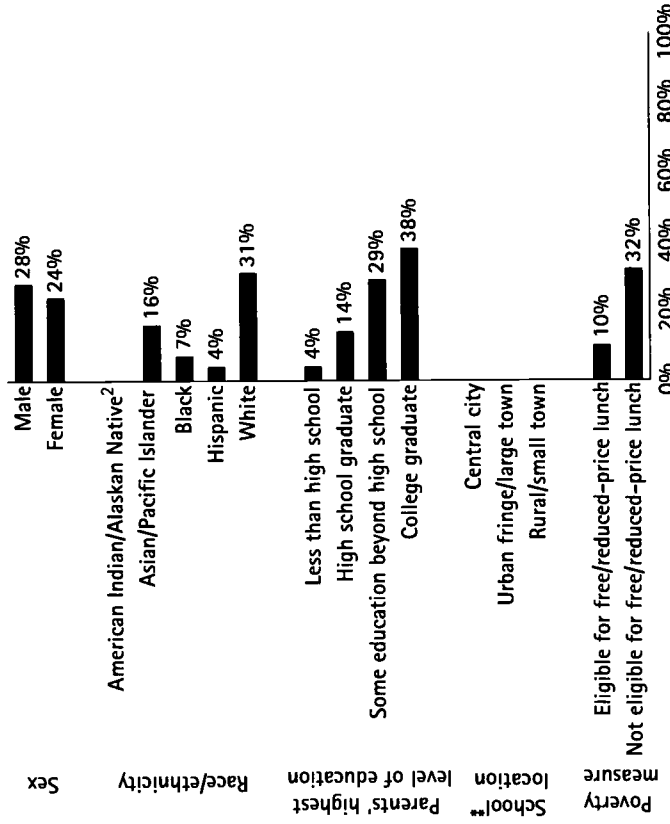
¹ See explanation on pp. 3-4.

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

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

3. Subgroup Performance

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



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

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

** No school location data for science in 1996.

International Comparisons

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 Rhode Island participated in the TIMSS mathematics assessment, how would their average performance compare to that of students who took TIMSS in these nations?

21 nations[†] would be expected to perform significantly higher:¹

(Australia)
(Austria)
Belgium – Flemish²
(Belgium – French)³
(Bulgaria)
Canada
Czech Republic
France
Hong Kong
Hungary
Ireland
Japan
Korea
(Netherlands)
Russian Federation
Singapore
Slovak Republic
(Slovenia)
Sweden
(Switzerland)
(Thailand)

15 nations[†] would be expected to perform similarly:¹

Cyprus
(Denmark)
(England)
(Germany)
(Greece)
Iceland
(Israel)
(Latvia – LSS)³
(Lithuania)
New Zealand
Norway
Rhode Island
(Romania)
(Scotland)
Spain
United States

5 nations[†] would be expected to perform significantly lower:¹

(Colombia)
Iran, Islamic Republic
(Kuwait)
Portugal
(South Africa)

† The term "nation" is used to refer to nations, states, or jurisdictions. Performance for nations is based on public school data only. Nations not meeting international guidelines are shown in parentheses.

1 See explanation on pp. 3-4.

2 The Flemish and French educational systems in Belgium participated separately.

3 Latvia is designated LSS because only Latvian-speaking schools were tested, which represent less than 65% of the population.

Rhode Island

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 Rhode Island participated in the TIMSS science assessment, how would their average performance compare to that of students who took TIMSS in these nations?

8 nations[†] would be expected to perform significantly higher:¹

(Austria)
(Bulgaria)
Czech Republic
Japan
Korea
(Netherlands)
Singapore
(Slovenia)

19 nations[†] would be expected to perform similarly:¹

(Australia)
Belgium – Flemish²
Canada
(England)
(Germany)
Hong Kong
Hungary
Ireland
(Israel)
New Zealand
Norway
Rhode Island
Russian Federation
(Scotland)
Slovak Republic
Spain
Sweden
(Switzerland)
(Thailand)
United States

14 nations[†] would be expected to perform significantly lower:¹

(Belgium – French)²
(Colombia)
Cyprus
(Denmark)
France
(Greece)
Iceland
Iran, Islamic Republic
(Kuwait)
(Latvia – LSS)³
(Lithuania)
Portugal
(Romania)
(South Africa)

† The term "nation" is used to refer to nations, states, or jurisdictions. Performance for nations is based on public school data only. Nations not meeting international guidelines are shown in parentheses.

1 See explanation on pp. 3-4.

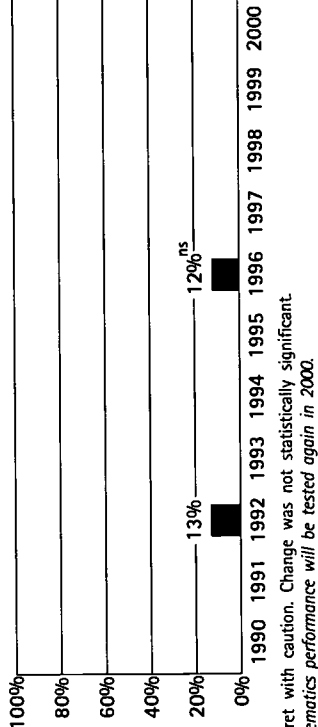
2 The Flemish and French educational systems in Belgium participated separately.

3 Latvia is designated LSS because only Latvian-speaking schools were tested, which represent less than 65% of the population.

1. Improvement Over Time

Have South Carolina'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 South Carolina compare with other states in 4th grade mathematics achievement in public schools in 1996?

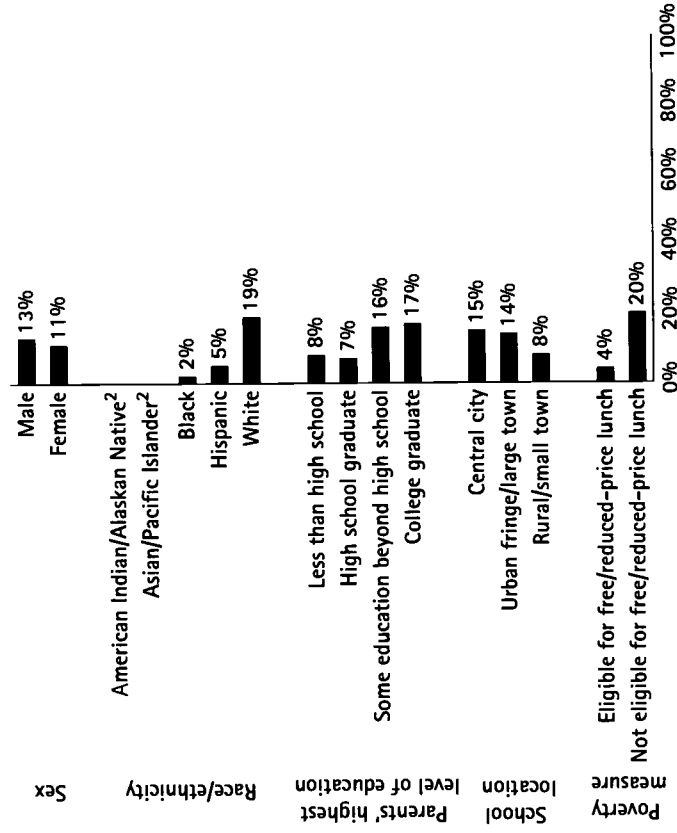
32 states had significantly higher ¹ percentages of students who were at or above Proficient on NAEP:	
Connecticut	31%
Minnesota	29%
Maine, Wisconsin	27%
New Jersey, Texas	25%
Indiana, Massachusetts, Nebraska, North Dakota	24%
Michigan, Utah, Vermont	23%
Colorado, Iowa, Maryland, Montana	22%
U.S., ² Alaska, North Carolina, Oregon, Washington	21%
Missouri, New York, Pennsylvania	20%
Virginia, West Virginia, Wyoming	19%
Rhode Island, Tennessee	17%
Delaware, Hawaii, Kentucky	16%

8 states had similar ¹ percentages of students who were at or above Proficient on NAEP:	
Arizona, Florida	15%
Nevada	14%
Arkansas, Georgia, New Mexico	13%
South Carolina	12%
Alabama, California	11%

4 states had significantly lower ¹ percentages of students who were at or above Proficient on NAEP:	
Louisiana, Mississippi	8%
District of Columbia	5%
Guam	3%

3. Subgroup Performance

What percentages of public school 4th graders in different subgroups¹ in South Carolina were at or above Proficient on the 1996 NAEP mathematics assessment?



[†] The term "state" is used to refer to the 50 states, the District of Columbia, and the territories.
¹ See explanation on pp. 3-4.
² Figure shown for the U.S. includes both public and nonpublic school data.

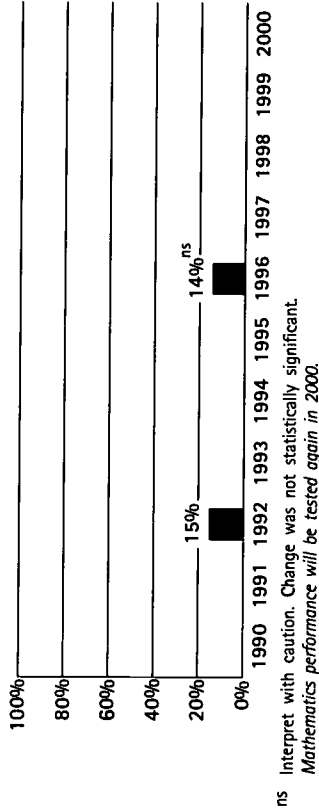
1. Improvement Over Time

Have South Carolina's 8th graders improved in mathematics achievement?

Not yet. Between 1992 and 1996, 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



2. State Comparisons[†]

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

27 states had significantly higher¹ percentages of students who were at or above Proficient on NAEP:

Minnesota	34%	Colorado	25%
North Dakota	33%	U.S.²	24%
Montana, Wisconsin	32%	Indiana, Maryland, Utah	22%
Connecticut, Iowa, Maine, Nebraska	31%	Missouri, New York, Wyoming	22%
Alaska	30%	Texas, Virginia	21%
Massachusetts, Michigan	28%	North Carolina, Rhode Island	20%
Vermont	27%	Delaware	19%
Oregon, Washington	26%	Arizona	18%

10 states had similar¹ percentages of students who were at or above Proficient on NAEP:

California, Florida	17%	Arkansas	13%
Georgia, Hawaii, Kentucky	16%	Alabama	12%
Tennessee	15%		
South Carolina , New Mexico,	14%		
West Virginia			

4 states had significantly lower¹ percentages of students who were at or above Proficient on NAEP:

Louisiana, Mississippi	7%	District of Columbia	5%
Guam	6%		

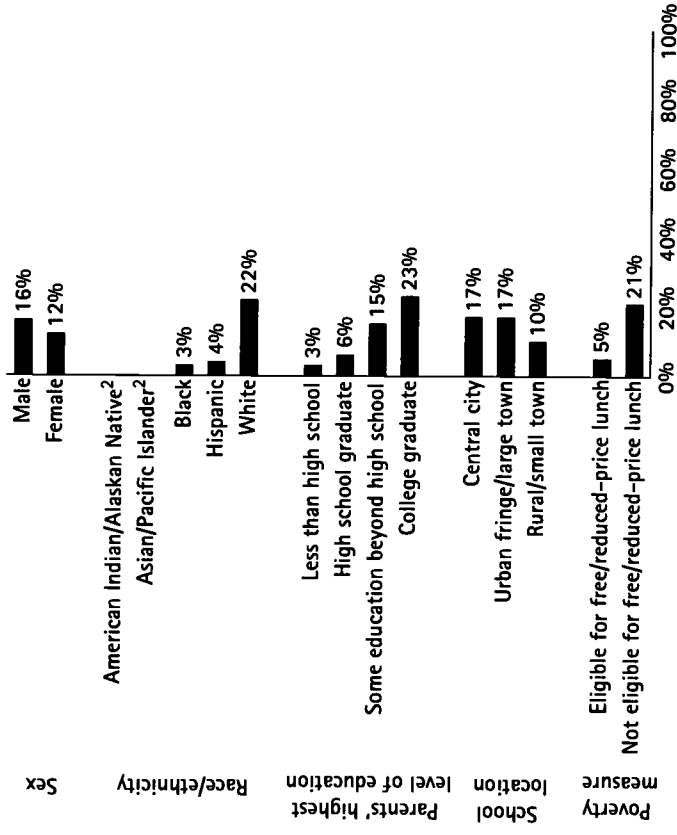
[†] The term "state" is used to refer to the 50 states, the District of Columbia, and the territories.

¹ See explanation on pp. 3-4.

² Figure shown for the U.S. includes both public and non-public school data.

3. Subgroup Performance

What percentages of public school 8th graders in different subgroups¹ in South Carolina 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.

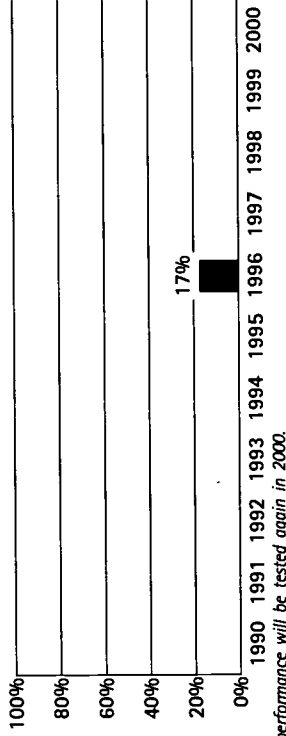
² Characteristics of the sample do not permit a reliable estimate.

1. Improvement Over Time

Have South Carolina's 8th graders improved in science achievement?
 In 1996, 17% of South Carolina's public school 8th graders met the Goals Panel's performance standard in science. The Goals Panel will report whether science performance has improved over time when science is assessed again in 2000.

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 science assessment



Science performance will be tested again in 2000.

2. State Comparisons[†]

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

31 states had significantly higher ¹ percentages of students who were at or above Proficient on NAEP:	
Maine, Montana, North Dakota	41%
Wisconsin	39%
Massachusetts, Minnesota	37%
Connecticut, Iowa	36%
Nebraska	35%
Vermont, Wyoming	34%
Colorado, Michigan, Oregon, Utah	32%
Alaska	31%
Indiana	30%
U.S.*	29%
Missouri	28%
New York, Virginia, Washington	27%
Rhode Island	26%
Maryland	25%
North Carolina	24%
Arizona, Kentucky, Texas	23%
Arkansas, Tennessee	22%
Delaware, ² West Virginia ²	21%

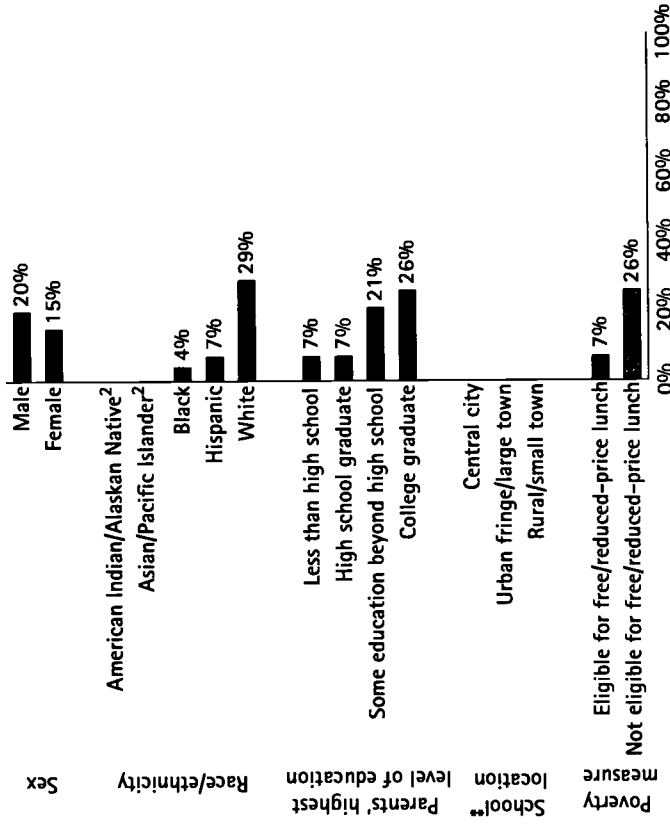
6 states had similar ¹ percentages of students who were at or above Proficient on NAEP:	
Florida, ² Georgia ²	21%
California	20%
New Mexico	19%
Alabama	18%
South Carolina	17%
Hawaii	15%

4 states had significantly lower ¹ percentages of students who were at or above Proficient on NAEP:	
Louisiana	13%
Mississippi	12%
Guam	7%
District of Columbia	5%

[†] The term "state" is used to refer to the 50 states, the District of Columbia, and the territories.
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.
 * Figure shown for the U.S. includes both public and nonpublic school data.

3. Subgroup Performance

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



¹ Interpret differences between subgroups with caution. See pp. 3-4 and Appendix D.
² Characteristics of the sample do not permit a reliable estimate.
 ** No school location data for science in 1996.

International Comparisons

South Carolina

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 South Carolina participated in the TIMSS mathematics assessment, how would their average performance compare to that of students who took TIMSS in these nations?

27 nations[†] would be expected to perform significantly higher:¹

(Australia)
(Austria)
Belgium – Flemish²
(Belgium – French)²
(Bulgaria)
Canada
Czech Republic
(Denmark)
(England)
France
(Germany)
Hong Kong
Hungary
Ireland
(Israel)
Japan
Korea
(Netherlands)
New Zealand
Norway
Russian Federation
Singapore
Slovak Republic
(Slovenia)
Sweden
(Switzerland)
(Thailand)

10 nations[†] would be expected to perform similarly:¹

Cyprus
(Greece)
Iceland
(Latvia – LSS)³
(Lithuania)
Portugal
(Romania)
(Scotland)
South Carolina
Spain
United States

4 nations[†] would be expected to perform significantly lower:¹

(Colombia)
Iran, Islamic Republic
(Kuwait)
(South Africa)

† The term "nation" is used to refer to nations, states, or jurisdictions. Performance for nations is based on public school data only. Nations not meeting international guidelines are shown in parentheses.

1 See explanation on pp. 3-4.

2 The Flemish and French educational systems in Belgium participated separately.

3 Latvia is designated LSS because only Latvian-speaking schools were tested, which represent less than 65% of the population.

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 South Carolina participated in the TIMSS science assessment, how would their average performance compare to that of students who took TIMSS in these nations?

20 nations[†] would be expected to perform significantly higher:¹

(Australia)
(Austria)
Belgium – Flemish²
(Bulgaria)
Canada
Czech Republic
(England)
(Germany)
Hungary
Ireland
Japan
Korea
(Netherlands)
Norway
Russian Federation
Singapore
Slovak Republic
(Slovenia)
Sweden
United States

15 nations[†] would be expected to perform similarly:¹

(Denmark)
France
(Greece)
Hong Kong
Iceland
(Israel)
(Latvia – LSS)³
(Lithuania)
New Zealand
Portugal
(Romania)
(Scotland)
South Carolina
Spain
(Switzerland)
(Thailand)

6 nations[†] would be expected to perform significantly lower:¹

(Belgium – French)²
(Colombia)
Cyprus
Iran, Islamic Republic
(Kuwait)
(South Africa)

† The term "nation" is used to refer to nations, states, or jurisdictions. Performance for nations is based on public school data only. Nations not meeting international guidelines are shown in parentheses.

1 See explanation on pp. 3-4.

2 The Flemish and French educational systems in Belgium participated separately.

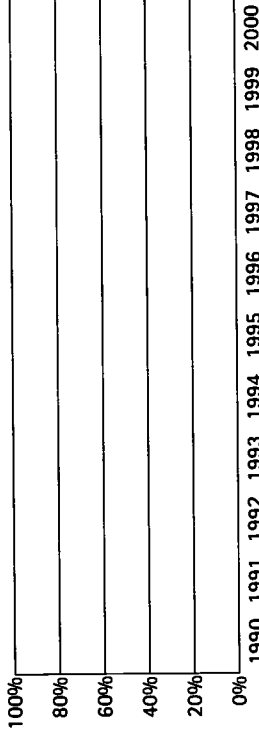
3 Latvia is designated LSS because only Latvian-speaking schools were tested, which represent less than 65% of the population.

1. Improvement Over Time

Have South Dakota's 4th graders improved in mathematics achievement?

South Dakota did not participate in NAEP mathematics in 1992 or 1996.

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



Mathematics performance will be tested again in 2000.

2. State Comparisons

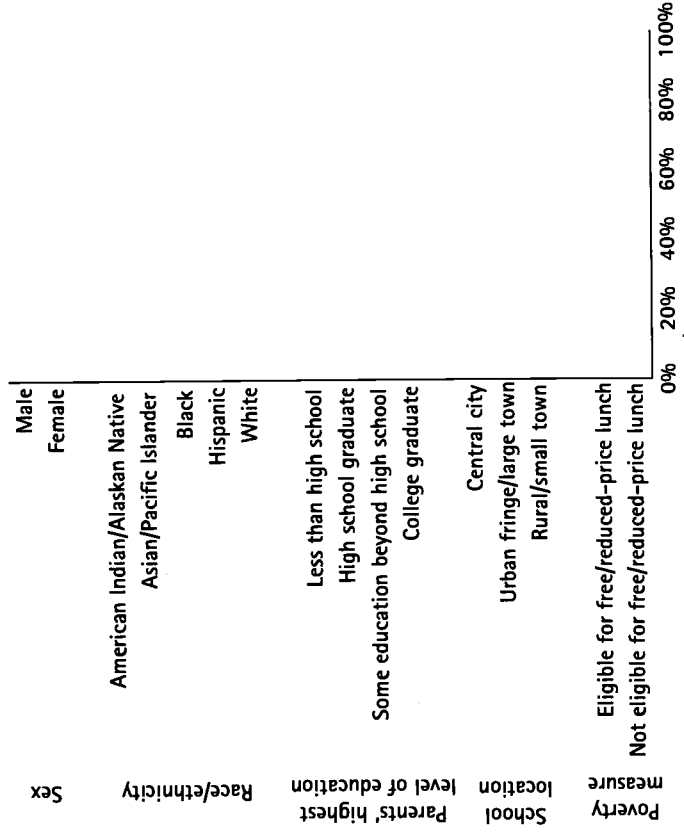
How did South Dakota compare with other states in 4th grade mathematics achievement in public schools in 1996?

South Dakota did not participate in NAEP mathematics in 1996.

3. Subgroup Performance

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

South Dakota did not participate in NAEP mathematics in 1996.

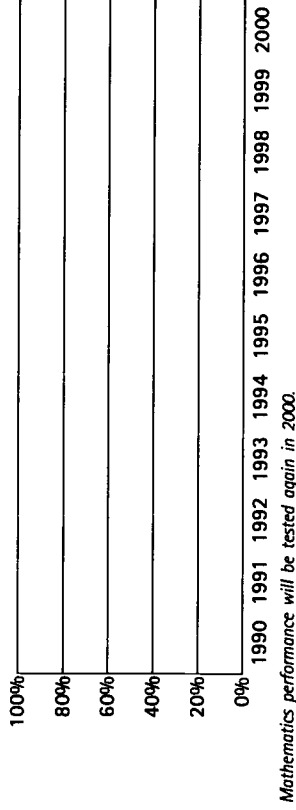


1. Improvement Over Time

Have South Dakota's 8th graders improved in mathematics achievement?

South Dakota did not participate in NAEP mathematics in 1990, 1992, or 1996.

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



Mathematics performance will be tested again in 2000.

2. State Comparisons

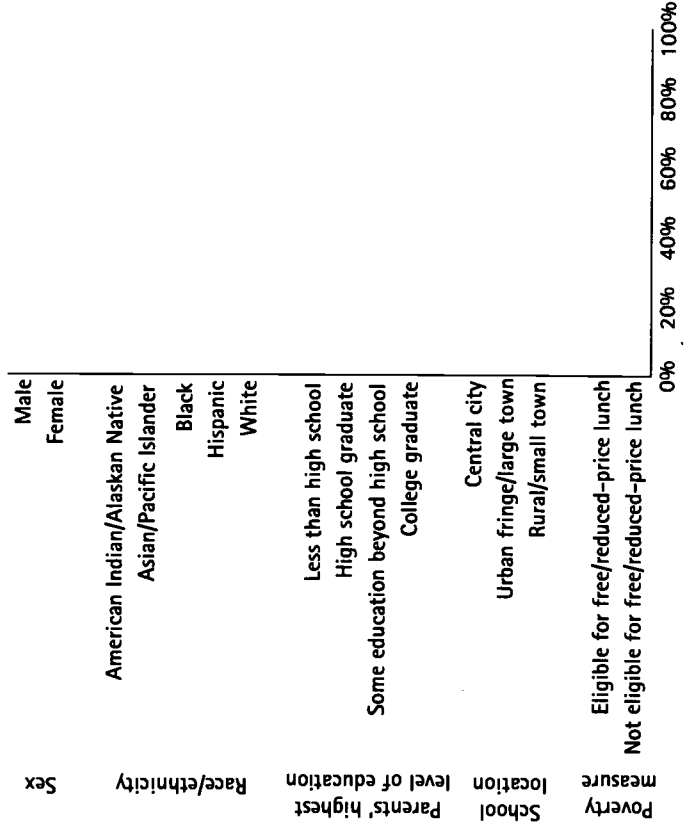
How did South Dakota compare with other states in 8th grade mathematics achievement in public schools in 1996?

South Dakota did not participate in NAEP mathematics in 1996.

3. Subgroup Performance

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

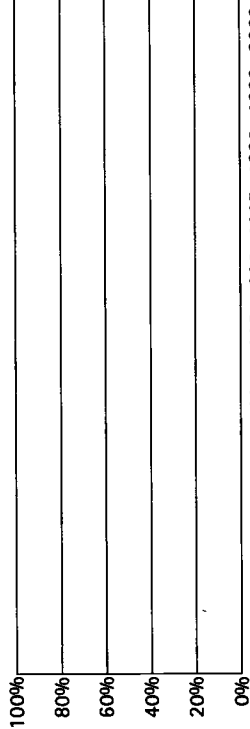
South Dakota did not participate in NAEP mathematics in 1996.



1. Improvement Over Time

Have South Dakota's 8th graders improved in science achievement?
South Dakota 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.

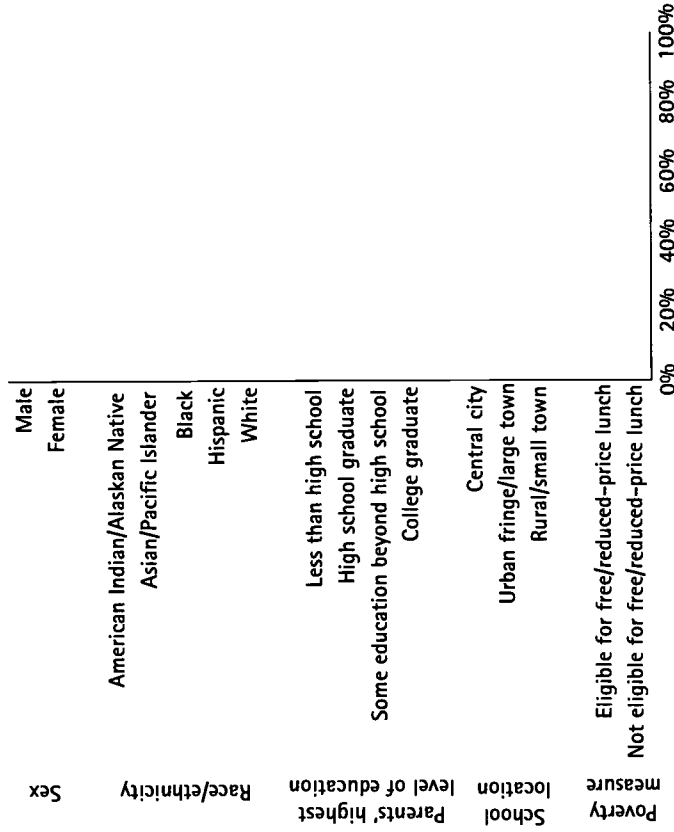
2. State Comparisons

How did South Dakota compare with other states in 8th grade science achievement in public schools in 1996?
South Dakota did not participate in NAEP science in 1996.

3. Subgroup Performance

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

South Dakota did not participate in NAEP science in 1996.



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 South Dakota 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 South Dakota would have performed on TIMSS, because the estimate is based on scores from the 1996 NAEP mathematics assessment. South Dakota did not participate in NAEP mathematics in Grade 8 in 1996.

[†] The term "nation" is used to refer to nations, states, or jurisdictions. Performance for nations is based on both public and nonpublic school data. Nations not meeting international guidelines are shown in parentheses.

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 South Dakota 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 South Dakota would have performed on TIMSS, because the estimate is based on scores from the 1996 NAEP science assessment. South Dakota did not participate in NAEP science in 1996.

[†] The term "nation" is used to refer to nations, states, or jurisdictions. Performance for nations is based on both public and nonpublic school data. Nations not meeting international guidelines are shown in parentheses.



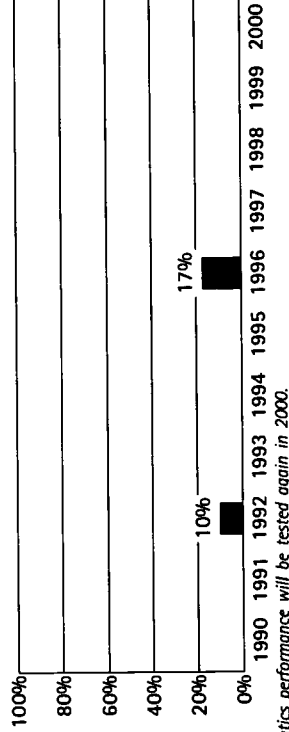
1. Improvement Over Time

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

Yes. The percentage of Tennessee's public school 4th graders who met the Goals Panel's performance standard in mathematics increased from 10% in 1992, to 17% in 1996.

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



2. State Comparisons[†]

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

15 states had significantly higher¹ percentages of students who were at or above Proficient on NAEP:

Connecticut	31%	Indiana, Massachusetts, Nebraska,	24%
Minnesota	29%	North Dakota	23%
Maine, Wisconsin	27%	Michigan, Utah, Vermont	22%
New Jersey, Texas	25%	Colorado, ² Iowa ³	

21 states had similar¹ percentages of students who were at or above Proficient on NAEP:

Maryland, ² Montana ²	22%	Tennessee, Rhode Island	17%
U.S., ² Alaska, North Carolina, Oregon,	21%	Delaware, Hawaii, Kentucky	16%
Washington	15%	Arizona, Florida	15%
Missouri, New York, Pennsylvania	20%	Nevada	14%
Virginia, West Virginia, Wyoming	19%	Arkansas, ² Georgia ²	13%

8 states had significantly lower¹ percentages of students who were at or above Proficient on NAEP:

New Mexico ²	13%	Louisiana, Mississippi	8%
South Carolina	12%	District of Columbia	5%
Alabama, California	11%	Guam	3%

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

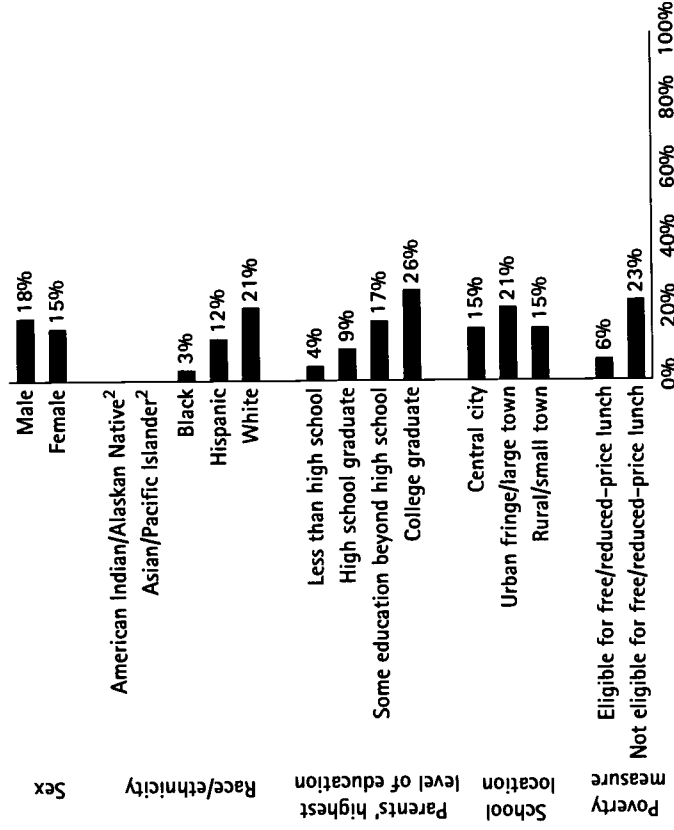
¹ See explanation on pp. 3-4.

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

³ 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 subgroups¹ in Tennessee 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.

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

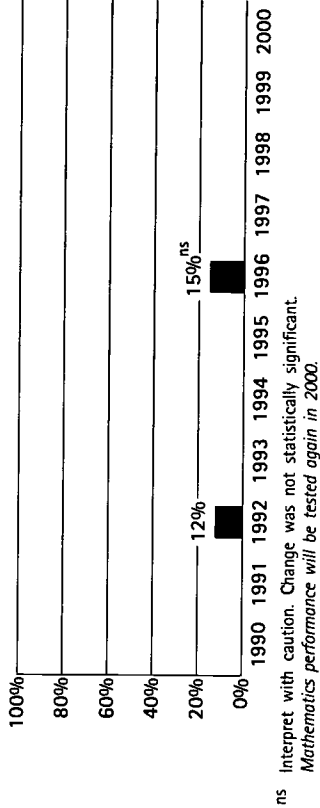
1. Improvement Over Time

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

Not yet. Between 1992 and 1996, 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



2. State Comparisons[†]

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

26 states had significantly higher¹ percentages of students who were at or above Proficient on NAEP:

Minnesota	34%	Oregon, Washington	26%
North Dakota	33%	Colorado	25%
Montana, Wisconsin	32%	U.S.,* Indiana, Maryland, Utah	24%
Connecticut, Iowa, Maine, Nebraska	31%	Missouri, New York, Wyoming	22%
Alaska	30%	Texas, Virginia	21%
Massachusetts, Michigan	28%	North Carolina, Rhode Island	20%
Vermont	27%	Delaware	19%

11 states had similar¹ percentages of students who were at or above Proficient on NAEP:

Arizona	18%	New Mexico, South Carolina,	14%
California, Florida	17%	West Virginia	13%
Georgia, Hawaii, Kentucky	16%	Arkansas	12%
Tennessee	15%	Alabama	

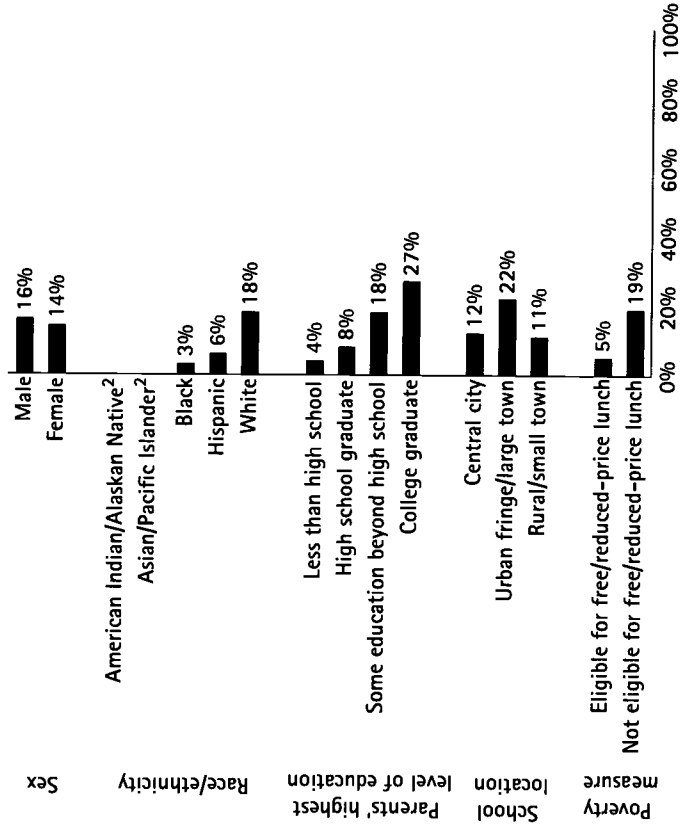
4 states had significantly lower¹ percentages of students who were at or above Proficient on NAEP:

Louisiana, Mississippi	7%	District of Columbia	5%
Guam	6%		

[†] The term "state" is used to refer to the 50 states, the District of Columbia, and the territories.
¹ See explanation on pp. 3-4.
 * Figure shown for the U.S. includes both public and nonpublic school data.

3. Subgroup Performance

What percentages of public school 8th graders in different subgroups¹ in Tennessee 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.
² Characteristics of the sample do not permit a reliable estimate.

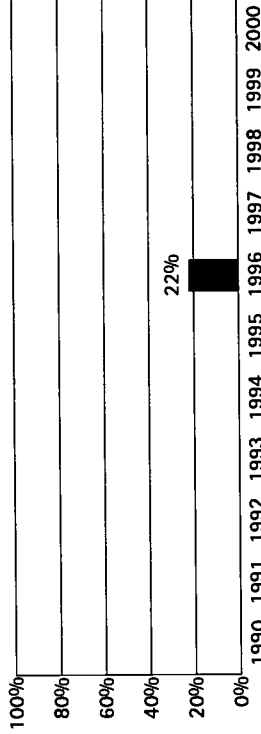
1. Improvement Over Time

Have Tennessee's 8th graders improved in science achievement?

In 1996, 22% of Tennessee's public school 8th graders met the Goals Panel's performance standard in science. The Goals Panel will report whether science performance has improved over time when science is assessed again in 2000.

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 science assessment



Science performance will be tested again in 2000.

2. State Comparisons[†]

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

18 states had significantly higher¹ percentages of students who were at or above Proficient on NAEP:

Maine, Montana, North Dakota	41%	Colorado, Michigan, Oregon, Utah	32%
Wisconsin	39%	Alaska	31%
Massachusetts, Minnesota	37%	Indiana	30%
Connecticut, Iowa	36%	U.S.*	29%
Nebraska	35%	Missouri	28%
Vermont, Wyoming	34%		

17 states had similar¹ percentages of students who were at or above Proficient on NAEP:

New York, Virginia, Washington	27%	Delaware, Florida, Georgia,	21%
Rhode Island	26%	West Virginia	
Maryland	25%	California	20%
North Carolina	24%	New Mexico	19%
Arizona, Kentucky, Texas	23%	Alabama	18%
Tennessee, Arkansas	22%		

6 states had significantly lower¹ percentages of students who were at or above Proficient on NAEP:

South Carolina	17%	Mississippi	12%
Hawaii	15%	Guam	7%
Louisiana	13%	District of Columbia	5%

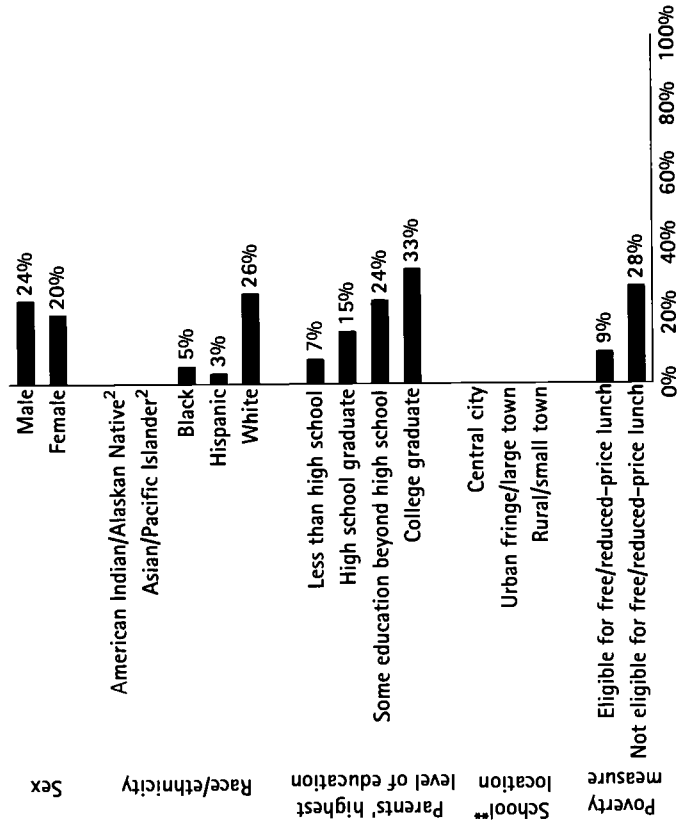
[†] The term "state" is used to refer to the 50 states, the District of Columbia, and the territories.

¹ See explanation on pp. 3-4.

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

3. Subgroup Performance

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



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

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

** No school location data for science in 1996.

International Comparisons

Tennessee

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 Tennessee participated in the TIMSS mathematics assessment, how would their average performance compare to that of students who took TIMSS in these nations?

26 nations[†] would be expected to perform significantly higher:¹

(Australia)
(Austria)
Belgium – Flemish²
(Belgium – French)²
(Bulgaria)
Canada
Czech Republic
(England)
France
(Germany)
Hong Kong
Hungary
Ireland
(Israel)
Japan
Korea
(Netherlands)
New Zealand
Norway
Russian Federation
Singapore
Slovak Republic
(Slovenia)
Sweden
(Switzerland)
(Thailand)

10 nations[†] would be expected to perform similarly:¹

Cyprus
(Denmark)
(Greece)
Iceland
(Latvia – LSS)³
(Lithuania)
(Romania)
(Scotland)
Spain
Tennessee
United States

5 nations[†] would be expected to perform significantly lower:¹

(Colombia)
Iran, Islamic Republic
(Kuwait)
Portugal
(South Africa)

[†] The term "nation" is used to refer to nations, states, or jurisdictions. Performance for nations is based on public school data only. Nations not meeting international guidelines are shown in parentheses.

¹ See explanation on pp. 3-4.

² The Flemish and French educational systems in Belgium participated separately.

³ Latvia is designated LSS because only Latvian-speaking schools were tested, which represent less than 65% of the population.

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See Appendix A for definitions, sources, and technical notes.

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 Tennessee participated in the TIMSS science assessment, how would their average performance compare to that of students who took TIMSS in these nations?

13 nations[†] would be expected to perform significantly higher:¹

(Australia)
(Austria)
Belgium – Flemish²
(Bulgaria)
Czech Republic
(England)
Hungary
Japan
Korea
(Netherlands)
Singapore
Slovak Republic
(Slovenia)

18 nations[†] would be expected to perform similarly:¹

Canada
France
(Germany)
(Greece)
Hong Kong
Iceland
Ireland
(Israel)
New Zealand
Norway
(Romania)
Russian Federation
(Scotland)
Spain
Sweden
(Switzerland)
Tennessee
(Thailand)
United States

10 nations[†] would be expected to perform significantly lower:¹

(Belgium – French)²
(Colombia)
Cyprus
(Denmark)
Iran, Islamic Republic
(Kuwait)
(Latvia – LSS)³
(Lithuania)
Portugal
(South Africa)

[†] The term "nation" is used to refer to nations, states, or jurisdictions. Performance for nations is based on public school data only. Nations not meeting international guidelines are shown in parentheses.

¹ See explanation on pp. 3-4.

² The Flemish and French educational systems in Belgium participated separately.

³ Latvia is designated LSS because only Latvian-speaking schools were tested, which represent less than 65% of the population.

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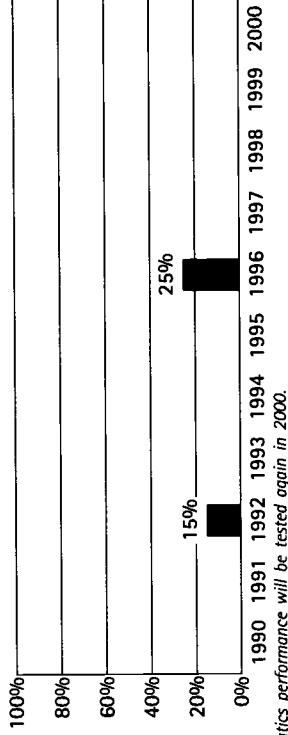
1. Improvement Over Time

Have Texas' 4th graders improved in mathematics achievement?

Yes. The percentage of Texas' public school 4th graders who met the Goals Panel's performance standard in mathematics increased from 15% in 1992, to 25% in 1996.

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



2. State Comparisons[†]

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

20 states had similar[†] percentages of students who were at or above Proficient on NAEP:

Connecticut	31%	Michigan, Utah, Vermont	23%
Minnesota	29%	Colorado, Iowa, Maryland, Montana	22%
Maine, Wisconsin	27%	U.S.* Alaska, North Carolina, Oregon,	21%
Texas , New Jersey	25%	Washington	
Indiana, Massachusetts, Nebraska,	24%		
North Dakota			

24 states had significantly lower[†] percentages of students who were at or above Proficient on NAEP:

Missouri, New York, Pennsylvania	20%	Arkansas, Georgia, New Mexico	13%
Virginia, West Virginia, Wyoming	19%	South Carolina	12%
Rhode Island, Tennessee	17%	Alabama, California	11%
Delaware, Hawaii, Kentucky	16%	Louisiana, Mississippi	8%
Arizona, Florida	15%	District of Columbia	5%
Nevada	14%	Guam	3%

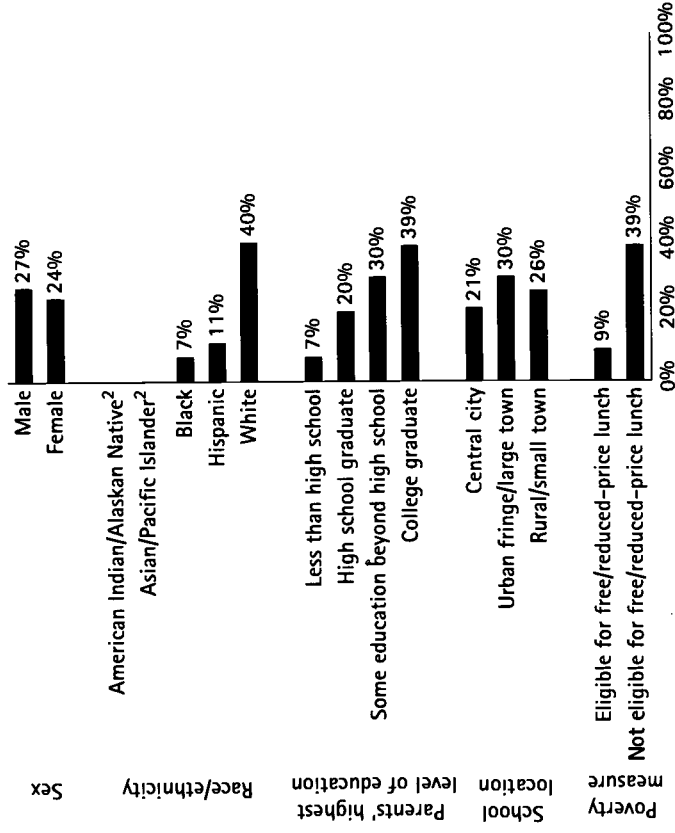
[†] The term "state" is used to refer to the 50 states, the District of Columbia, and the territories.

¹ See explanation on pp. 3-4.

* 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 subgroups¹ in Texas 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.

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

1. Improvement Over Time

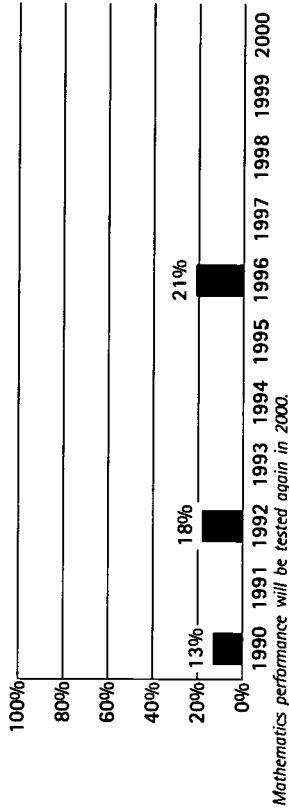


Have Texas' 8th graders improved in mathematics achievement?

Yes. The percentage of Texas' public school 8th graders who met the Goals Panel's performance standard in mathematics increased from 13% in 1990, to 21% in 1996.

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



2. State Comparisons[†]

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

13 states had significantly higher¹ percentages of students who were at or above Proficient on NAEP:

Minnesota	34%	Alaska	30%
North Dakota	33%	Massachusetts, Michigan	28%
Montana, Wisconsin	32%	Vermont	27%
Connecticut, Iowa, Maine, Nebraska	31%	Washington ²	26%

15 states had similar¹ percentages of students who were at or above Proficient on NAEP:

Oregon ²	26%	North Carolina, Rhode Island	20%
Colorado	25%	Delaware	19%
U.S., [*] Indiana, Maryland, Utah	24%	Arizona	18%
Missouri, New York, Wyoming	22%	California, Florida	17%
Texas, Virginia	21%		

13 states had significantly lower¹ percentages of students who were at or above Proficient on NAEP:

Georgia, Hawaii, Kentucky	16%	Alabama	12%
Tennessee	15%	Louisiana, Mississippi	7%
New Mexico, South Carolina,	14%	Guam	6%
West Virginia		District of Columbia	5%
Arkansas	13%		

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

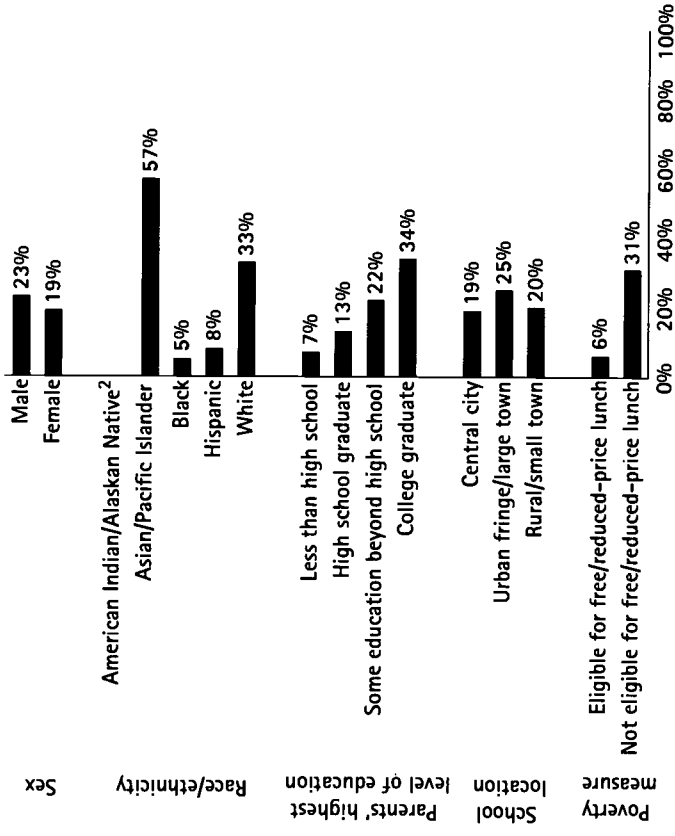
¹ See explanation on pp. 3-4.

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

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

3. Subgroup Performance

What percentages of public school 8th graders in different subgroups¹ in Texas 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.

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

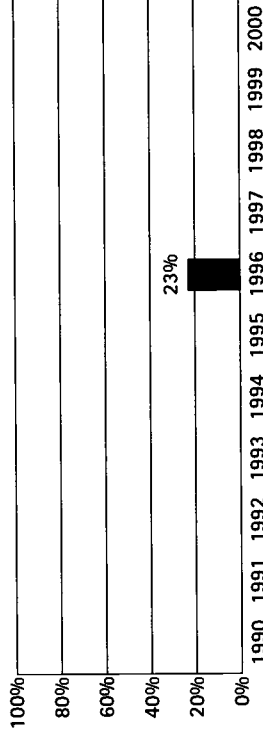
1. Improvement Over Time

Have Texas' 8th graders improved in science achievement?

In 1996, 23% of Texas' public school 8th graders met the Goals Panel's performance standard in science. The Goals Panel will report whether science performance has improved over time when science is assessed again in 2000.

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 science assessment



Science performance will be tested again in 2000.

2. State Comparisons[†]

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

18 states had significantly higher¹ percentages of students who were at or above Proficient on NAEP:

Maine, Montana, North Dakota	41%	Colorado, Michigan, Oregon, Utah	32%
Wisconsin	39%	Alaska	31%
Massachusetts, Minnesota	37%	Indiana	30%
Connecticut, Iowa	36%	U.S.*	29%
Nebraska	35%	Missouri	28%
Vermont, Wyoming	34%		

15 states had similar¹ percentages of students who were at or above Proficient on NAEP:

New York, Virginia, Washington	27%	Arkansas, Tennessee	22%
Rhode Island	26%	Delaware, Florida, Georgia,	21%
Maryland	25%	West Virginia	
North Carolina	24%	California	20%
Texas, Arizona, Kentucky	23%		

8 states had significantly lower¹ percentages of students who were at or above Proficient on NAEP:

New Mexico	19%	Louisiana	13%
Alabama	18%	Mississippi	12%
South Carolina	17%	Guam	7%
Hawaii	15%	District of Columbia	5%

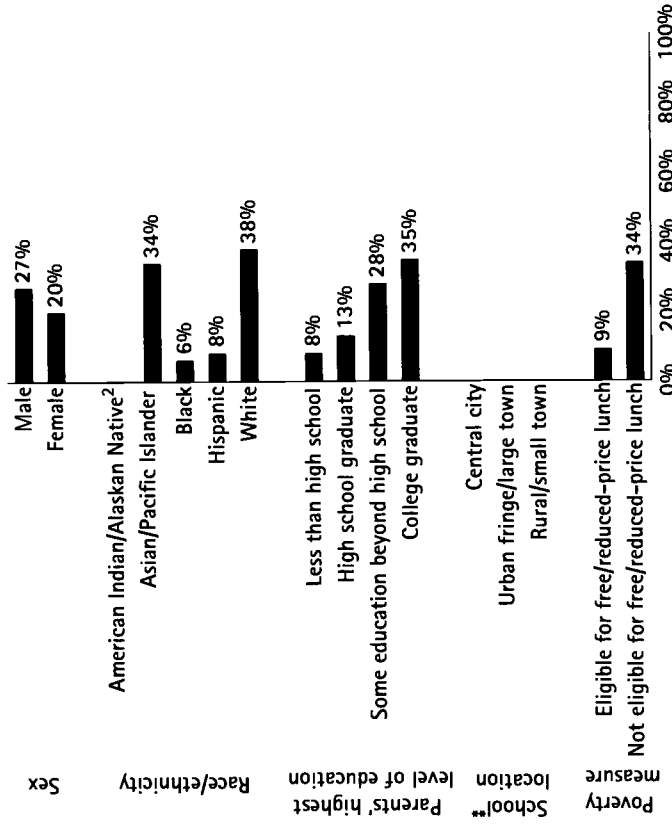
[†] The term "state" is used to refer to the 50 states, the District of Columbia, and the territories.

¹ See explanation on pp. 3-4.

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

3. Subgroup Performance

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



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

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

** No school location data for science in 1996.

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 Texas participated in the TIMSS mathematics assessment, how would their average performance compare to that of students who took TIMSS in these nations?

19 nations[†] would be expected to perform significantly higher:¹

(Australia)
(Austria)
Belgium – Flemish²
(Belgium – French)²
(Bulgaria)
Canada
Czech Republic
France
Hong Kong
Hungary
Ireland
Japan
Korea
(Netherlands)
Russian Federation
Singapore
Slovak Republic
(Slovenia)
(Switzerland)

16 nations[†] would be expected to perform similarly:¹

(Denmark)
(England)
(Germany)
(Greece)
Iceland
(Israel)
(Latvia – LSS)³
(Lithuania)
New Zealand
Norway
(Romania)
(Scotland)
Spain
Sweden
Texas
United States

6 nations[†] would be expected to perform significantly lower:¹

(Colombia)
Cyprus
Iran, Islamic Republic
(Kuwait)
Portugal
(South Africa)

† The term "nation" is used to refer to nations, states, or jurisdictions. Performance for nations is based on public school data only. Nations not meeting international guidelines are shown in parentheses.

1 See explanation on pp. 3-4.

2 The Flemish and French educational systems in Belgium participated separately.

3 Latvia is designated LSS because only Latvian-speaking schools were tested, which represent less than 65% of the population.

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 Texas participated in the TIMSS science assessment, how would their average performance compare to that of students who took TIMSS in these nations?

10 nations[†] would be expected to perform significantly higher:¹

(Austria)
(Bulgaria)
Czech Republic
(England)
Hungary
Japan
Korea
(Netherlands)
Singapore
(Slovenia)

20 nations[†] would be expected to perform similarly:¹

(Australia)
Belgium – Flemish²
Canada
France
(Germany)
(Greece)
Hong Kong
Iceland
Ireland
(Israel)
New Zealand
Norway
Russian Federation
(Scotland)
Slovak Republic
Spain
Sweden
(Switzerland)
Texas
(Thailand)
United States

11 nations[†] would be expected to perform significantly lower:¹

(Belgium – French)²
(Colombia)
Cyprus
(Denmark)
Iran, Islamic Republic
(Kuwait)
(Latvia – LSS)³
(Lithuania)
Portugal
(Romania)
(South Africa)

† The term "nation" is used to refer to nations, states, or jurisdictions. Performance for nations is based on public school data only. Nations not meeting international guidelines are shown in parentheses.

1 See explanation on pp. 3-4.

2 The Flemish and French educational systems in Belgium participated separately.

3 Latvia is designated LSS because only Latvian-speaking schools were tested, which represent less than 65% of the population.

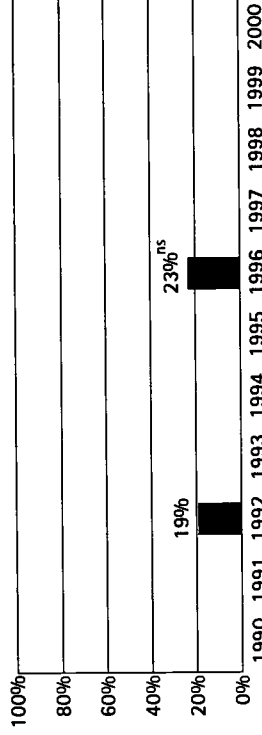
1. Improvement Over Time

Have Utah'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 Utah compare with other states in 4th grade mathematics achievement in public schools in 1996?

1 state had a significantly higher¹ percentage of students who were at or above Proficient on NAEP:

Connecticut 31%

23 states had similar¹ percentages of students who were at or above Proficient on NAEP:

- Minnesota 29%
- Maine, Wisconsin 27%
- New Jersey, Texas 25%
- Indiana, Massachusetts, Nebraska, North Dakota 24%
- Utah, Michigan, Vermont 23%
- Colorado, Iowa, Maryland, Montana 22%
- U.S.,² Alaska, North Carolina, Oregon, Washington 21%
- Missouri, New York, Pennsylvania 20%
- Virginia² 19%

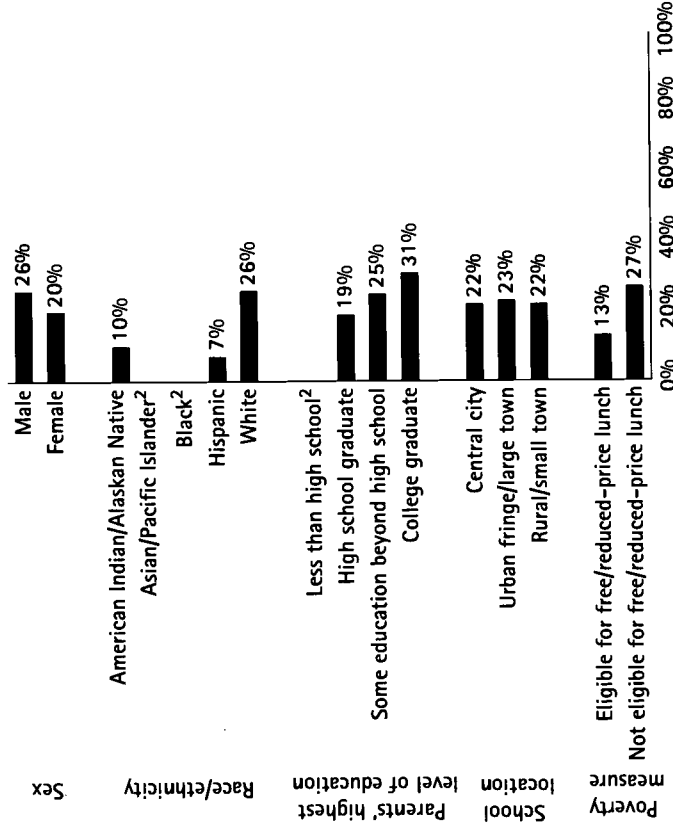
20 states had significantly lower¹ percentages of students who were at or above Proficient on NAEP:

- West Virginia,² Wyoming² 19%
- Rhode Island, Tennessee 17%
- Delaware, Hawaii, Kentucky 16%
- Arizona, Florida 15%
- Nevada 14%
- Arkansas, Georgia, New Mexico 13%
- South Carolina 12%
- Alabama, California 11%
- Louisiana, Mississippi 8%
- District of Columbia 5%
- Guam 3%

[†] The term "state" is used to refer to the 50 states, the District of Columbia, and the territories.
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.
^{*} 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 subgroups¹ in Utah 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.
² Characteristics of the sample do not permit a reliable estimate.

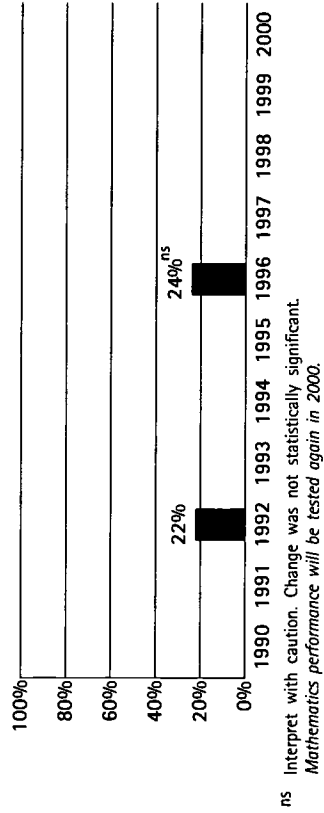
1. Improvement Over Time

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

Not yet. Between 1992 and 1996, 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



2. State Comparisons[†]

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

9 states had significantly higher¹ percentages of students who were at or above Proficient on NAEP:

Minnesota	34%	Connecticut, Iowa, Maine, Nebraska	31%
North Dakota	33%	Alaska	30%
Montana, Wisconsin	32%		

14 states had similar¹ percentages of students who were at or above Proficient on NAEP:

Massachusetts, Michigan	28%	U.S.,² Utah, Indiana, Maryland	24%
Vermont	27%	Missouri, New York, Wyoming	22%
Oregon, Washington	26%	Texas, Virginia	21%
Colorado	25%	North Carolina ²	20%

18 states had significantly lower¹ percentages of students who were at or above Proficient on NAEP:

Rhode Island ²	20%	Arkansas	13%
Delaware	19%	Alabama	12%
Arizona	18%	Louisiana, Mississippi	7%
California, Florida	17%	Guam	6%
Georgia, Hawaii, Kentucky	16%	District of Columbia	5%
Tennessee	15%		
New Mexico, South Carolina, West Virginia	14%		

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

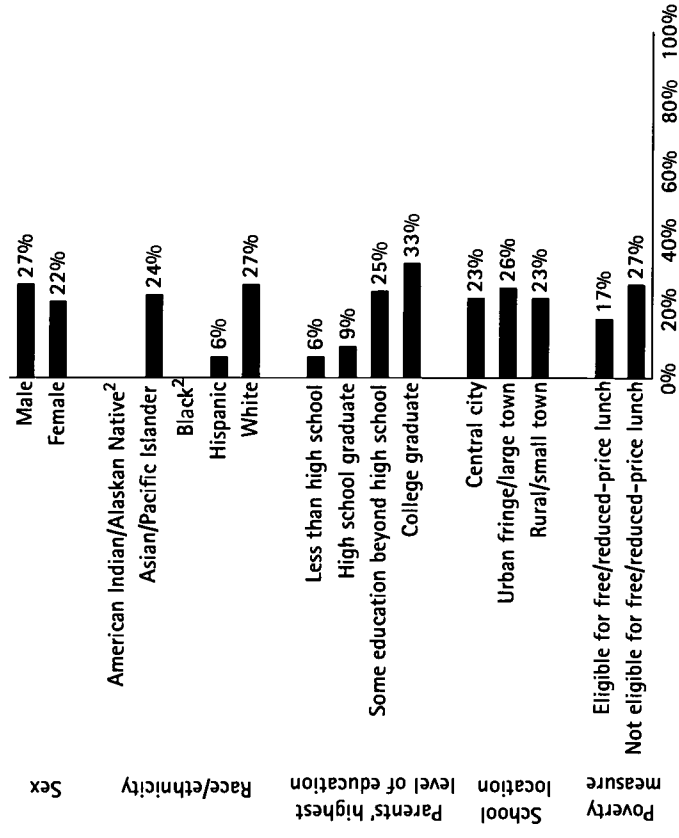
¹ See explanation on pp. 3-4.

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

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

3. Subgroup Performance

What percentages of public school 8th graders in different subgroups¹ in Utah 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.

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

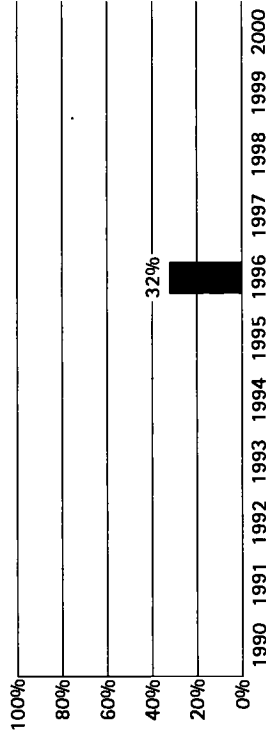
1. Improvement Over Time

Have Utah's 8th graders improved in science achievement?

In 1996, 32% of Utah's public school 8th graders met the Goals Panel's performance standard in science. The Goals Panel will report whether science performance has improved over time when science is assessed again in 2000.

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 science assessment



Science performance will be tested again in 2000.

2. State Comparisons[†]

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

4 states had significantly higher¹ percentages of students who were at or above Proficient on NAEP:

Maine	41%	Wisconsin	39%
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14 states had similar¹ percentages of students who were at or above Proficient on NAEP:

Massachusetts	37%	Alaska	31%
Connecticut, Iowa	36%	Indiana	30%
Nebraska	35%	U.S.*	29%
Vermont, Wyoming	34%	Missouri	28%
Utah , Colorado, Michigan, Oregon	32%	Virginia ²	27%

23 states had significantly lower¹ percentages of students who were at or above Proficient on NAEP:

New York, ² Washington ²	27%	New Mexico	19%
Rhode Island	26%	Alabama	18%
Maryland	25%	South Carolina	17%
North Carolina	24%	Hawaii	15%
Arizona, Kentucky, Texas	23%	Louisiana	13%
Arkansas, Tennessee	22%	Mississippi	12%
Delaware, Florida, Georgia, West Virginia	21%	Guam	7%
District of Columbia		District of Columbia	5%
California	20%		

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

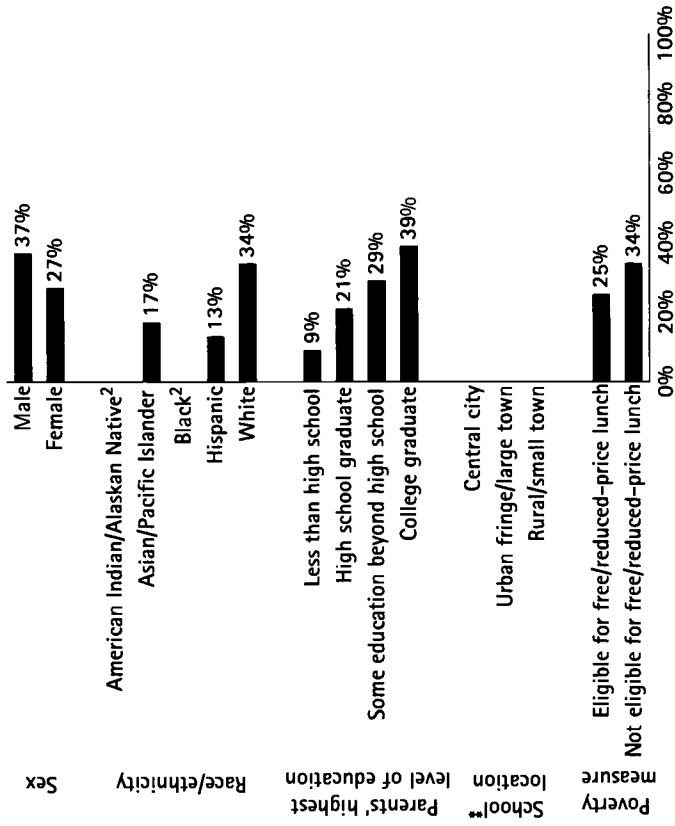
¹ See explanation on pp. 3-4.

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

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

3. Subgroup Performance

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



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

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

** No school location data for science in 1996.

International Comparisons

Mathematics Grade 8

Forty-one nations¹ participated in the Third International Mathematics and Science Study (TIMSS) in 8th grade mathematics in 1995. If public school 8th graders in Utah participated in the TIMSS mathematics assessment, how would their average performance compare to that of students who took TIMSS in these nations?

12 nations¹ would be expected to perform significantly higher:¹

(Austria)
Belgium – Flemish²
Czech Republic
France
Hong Kong
Hungary
Japan
Korea
Singapore
Slovak Republic
(Slovenia)
(Switzerland)

18 nations¹ would be expected to perform similarly:¹

(Australia)
(Belgium – French)²
(Bulgaria)
Canada
(Denmark)
(England)
(Germany)
Ireland
(Israel)
(Latvia – LSS)³
(Netherlands)
New Zealand
Norway
Russian Federation
(Scotland)
Sweden
(Thailand)
United States
Utah

11 nations¹ would be expected to perform significantly lower:¹

(Colombia)
Cyprus
(Greece)
Iceland
Iran, Islamic Republic
(Kuwait)
(Lithuania)
Portugal
(Romania)
(South Africa)
Spain

[†] The term "nation" is used to refer to nations, states, or jurisdictions. Performance for nations is based on public school data only. Nations not meeting international guidelines are shown in parentheses.

¹ See explanation on pp. 3–4.

² The Flemish and French educational systems in Belgium participated separately.

³ Latvia is designated LSS because only Latvian-speaking schools were tested, which represent less than 65% of the population.

Utah

Science Grade 8 ☆

Forty-one nations¹ participated in the Third International Mathematics and Science Study (TIMSS) in 8th grade science in 1995. If public school 8th graders in Utah participated in the TIMSS science assessment, how would their average performance compare to that of students who took TIMSS in these nations?

1 nation¹ would be expected to perform significantly higher:¹

Singapore

17 nations¹ would be expected to perform similarly:¹

(Australia)
(Austria)
Belgium – Flemish²
(Bulgaria)
Czech Republic
(England)
(Germany)
Hungary
Ireland
Japan
Korea
(Netherlands)
Russian Federation
Slovak Republic
(Slovenia)
Sweden
United States
Utah

23 nations¹ would be expected to perform significantly lower:¹

(Belgium – French)²
Canada
(Colombia)
Cyprus
(Denmark)
France
(Greece)
Hong Kong
Iceland
Iran, Islamic Republic
(Israel)
(Kuwait)
(Latvia – LSS)³
(Lithuania)
New Zealand
Norway
Portugal
(Romania)
(Scotland)
(South Africa)
Spain
(Switzerland)
(Thailand)

[†] The term "nation" is used to refer to nations, states, or jurisdictions. Performance for nations is based on public school data only. Nations not meeting international guidelines are shown in parentheses.

¹ See explanation on pp. 3–4.

² The Flemish and French educational systems in Belgium participated separately.

³ Latvia is designated LSS because only Latvian-speaking schools were tested, which represent less than 65% of the population.

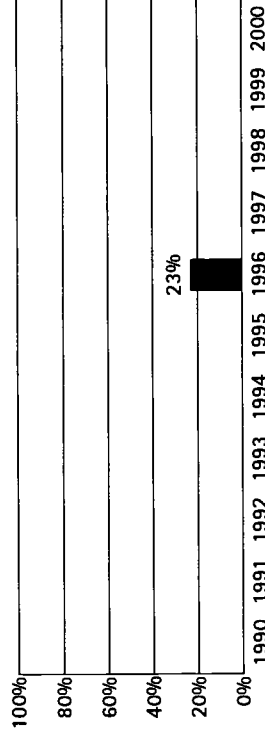
1. Improvement Over Time

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

In 1996, 23% of Vermont's public school 4th graders met the Goals Panel's performance standard in mathematics. The Goals Panel will report whether mathematics performance has improved over time when mathematics is assessed again in 2000.

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



Mathematics performance will be tested again in 2000.

2. State Comparisons[†]

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

2 states had significantly higher¹ percentages of students who were at or above Proficient on NAEP:

Connecticut	31%	Minnesota	29%
-------------	-----	-----------	-----

22 states had similar¹ percentages of students who were at or above Proficient on NAEP:

Maine, Wisconsin	27%	Colorado, Iowa, Maryland, Montana	22%
New Jersey, Texas	25%	U.S.,* Alaska, North Carolina, Oregon,	21%
Indiana, Massachusetts, Nebraska,	24%	Washington	
North Dakota		Missouri, New York, Pennsylvania	20%
Vermont, Michigan, Utah	23%	Virginia ²	19%

20 states had significantly lower¹ percentages of students who were at or above Proficient on NAEP:

West Virginia, ² Wyoming ²	19%	South Carolina	12%
Rhode Island, Tennessee	17%	Alabama, California	11%
Delaware, Hawaii, Kentucky	16%	Louisiana, Mississippi	8%
Arizona, Florida	15%	District of Columbia	5%
Nevada	14%	Guam	3%
Arkansas, Georgia, New Mexico	13%		

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

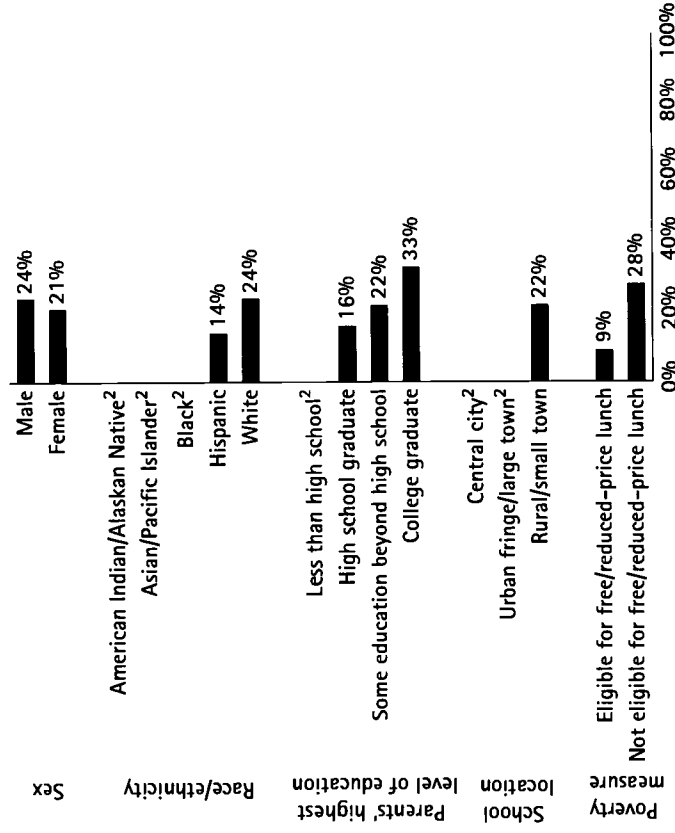
¹ See explanation on pp. 3-4.

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

* 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 subgroups¹ in Vermont 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.

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

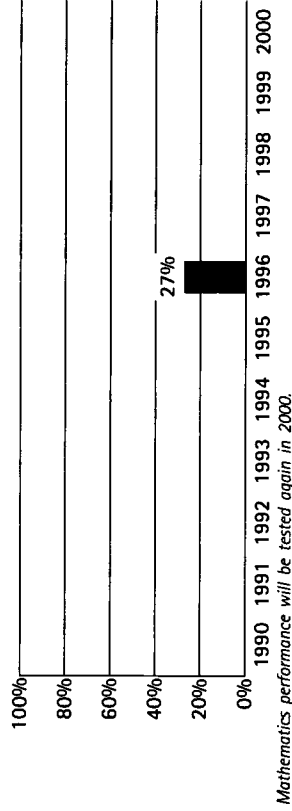
1. Improvement Over Time

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

In 1996, 27% of Vermont's public school 8th graders met the Goals Panel's performance standard in mathematics. The Goals Panel will report whether mathematics performance has improved over time when mathematics is assessed again in 2000.

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



2. State Comparisons[†]

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

17 states had similar¹ percentages of students who were at or above Proficient on NAEP:

Minnesota	34%	Massachusetts, Michigan	28%
North Dakota	33%	Vermont	27%
Montana, Wisconsin	32%	Oregon, Washington	26%
Connecticut, Iowa, Maine, Nebraska	31%	Colorado	25%
Alaska	30%	U.S.* Indiana, Maryland, Utah	24%

24 states had significantly lower¹ percentages of students who were at or above Proficient on NAEP:

Missouri, New York, Wyoming	22%	New Mexico, South Carolina,	14%
Texas, Virginia	21%	West Virginia	13%
North Carolina, Rhode Island	20%	Arkansas	12%
Delaware	19%	Alabama	7%
Arizona	18%	Louisiana, Mississippi	6%
California, Florida	17%	Guam	5%
Georgia, Hawaii, Kentucky	16%	District of Columbia	15%
Tennessee	15%		

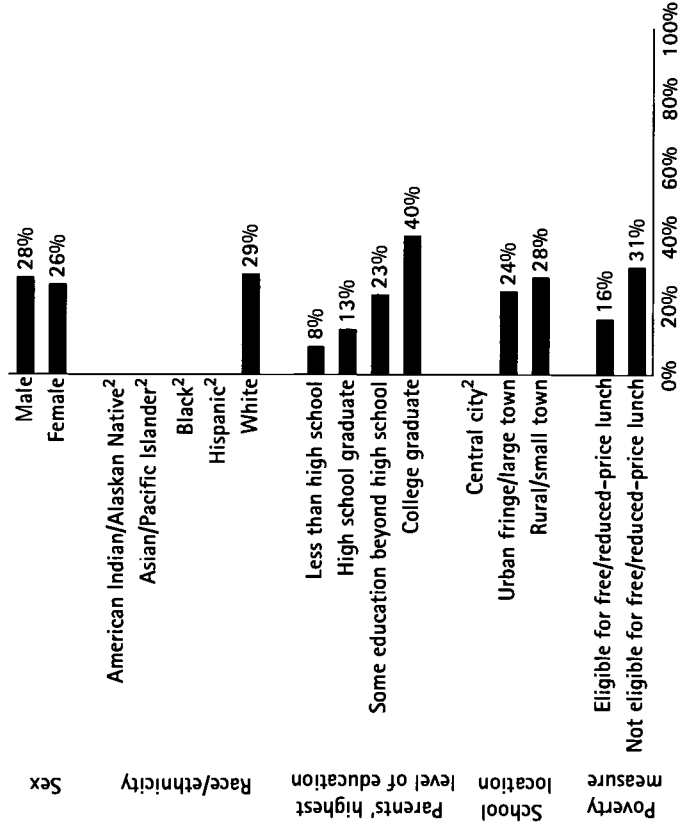
[†] The term "state" is used to refer to the 50 states, the District of Columbia, and the territories.

¹ See explanation on pp. 3-4.

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

3. Subgroup Performance

What percentages of public school 8th graders in different subgroups¹ in Vermont 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.

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

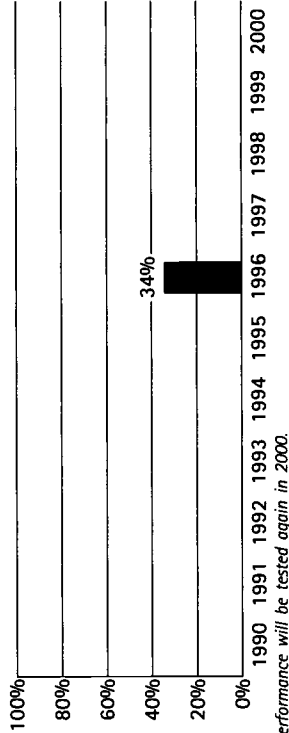
1. Improvement Over Time

Have Vermont's 8th graders improved in science achievement?

In 1996, 34% of Vermont's public school 8th graders met the Goals Panel's performance standard in science. The Goals Panel will report whether science performance has improved over time when science is assessed again in 2000.

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 science assessment



2. State Comparisons[†]

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

1 state had a significantly higher¹ percentage of students who were at or above Proficient on NAEP:

North Dakota² 41%

15 states had similar¹ percentages of students who were at or above Proficient on NAEP:

Maine, ² Montana ²	41%	Vermont, Wyoming	34%
Wisconsin	39%	Colorado, Michigan, Oregon, Utah	32%
Massachusetts, Minnesota	37%	Alaska	31%
Connecticut, Iowa	36%	Indiana	30%
Nebraska	35%		

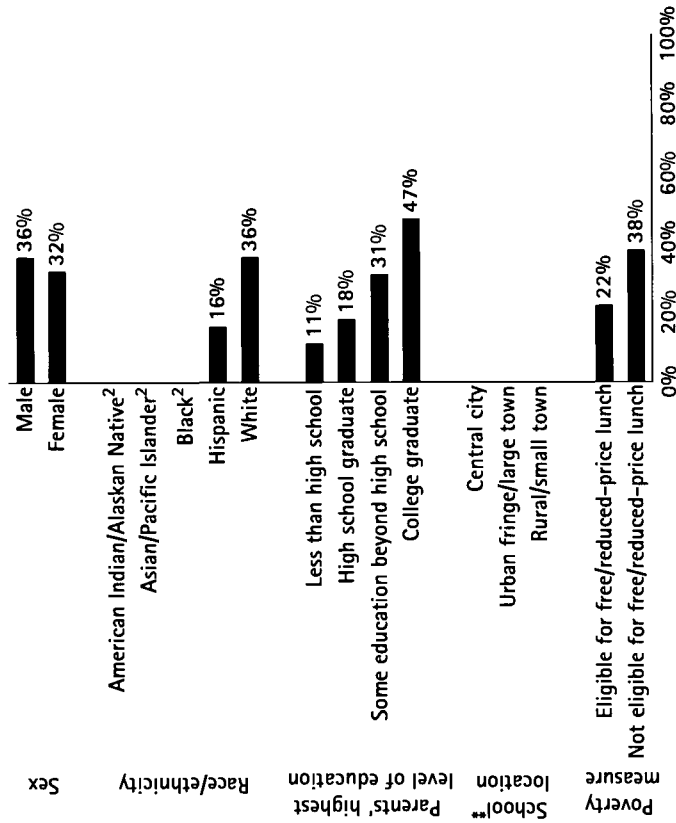
25 states had significantly lower¹ percentages of students who were at or above Proficient on NAEP:

U.S.:	29%	California	20%
Missouri	28%	New Mexico	19%
New York, Virginia, Washington	27%	Alabama	18%
Rhode Island	26%	South Carolina	17%
Maryland	25%	Hawaii	15%
North Carolina	24%	Louisiana	13%
Arizona, Kentucky, Texas	23%	Mississippi	12%
Arkansas, Tennessee	22%	Guam	7%
Delaware, Florida, Georgia, West Virginia	21%	District of Columbia	5%

[†] The term "state" is used to refer to the 50 states, the District of Columbia, and the territories.
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.
 • Figure shown for the U.S. includes both public and nonpublic school data.

3. Subgroup Performance

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



¹ Interpret differences between subgroups with caution. See pp. 3-4 and Appendix D.
² Characteristics of the sample do not permit a reliable estimate.
 ** No school location data for science in 1996.

International Comparisons

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 Vermont participated in the TIMSS mathematics assessment, how would their average performance compare to that of students who took TIMSS in these nations?

8 nations[†] would be expected to perform significantly higher:¹

Belgium – Flemish²
Czech Republic
Hong Kong
Japan
Korea
Singapore
Slovak Republic
(Switzerland)

21 nations[†] would be expected to perform similarly:²

(Australia)
(Austria)
(Belgium – French)²
(Bulgaria)
Canada
(Denmark)
(England)
France
(Germany)
Hungary
Ireland
(Israel)
(Netherlands)
New Zealand
Norway
Russian Federation
(Scotland)
(Slovenia)
Sweden
(Thailand)
United States
Vermont

12 nations[†] would be expected to perform significantly lower:¹

(Colombia)
Cyprus
(Greece)
Iceland
Iran, Islamic Republic
(Kuwait)
(Latvia – LSS)³
(Lithuania)
Portugal
(Romania)
(South Africa)
Spain

† The term "nation" is used to refer to nations, states, or jurisdictions. Performance for nations is based on public school data only. Nations not meeting international guidelines are shown in parentheses.
1 See explanation on pp. 3–4.
2 The Flemish and French educational systems in Belgium participated separately.
3 Latvia is designated LSS because only Latvian-speaking schools were tested, which represent less than 65% of the population.

Vermont

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 Vermont participated in the TIMSS science assessment, how would their average performance compare to that of students who took TIMSS in these nations?

1 nation[†] would be expected to perform significantly higher:¹

Singapore

17 nations[†] would be expected to perform similarly:¹

(Australia)
(Austria)
Belgium – Flemish²
(Bulgaria)
Czech Republic
(England)
(Germany)
Hungary
Ireland
Japan
Korea
(Netherlands)
Russian Federation
Slovak Republic
(Slovenia)
Sweden
United States
Vermont

23 nations[†] would be expected to perform significantly lower:¹

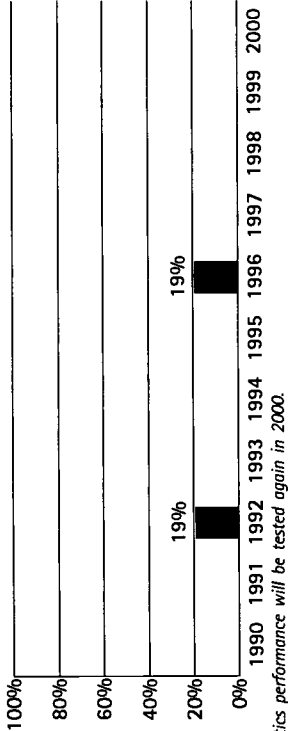
(Belgium – French)²
Canada
(Colombia)
Cyprus
(Denmark)
France
(Greece)
Hong Kong
Iceland
Iran, Islamic Republic
(Israel)
(Kuwait)
(Latvia – LSS)³
(Lithuania)
New Zealand
Norway
Portugal
(Romania)
(Scotland)
(South Africa)
Spain
(Switzerland)
(Thailand)

† The term "nation" is used to refer to nations, states, or jurisdictions. Performance for nations is based on public school data only. Nations not meeting international guidelines are shown in parentheses.
1 See explanation on pp. 3–4.
2 The Flemish and French educational systems in Belgium participated separately.
3 Latvia is designated LSS because only Latvian-speaking schools were tested, which represent less than 65% of the population.

1. Improvement Over Time

Have Virginia'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



Mathematics performance will be tested again in 2000.

2. State Comparisons[†]

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

5 states had significantly higher¹ percentages of students who were at or above Proficient on NAEP:

Connecticut	31%	Maine, Wisconsin	27%
Minnesota	29%	Texas ²	25%

27 states had similar¹ percentages of students who were at or above Proficient on NAEP:

New Jersey ²	25%	Missouri, New York, Pennsylvania	20%
Indiana, Massachusetts, Nebraska,	24%	Virginia , West Virginia, Wyoming	19%
North Dakota	23%	Rhode Island, Tennessee	17%
Michigan, Utah, Vermont	23%	Delaware, Hawaii, Kentucky	16%
Colorado, Iowa, Maryland, Montana	22%	Arizona ²	15%
U.S. , [*] Alaska, North Carolina, Oregon,	21%	Washington	

12 states had significantly lower¹ percentages of students who were at or above Proficient on NAEP:

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

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

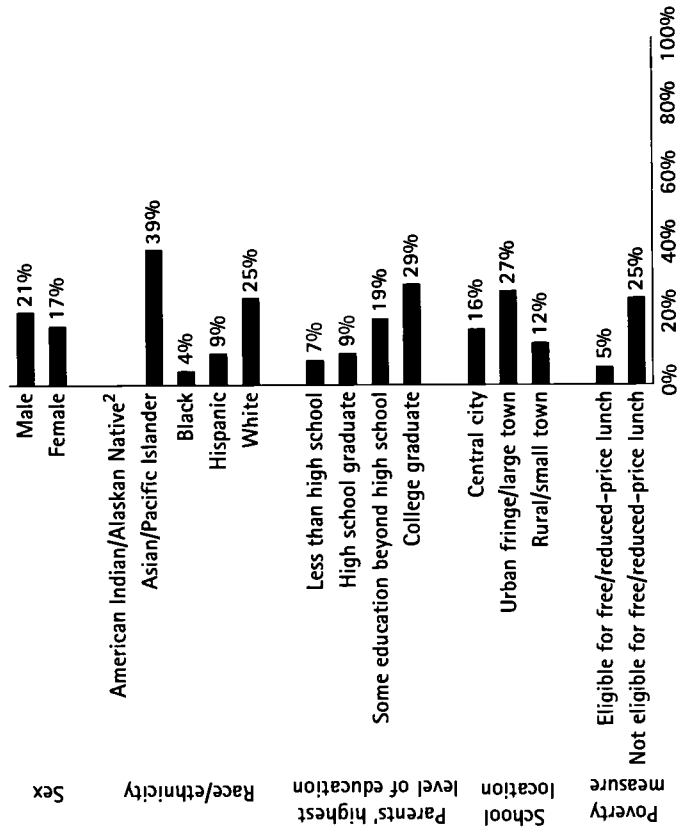
¹ See explanation on pp. 3-4.

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

* 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 subgroups¹ in Virginia 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.

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

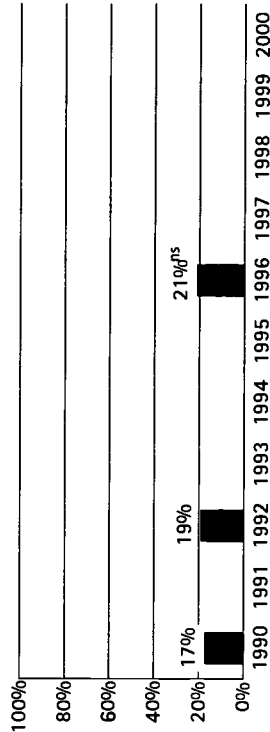
1. Improvement Over Time

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

Not yet. Between 1990 and 1996, 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 Virginia compare with other states in 8th grade mathematics achievement in public schools in 1996?

14 states had significantly higher¹ percentages of students who were at or above Proficient on NAEP:

Minnesota	34%	Alaska	30%
North Dakota	33%	Massachusetts, Michigan	28%
Montana, Wisconsin	32%	Vermont	27%
Connecticut, Iowa, Maine, Nebraska	31%	Oregon, Washington	26%

13 states had similar¹ percentages of students who were at or above Proficient on NAEP:

Colorado	25%	North Carolina, Rhode Island	20%
U.S. ² , Indiana, Maryland, Utah	24%	Delaware	19%
Missouri, New York, Wyoming	22%	Arizona	18%
Virginia, Texas	21%	California ²	17%

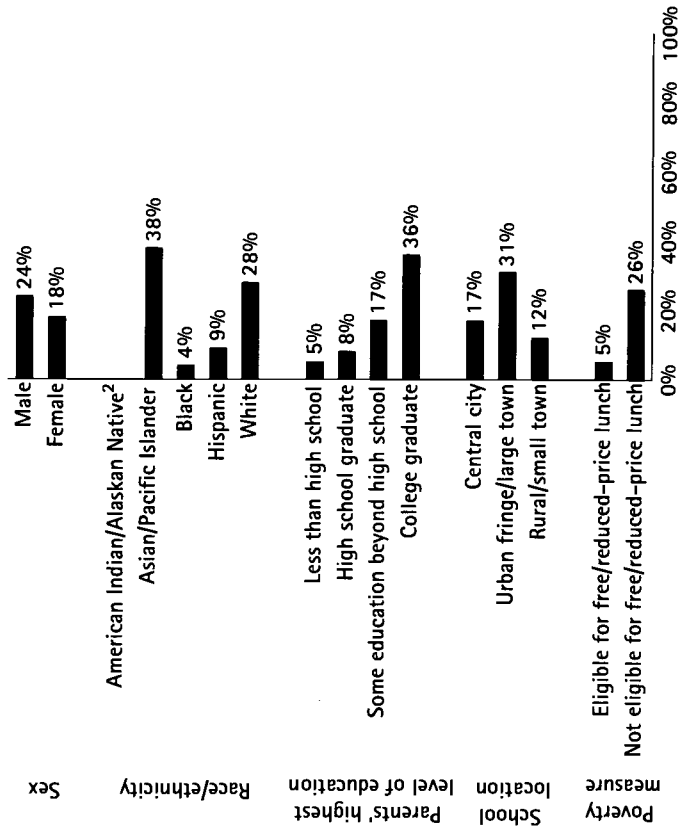
14 states had significantly lower¹ percentages of students who were at or above Proficient on NAEP:

Florida [†]	17%	Arkansas	13%
Georgia, Hawaii, Kentucky	16%	Alabama	12%
Tennessee	15%	Louisiana, Mississippi	7%
New Mexico, South Carolina,	14%	Guam	6%
West Virginia		District of Columbia	5%

[†] The term "state" is used to refer to the 50 states, the District of Columbia, and the territories.
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.
 • Figure shown for the U.S. includes both public and nonpublic school data.

3. Subgroup Performance

What percentages of public school 8th graders in different subgroups¹ in Virginia 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.
² Characteristics of the sample do not permit a reliable estimate.

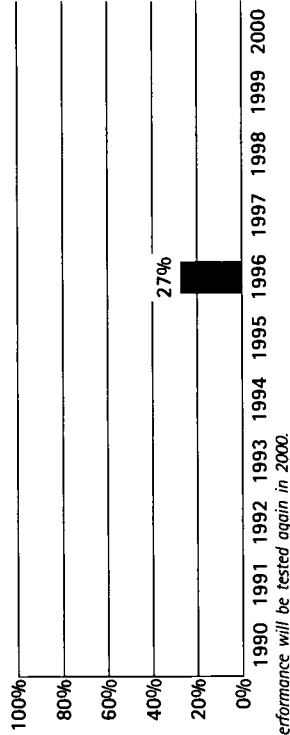
1. Improvement Over Time

Have Virginia's 8th graders improved in science achievement?

In 1996, 27% of Virginia's public school 8th graders met the Goals Panel's performance standard in science. The Goals Panel will report whether science performance has improved over time when science is assessed again in 2000.

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 science assessment



2. State Comparisons[†]

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

11 states had significantly higher¹ percentages of students who were at or above Proficient on NAEP:

Maine, Montana, North Dakota	41%	Connecticut, Iowa	36%
Wisconsin	39%	Nebraska	35%
Massachusetts, Minnesota	37%	Vermont, Wyoming	34%

17 states had similar¹ percentages of students who were at or above Proficient on NAEP:

Colorado, Michigan, Oregon, Utah	32%	Rhode Island	26%
Alaska	31%	Maryland	25%
Indiana	30%	North Carolina	24%
U.S.*	29%	Arizona, Kentucky, Texas	23%
Missouri	28%	Arkansas, Tennessee	22%
Virginia , New York, Washington	27%		

13 states had significantly lower¹ percentages of students who were at or above Proficient on NAEP:

Delaware, Florida, Georgia, West Virginia	21%	Hawaii	15%
California	20%	Louisiana	13%
New Mexico	19%	Mississippi	12%
Alabama	18%	Guam	7%
South Carolina	17%	District of Columbia	5%

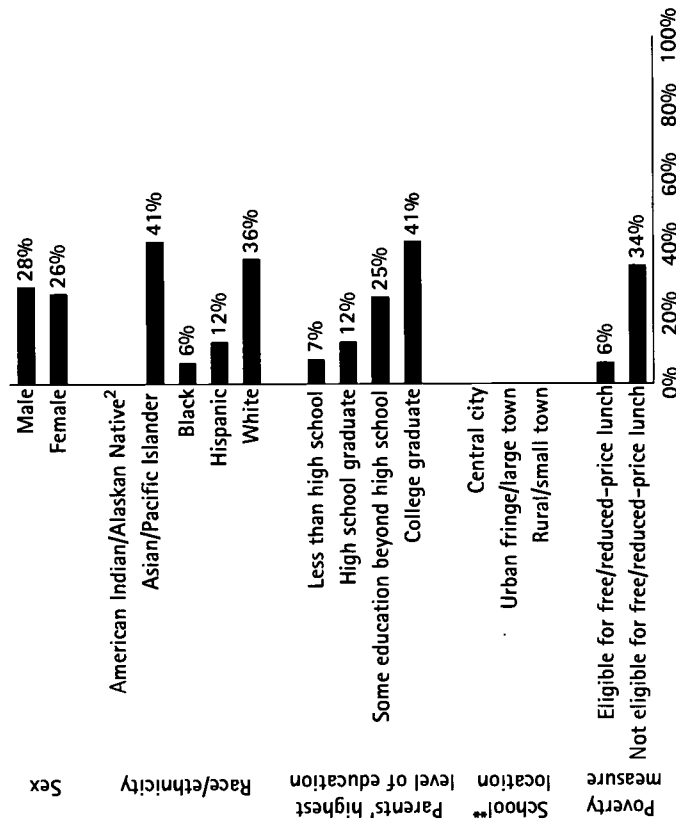
[†] The term "state" is used to refer to the 50 states, the District of Columbia, and the territories.

¹ See explanation on pp. 3-4.

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

3. Subgroup Performance

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



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

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

** No school location data for science in 1996.

International Comparisons

Virginia

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 Virginia participated in the TIMSS mathematics assessment, how would their average performance compare to that of students who took TIMSS in these nations?

19 nations[†] would be expected to perform significantly higher:¹

(Australia)
(Austria)
Belgium – Flemish²
(Belgium – French)²
(Bulgaria)
Canada
Czech Republic
France
Hong Kong
Hungary
Ireland
Japan
Korea
(Netherlands)
Russian Federation
Singapore
Slovak Republic
(Slovenia)
(Switzerland)

17 nations[†] would be expected to perform similarly:¹

Cyprus
(Denmark)
(England)
(Germany)
(Greece)
Iceland
(Israel)
(Latvia – LSS)³
(Lithuania)
New Zealand
Norway
(Romania)
(Scotland)
Spain
Sweden
(Thailand)
United States
Virginia

5 nations[†] would be expected to perform significantly lower:¹

(Colombia)
Iran, Islamic Republic
(Kuwait)
Portugal
(South Africa)

[†] The term "nation" is used to refer to nations, states, or jurisdictions. Performance for nations is based on public school data only. Nations not meeting international guidelines are shown in parentheses.

¹ See explanation on pp. 3–4.

² The Flemish and French educational systems in Belgium participated separately.

³ Latvia is designated LSS because only Latvian-speaking schools were tested, which represent less than 65% of the population.

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 Virginia participated in the TIMSS science assessment, how would their average performance compare to that of students who took TIMSS in these nations?

4 nations[†] would be expected to perform significantly higher:¹

Czech Republic
Japan
Korea
Singapore

23 nations[†] would be expected to perform similarly:¹

(Australia)
(Austria)
Belgium – Flemish²
(Bulgaria)
Canada
(England)
(Germany)
Hong Kong
Hungary
Ireland
(Israel)
(Netherlands)
New Zealand
Norway
Russian Federation
(Scotland)
Slovak Republic
(Slovenia)
Spain
Sweden
(Switzerland)
(Thailand)
United States
Virginia

14 nations[†] would be expected to perform significantly lower:¹

(Belgium – French)²
(Colombia)
Cyprus
(Denmark)
France
(Greece)
Iceland
Iran, Islamic Republic
(Kuwait)
(Latvia – LSS)³
(Lithuania)
Portugal
(Romania)
(South Africa)

[†] The term "nation" is used to refer to nations, states, or jurisdictions. Performance for nations is based on public school data only. Nations not meeting international guidelines are shown in parentheses.

¹ See explanation on pp. 3–4.

² The Flemish and French educational systems in Belgium participated separately.

³ Latvia is designated LSS because only Latvian-speaking schools were tested, which represent less than 65% of the population.

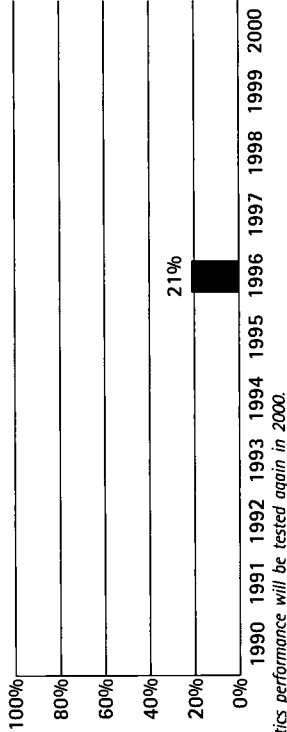
1. Improvement Over Time

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

In 1996, 21% of Washington's public school 4th graders met the Goals Panel's performance standard in mathematics. The Goals Panel will report whether mathematics performance has improved over time when mathematics is assessed again in 2000.

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



2. State Comparisons[†]

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

4 states had significantly higher¹ percentages of students who were at or above Proficient on NAEP:

Connecticut	31%	Maine, Wisconsin	27%
Minnesota	29%		

23 states had similar¹ percentages of students who were at or above Proficient on NAEP:

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

17 states had significantly lower¹ percentages of students who were at or above Proficient on NAEP:

Rhode Island [†]	17%	South Carolina	12%
Delaware, Hawaii, Kentucky	16%	Alabama, California	11%
Arizona, Florida	15%	Louisiana, Mississippi	8%
Nevada	14%	District of Columbia	5%
Arkansas, Georgia, New Mexico	13%	Guam	3%

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

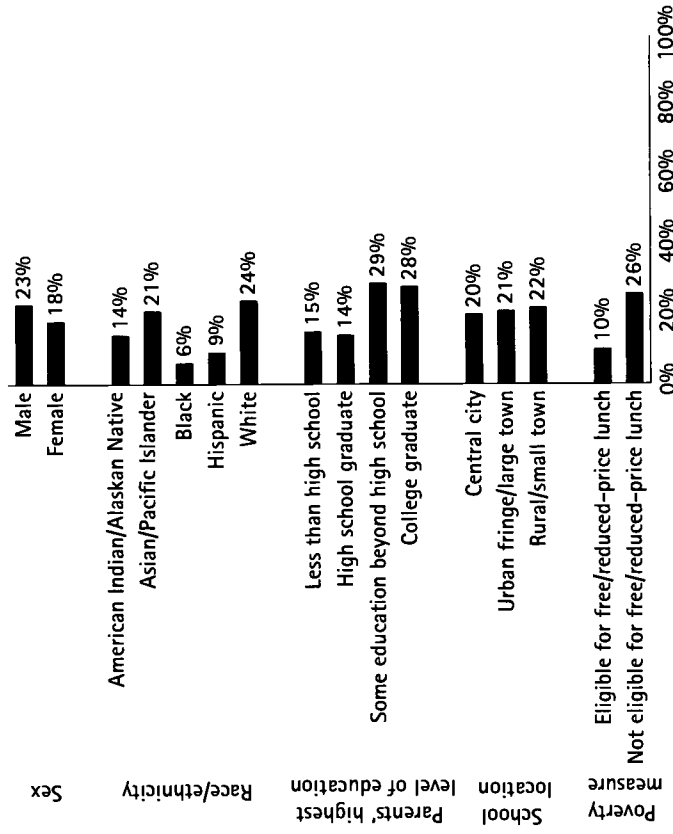
¹ See explanation on pp. 3-4.

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

• 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 subgroups¹ in Washington 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.

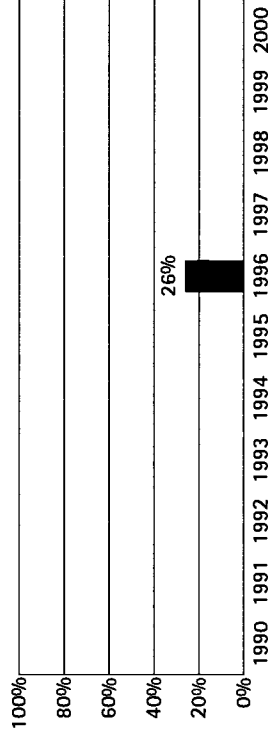
1. Improvement Over Time

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

In 1996, 26% of Washington's public school 8th graders met the Goals Panel's performance standard in mathematics. The Goals Panel will report whether mathematics performance has improved over time when mathematics is assessed again in 2000.

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



Mathematics performance will be tested again in 2000.

2. State Comparisons[†]

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

4 states had significantly higher¹ percentages of students who were at or above Proficient on NAEP:

Minnesota	34%	Montana ²	32%
North Dakota	33%	Nebraska ²	31%

15 states had similar¹ percentages of students who were at or above Proficient on NAEP:

Wisconsin ²	32%	Washington, Oregon	26%
Connecticut, ² Iowa, ² Maine ²	31%	Colorado	25%
Alaska	30%	U.S.,² Indiana, Maryland, Utah	24%
Massachusetts, Michigan	28%	Missouri, ² New York ²	22%
Vermont	27%		

22 states had significantly lower¹ percentages of students who were at or above Proficient on NAEP:

Wyoming ²	22%	New Mexico, South Carolina,	14%
Texas, Virginia	21%	West Virginia	13%
North Carolina, Rhode Island	20%	Arkansas	12%
Delaware	19%	Alabama	7%
Arizona	18%	Louisiana, Mississippi	6%
California, Florida	17%	Guam	5%
Georgia, Hawaii, Kentucky	16%	District of Columbia	15%
Tennessee	15%		

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

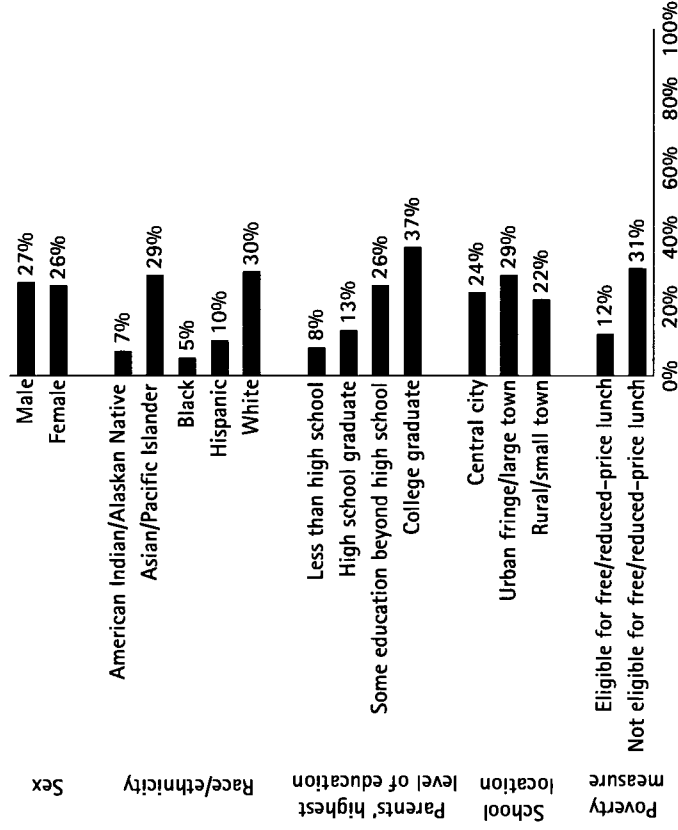
¹ See explanation on pp. 3-4.

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

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

3. Subgroup Performance

What percentages of public school 8th graders in different subgroups¹ in Washington 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.

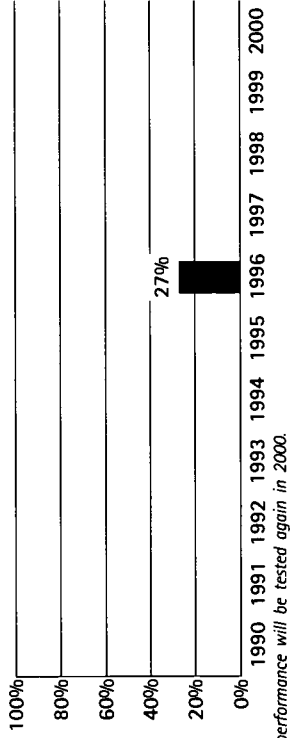
1. Improvement Over Time

Have Washington's 8th graders improved in science achievement?

In 1996, 27% of Washington's public school 8th graders met the Goals Panel's performance standard in science. The Goals Panel will report whether science performance has improved over time when science is assessed again in 2000.

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 science assessment



Science performance will be tested again in 2000.

2. State Comparisons[†]

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

13 states had significantly higher¹ percentages of students who were at or above Proficient on NAEP:

Maine, Montana, North Dakota	41%	Nebraska	35%
Wisconsin	39%	Vermont, Wyoming	34%
Massachusetts, Minnesota	37%	Colorado, ² Utah ²	32%
Connecticut, Iowa	36%		

13 states had similar¹ percentages of students who were at or above Proficient on NAEP:

Michigan, ² Oregon ²	32%	Washington , New York, Virginia	27%
Alaska	31%	Rhode Island	26%
Indiana	30%	Maryland	25%
U.S.*	29%	North Carolina	24%
Missouri	28%	Arizona, Kentucky, Texas	23%

15 states had significantly lower¹ percentages of students who were at or above Proficient on NAEP:

Arkansas, Tennessee	22%	South Carolina	17%
Delaware, Florida, Georgia, West Virginia	21%	Hawaii	15%
California	20%	Louisiana	13%
New Mexico	19%	Mississippi	12%
Alabama	18%	Guam	7%
		District of Columbia	5%

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

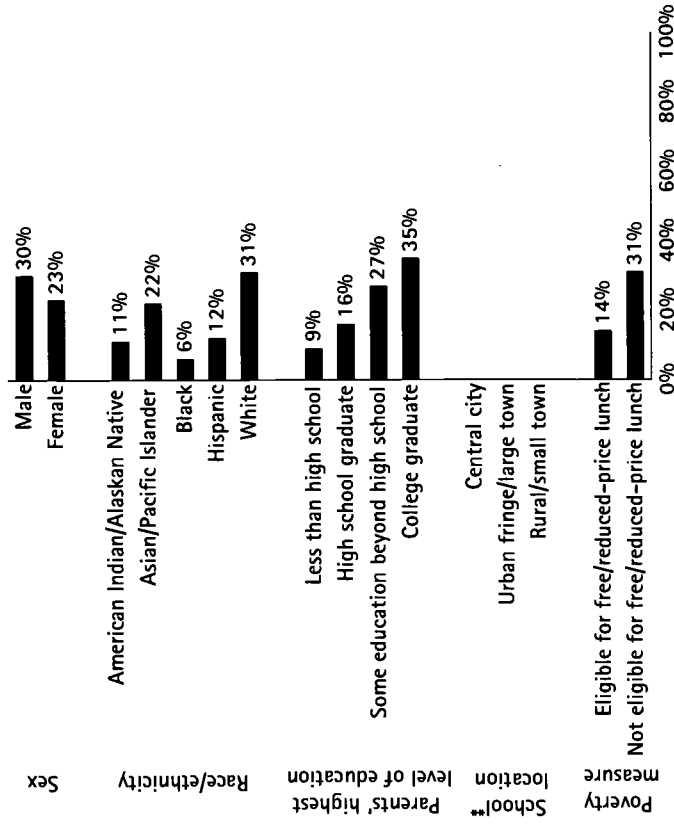
¹ See explanation on pp. 3-4.

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

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

3. Subgroup Performance

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



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

** No school location data for science in 1996.

International Comparisons

Mathematics Grade 8

Forty-one nations¹ participated in the Third International Mathematics and Science Study (TIMSS) in 8th grade mathematics in 1995. If public school 8th graders in Washington participated in the TIMSS mathematics assessment, how would their average performance compare to that of students who took TIMSS in these nations?

12 nations¹ would be expected to perform significantly higher:¹

(Austria)
Belgium – Flemish²
Czech Republic
France
Hong Kong
Hungary
Japan
Korea
Singapore
Slovak Republic
(Slovenia)
(Switzerland)

19 nations¹ would be expected to perform similarly:¹

(Australia)
(Belgium – French)²
(Bulgaria)
Canada
(Denmark)
(England)
(Germany)
Iceland
Ireland
(Israel)
(Latvia – LSS)³
(Netherlands)
New Zealand
Norway
Russian Federation
(Scotland)
Sweden
(Thailand)
United States
Washington

10 nations¹ would be expected to perform significantly lower:¹

(Colombia)
Cyprus
(Greece)
Iran, Islamic Republic
(Kuwait)
(Lithuania)
Portugal
(Romania)
(South Africa)
Spain

+ The term "nation" is used to refer to nations, states, or jurisdictions. Performance for nations is based on public school data only. Nations not meeting international guidelines are shown in parentheses.

1 See explanation on pp. 3-4.

2 The Flemish and French educational systems in Belgium participated separately.

3 Latvia is designated LSS because only Latvian-speaking schools were tested, which represent less than 65% of the population.

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See Appendix A for definitions, sources, and technical notes.

Washington

Science Grade 8

Forty-one nations¹ participated in the Third International Mathematics and Science Study (TIMSS) in 8th grade science in 1995. If public school 8th graders in Washington participated in the TIMSS science assessment, how would their average performance compare to that of students who took TIMSS in these nations?

5 nations¹ would be expected to perform significantly higher:¹

(Bulgaria)
Czech Republic
Japan
Korea
Singapore

22 nations¹ would be expected to perform similarly:¹

(Australia)
(Austria)
Belgium – Flemish²
Canada
(England)
(Germany)
Hong Kong
Hungary
Ireland
(Israel)
(Netherlands)
New Zealand
Norway
Russian Federation
(Scotland)
Slovak Republic
(Slovenia)
Spain
Sweden
(Switzerland)
(Thailand)
United States
Washington

14 nations¹ would be expected to perform significantly lower:¹

(Belgium – French)²
(Colombia)
Cyprus
(Denmark)
France
(Greece)
Iceland
Iran, Islamic Republic
(Kuwait)
(Latvia – LSS)³
(Lithuania)
Portugal
(Romania)
(South Africa)

+ The term "nation" is used to refer to nations, states, or jurisdictions. Performance for nations is based on public school data only. Nations not meeting international guidelines are shown in parentheses.

1 See explanation on pp. 3-4.

2 The Flemish and French educational systems in Belgium participated separately.

3 Latvia is designated LSS because only Latvian-speaking schools were tested, which represent less than 65% of the population.

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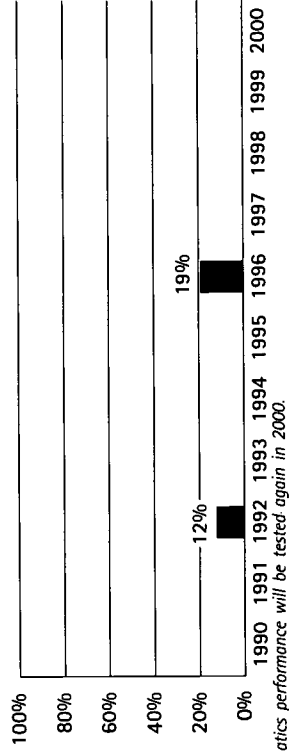


1. Improvement Over Time

Have West Virginia's 4th graders improved in mathematics achievement?
 Yes. The percentage of West Virginia's public school 4th graders who met the Goals Panel's performance standard in mathematics increased from 12% in 1992, to 19% in 1996.

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



2. State Comparisons[†]

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

9 states had significantly higher¹ percentages of students who were at or above Proficient on NAEP:

Connecticut	31%	New Jersey, Texas	25%
Minnesota	29%	Nebraska, ² North Dakota ²	24%
Maine, Wisconsin	27%	Vermont ²	23%

23 states had similar¹ percentages of students who were at or above Proficient on NAEP:

Indiana, ² Massachusetts ²	24%	Missouri, New York, Pennsylvania	20%
Michigan, ² Utah ²	23%	West Virginia , Virginia, Wyoming	19%
Colorado, Iowa, Maryland, Montana	22%	Rhode Island, Tennessee	17%
U.S. , [*] Alaska, North Carolina, Oregon, Washington	21%	Delaware, Hawaii, Kentucky	16%
		Arizona ²	15%

12 states had significantly lower¹ percentages of students who were at or above Proficient on NAEP:

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

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

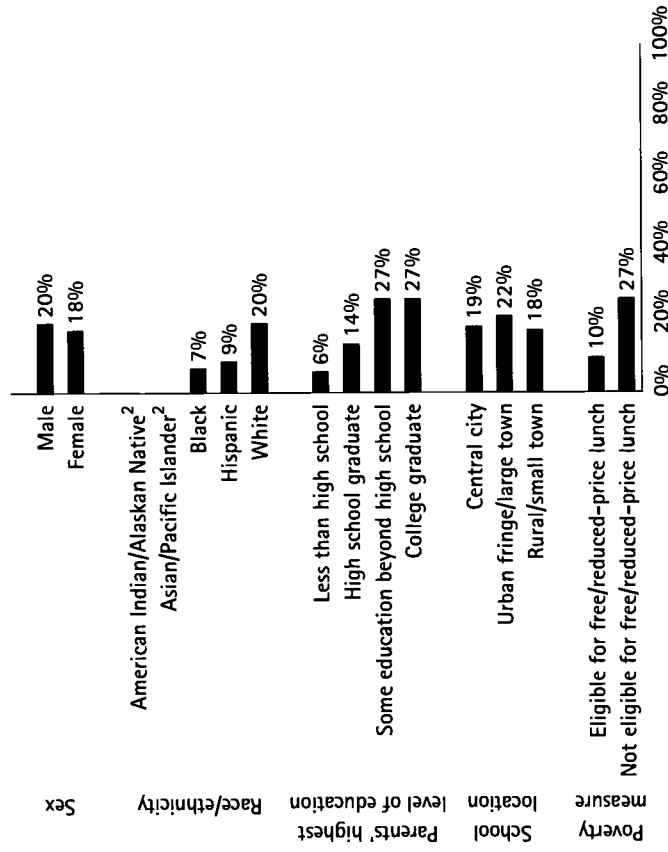
¹ See explanation on pp. 3-4.

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

* 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 subgroups¹ in West Virginia 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.

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

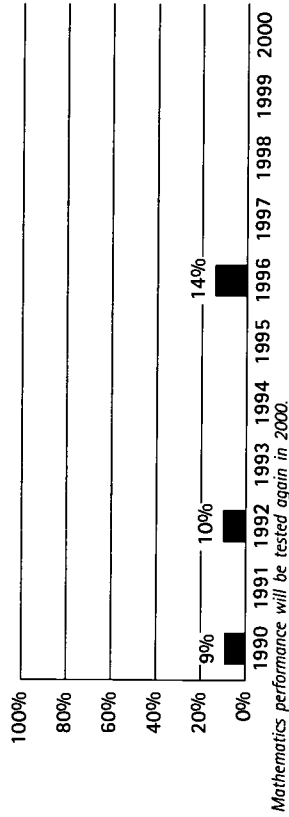


1. Improvement Over Time

Have West Virginia's 8th graders improved in mathematics achievement?
 Yes. *The percentage of West Virginia's public school 8th graders who met the Goals Panel's performance standard in mathematics increased from 9% in 1990, to 14% in 1996.*

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



2. State Comparisons[†]

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

27 states had significantly higher¹ percentages of students who were at or above Proficient on NAEP:

Minnesota	34%	Colorado	25%
North Dakota	33%	U.S.* Indiana, Maryland, Utah	24%
Montana, Wisconsin	32%	Missouri, New York, Wyoming	22%
Connecticut, Iowa, Maine, Nebraska	31%	Texas, Virginia	21%
Alaska	30%	North Carolina, Rhode Island	20%
Massachusetts, Michigan	28%	Delaware	19%
Vermont	27%	Arizona	18%
Oregon, Washington	26%		

10 states had similar¹ percentages of students who were at or above Proficient on NAEP:

California, Florida	17%	Arkansas	13%
Georgia, Hawaii, Kentucky	16%	Alabama	12%
Tennessee	15%		
West Virginia , New Mexico, South Carolina	14%		

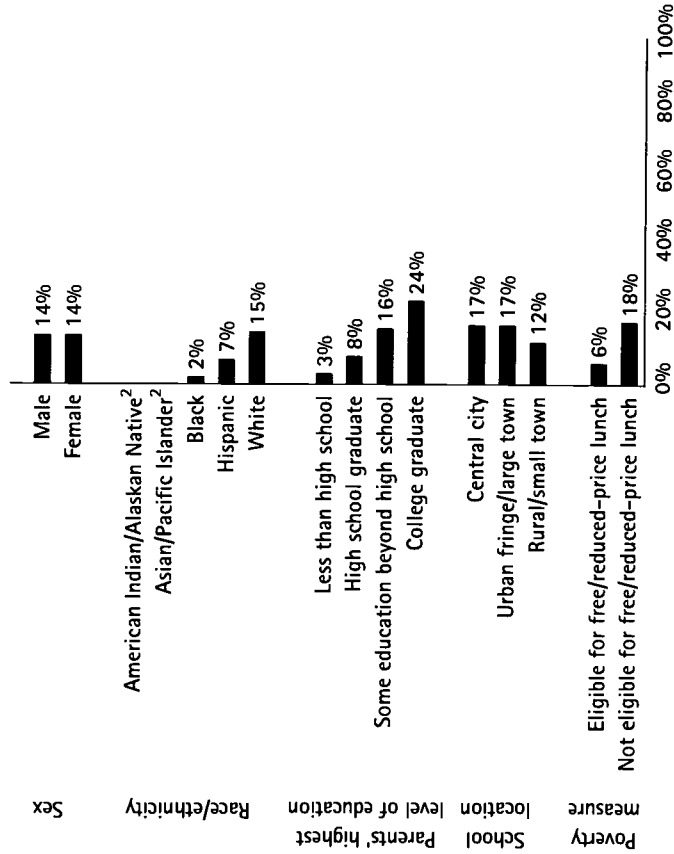
4 states had significantly lower¹ percentages of students who were at or above Proficient on NAEP:

Louisiana, Mississippi	7%	District of Columbia	5%
Guam	6%		

[†] The term "state" is used to refer to the 50 states, the District of Columbia, and the territories.
¹ See explanation on pp. 3-4.
 * Figure shown for the U.S. includes both public and nonpublic school data.

3. Subgroup Performance

What percentages of public school 8th graders in different subgroups¹ in West Virginia 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.
² Characteristics of the sample do not permit a reliable estimate.

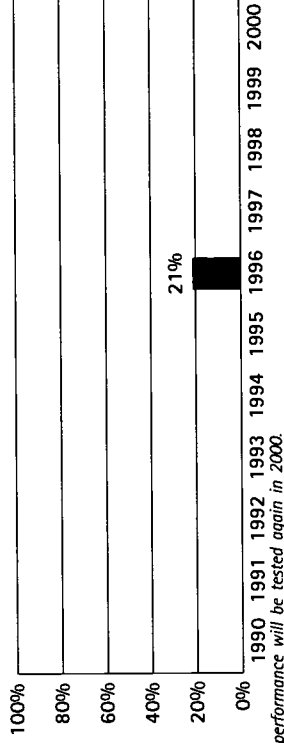
1. Improvement Over Time

Have West Virginia's 8th graders improved in science achievement?

In 1996, 21% of West Virginia's public school 8th graders met the Goals Panel's performance standard in science. The Goals Panel will report whether science performance has improved over time when science is assessed again in 2000.

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 science assessment



Science performance will be tested again in 2000.

2. State Comparisons[†]

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

22 states had significantly higher¹ percentages of students who were at or above Proficient on NAEP:

Maine, Montana, North Dakota	41%	Alaska	31%
Wisconsin	39%	Indiana	30%
Massachusetts, Minnesota	37%	U.S.*	29%
Connecticut, Iowa	36%	Missouri	28%
Nebraska	35%	New York, Virginia, Washington	27%
Vermont, Wyoming	34%	Rhode Island	26%
Colorado, Michigan, Oregon, Utah	32%		

13 states had similar¹ percentages of students who were at or above Proficient on NAEP:

Maryland	25%	California	20%
North Carolina	24%	New Mexico	19%
Arizona, Kentucky, Texas	23%	Alabama	18%
Arkansas, Tennessee	22%		
West Virginia , Delaware, Florida, Georgia	21%		

6 states had significantly lower¹ percentages of students who were at or above Proficient on NAEP:

South Carolina	17%	Mississippi	12%
Hawaii	15%	Guam	7%
Louisiana	13%	District of Columbia	5%

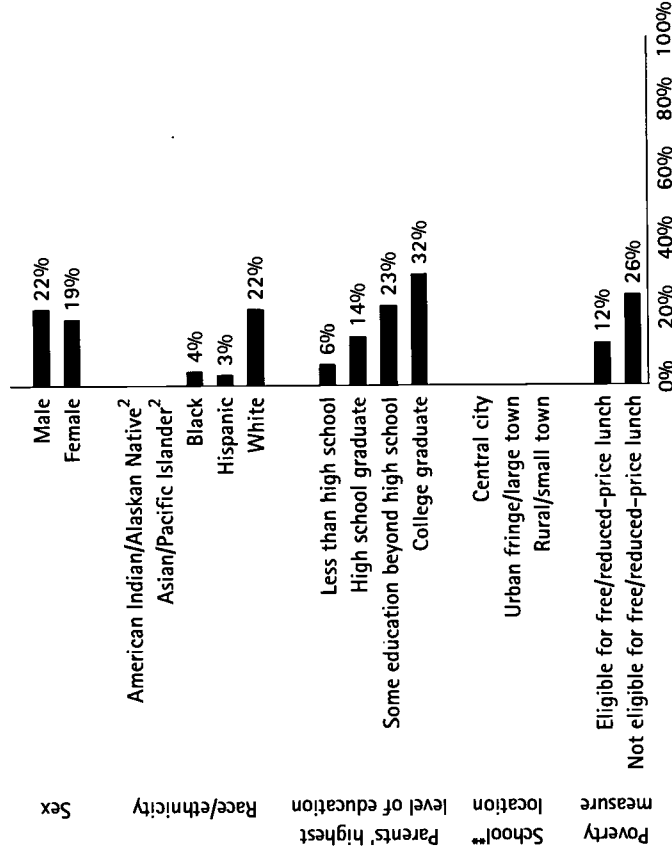
[†] The term "state" is used to refer to the 50 states, the District of Columbia, and the territories.

¹ See explanation on pp. 3-4.

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

3. Subgroup Performance

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



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

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

** No school location data for science in 1996.

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 West Virginia participated in the TIMSS mathematics assessment, how would their average performance compare to that of students who took TIMSS in these nations?

22 nations[†] would be expected to perform significantly higher:¹

(Australia)
(Austria)
Belgium – Flemish²
(Belgium – French)²
(Bulgaria)
Canada
Czech Republic
France
Hong Kong
Hungary
Ireland
(Israel)
Japan
Korea
(Netherlands)
Russian Federation
Singapore
Slovak Republic
(Slovenia)
Sweden
(Switzerland)
(Thailand)

14 nations[†] would be expected to perform similarly:¹

Cyprus
(Denmark)
(England)
(Germany)
(Greece)
Iceland
(Latvia – LSS)³
(Lithuania)
New Zealand
Norway
(Romania)
(Scotland)
Spain
United States
West Virginia

5 nations[†] would be expected to perform significantly lower:¹

(Colombia)
Iran, Islamic Republic
(Kuwait)
Portugal
(South Africa)

† The term "nation" is used to refer to nations, states, or jurisdictions. Performance for nations is based on public school data only. Nations not meeting international guidelines are shown in parentheses.

1 See explanation on pp. 3–4.

2 The Flemish and French educational systems in Belgium participated separately.

3 Latvia is designated LSS because only Latvian-speaking schools were tested, which represent less than 65% of the population.

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 West Virginia participated in the TIMSS science assessment, how would their average performance compare to that of students who took TIMSS in these nations?

10 nations[†] would be expected to perform significantly higher:¹

(Austria)
(Bulgaria)
Czech Republic
(England)
Hungary
Japan
Korea
(Netherlands)
Singapore
(Slovenia)

17 nations[†] would be expected to perform similarly:¹

(Australia)
Belgium – Flemish²
Canada
(Germany)
Hong Kong
Ireland
(Israel)
New Zealand
Norway
Russian Federation
(Scotland)
Slovak Republic
Spain
Sweden
(Switzerland)
(Thailand)
United States
West Virginia

14 nations[†] would be expected to perform significantly lower:¹

(Belgium – French)²
(Colombia)
Cyprus
(Denmark)
France
(Greece)
Iceland
Iran, Islamic Republic
(Kuwait)
(Latvia – LSS)³
(Lithuania)
Portugal
(Romania)
(South Africa)

† The term "nation" is used to refer to nations, states, or jurisdictions. Performance for nations is based on public school data only. Nations not meeting international guidelines are shown in parentheses.

1 See explanation on pp. 3–4.

2 The Flemish and French educational systems in Belgium participated separately.

3 Latvia is designated LSS because only Latvian-speaking schools were tested, which represent less than 65% of the population.

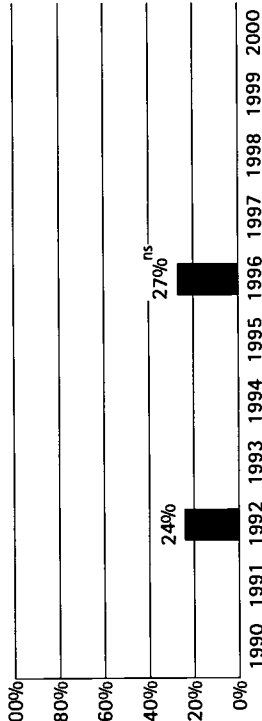
1. Improvement Over Time

Have Wisconsin'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 Wisconsin compare with other states in 4th grade mathematics achievement in public schools in 1996?

13 states had similar¹ percentages of students who were at or above Proficient on NAEP:

Connecticut	31%	Indiana, Massachusetts, Nebraska,	24%
Minnesota	29%	North Dakota	
Wisconsin , Maine	27%	Michigan, Utah, Vermont	23%
New Jersey, Texas	25%	Maryland ²	22%

31 states had significantly lower¹ percentages of students who were at or above Proficient on NAEP:

Colorado, ² Iowa, ² Montana ²	22%	Nevada	14%
U.S. , ² Alaska, North Carolina, Oregon, Washington	21%	Arkansas, Georgia, New Mexico	13%
Missouri, New York, Pennsylvania	20%	South Carolina	12%
Virginia, West Virginia, Wyoming	19%	Alabama, California	11%
Rhode Island, Tennessee	17%	Louisiana, Mississippi	8%
Delaware, Hawaii, Kentucky	16%	District of Columbia	5%
Arizona, Florida	15%	Guam	3%

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

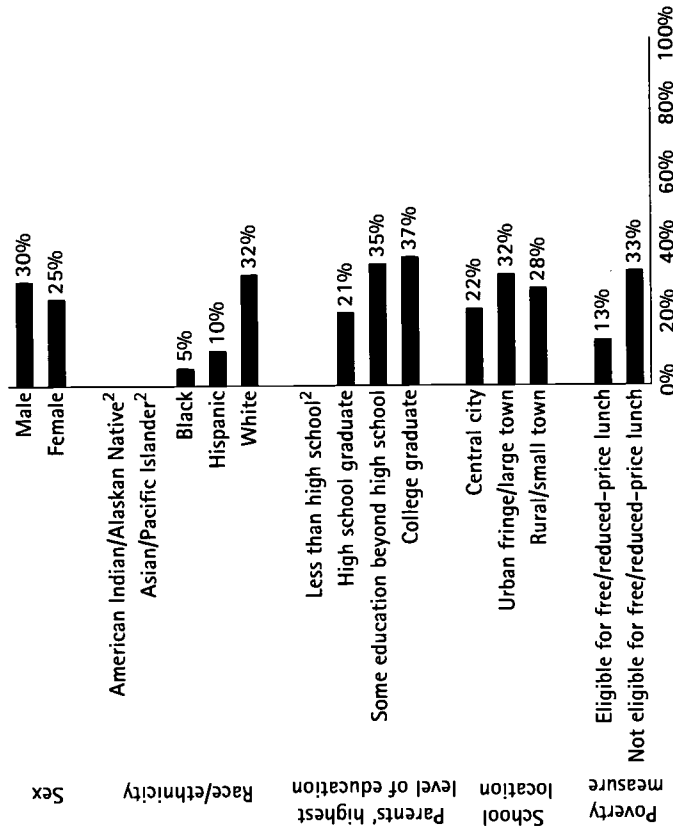
¹ See explanation on pp. 3-4.

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

^{*} 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 subgroups¹ in Wisconsin 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.

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

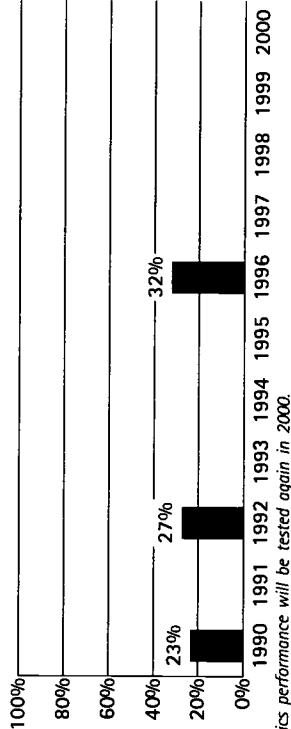
1. Improvement Over Time

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

Yes. The percentage of Wisconsin's public school 8th graders who met the Goals Panel's performance standard in mathematics increased from 23% in 1990, to 32% in 1996.

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



Mathematics performance will be tested again in 2000.

2. State Comparisons*

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

12 states had similar¹ percentages of students who were at or above Proficient on NAEP:

Minnesota	34%	Alaska	30%
North Dakota	33%	Massachusetts, Michigan	28%
Wisconsin , Montana	32%	Vermont	27%
Connecticut, Iowa, Maine, Nebraska	31%	Oregon ²	26%

29 states had significantly lower¹ percentages of students who were at or above Proficient on NAEP:

Washington ²	26%	Georgia, Hawaii, Kentucky	16%
Colorado	25%	Tennessee	15%
U.S. [*] Indiana, Maryland, Utah	24%	New Mexico, South Carolina,	14%
Missouri, New York, Wyoming	22%	West Virginia	13%
Texas, Virginia	21%	Arkansas	12%
North Carolina, Rhode Island	20%	Alabama	12%
Delaware	19%	Louisiana, Mississippi	7%
Arizona	18%	Guam	6%
California, Florida	17%	District of Columbia	5%

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

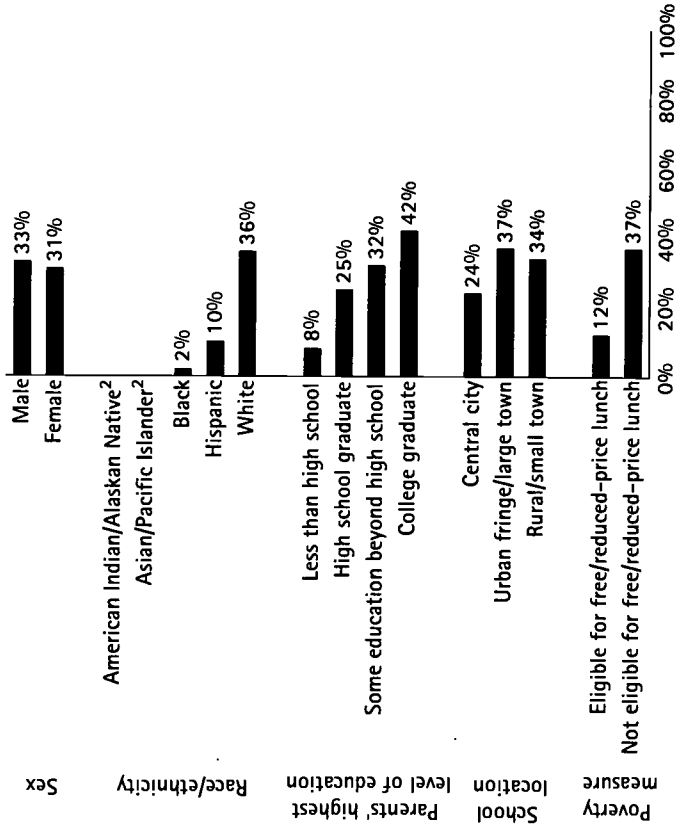
¹ See explanation on pp. 3-4.

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

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

3. Subgroup Performance

What percentages of public school 8th graders in different subgroups¹ in Wisconsin 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.

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

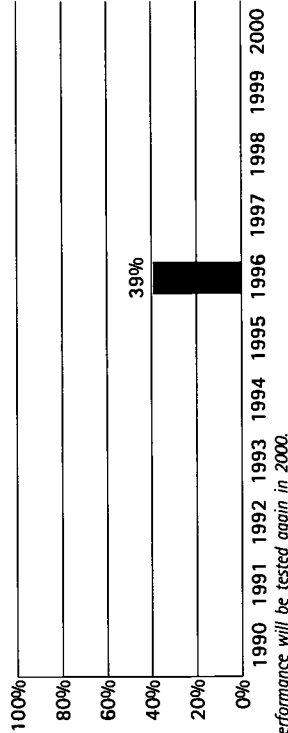
1. Improvement Over Time

Have Wisconsin's 8th graders improved in science achievement?

In 1996, 39% of Wisconsin's public school 8th graders met the Goals Panel's performance standard in science. The Goals Panel will report whether science performance has improved over time when science is assessed again in 2000.

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 science assessment



2. State Comparisons[†]

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

10 states had similar¹ percentages of students who were at or above Proficient on NAEP:

Maine, Montana, North Dakota	41%	Connecticut, Iowa	36%
Wisconsin	39%	Nebraska	35%
Massachusetts, Minnesota	37%	Vermont, Wyoming	34%

31 states had significantly lower¹ percentages of students who were at or above Proficient on NAEP:

Colorado, Michigan, Oregon, Utah	32%	Delaware, Florida, Georgia,	21%
Alaska	31%	West Virginia	
Indiana	30%	California	20%
U.S.*	29%	New Mexico	19%
Missouri	28%	Alabama	18%
New York, Virginia, Washington	27%	South Carolina	17%
Rhode Island	26%	Hawaii	15%
Maryland	25%	Louisiana	13%
North Carolina	24%	Mississippi	12%
Arizona, Kentucky, Texas	23%	Guam	7%
Arkansas, Tennessee	22%	District of Columbia	5%

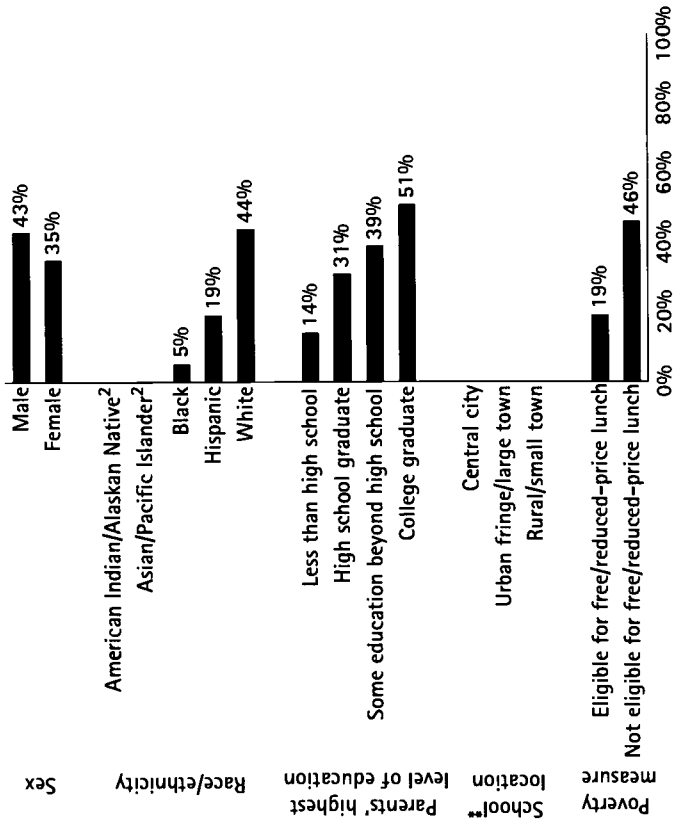
[†] The term "state" is used to refer to the 50 states, the District of Columbia, and the territories.

¹ See explanation on pp. 3-4.

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

3. Subgroup Performance

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



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

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

[†] No school location data for science in 1996.

International Comparisons

Mathematics Grade 8

Forty-one nations¹ participated in the Third International Mathematics and Science Study (TIMSS) in 8th grade mathematics in 1995. If public school 8th graders in Wisconsin participated in the TIMSS mathematics assessment, how would their average performance compare to that of students who took TIMSS in these nations?

6 nations¹ would be expected to perform significantly higher:¹

Belgium – Flemish²
Czech Republic
Hong Kong
Japan
Korea
Singapore

19 nations¹ would be expected to perform similarly:¹

(Australia)
(Austria)
(Belgium – French)²
(Bulgaria)
Canada
(England)
France
(Germany)
Hungary
Ireland
(Israel)
(Netherlands)
New Zealand
Russian Federation
Slovak Republic
(Slovenia)
Sweden
(Switzerland)
(Thailand)
Wisconsin

16 nations¹ would be expected to perform significantly lower:¹

(Colombia)
Cyprus
(Denmark)
(Greece)
Iceland
Iran, Islamic Republic
(Kuwait)
(Latvia – LSS)³
(Lithuania)
Norway
Portugal
(Romania)
(Scotland)
(South Africa)
Spain
United States

¹ The term "nation" is used to refer to nations, states, or jurisdictions. Performance for nations is based on public school data only. Nations not meeting international guidelines are shown in parentheses.
² See explanation on pp. 3-4.

² The Flemish and French educational systems in Belgium participated separately.

³ Latvia is designated LSS because only Latvian-speaking schools were tested, which represent less than 65% of the population.

Wisconsin

Science Grade 8 ☆

Forty-one nations¹ participated in the Third International Mathematics and Science Study (TIMSS) in 8th grade science in 1995. If public school 8th graders in Wisconsin participated in the TIMSS science assessment, how would their average performance compare to that of students who took TIMSS in these nations?

1 nation¹ would be expected to perform significantly higher:¹

Singapore

12 nations¹ would be expected to perform similarly:¹

(Australia)
(Austria)
Belgium – Flemish²
(Bulgaria)
Czech Republic
(England)
Hungary
Japan
Korea
(Netherlands)
Slovak Republic
(Slovenia)
Wisconsin

28 nations¹ would be expected to perform significantly lower:¹

(Belgium – French)²
Canada
(Colombia)
Cyprus
(Denmark)
France
(Germany)
(Greece)
Hong Kong
Iceland
Iran, Islamic Republic
Ireland
(Israel)
(Kuwait)
(Latvia – LSS)³
(Lithuania)
New Zealand
Norway
Portugal
(Romania)
Russian Federation
(Scotland)
(South Africa)
Spain
Sweden
(Switzerland)
(Thailand)
United States

¹ The term "nation" is used to refer to nations, states, or jurisdictions. Performance for nations is based on public school data only. Nations not meeting international guidelines are shown in parentheses.
² See explanation on pp. 3-4.

² The Flemish and French educational systems in Belgium participated separately.

³ Latvia is designated LSS because only Latvian-speaking schools were tested, which represent less than 65% of the population.

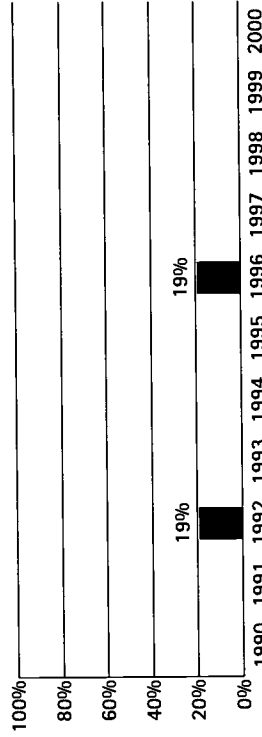
1. Improvement Over Time

Have Wyoming'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



Mathematics performance will be tested again in 2000.

2. State Comparisons[†]

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

9 states had significantly higher¹ percentages of students who were at or above Proficient on NAEP:

Connecticut	31%	New Jersey, Texas	25%
Minnesota	29%	Nebraska, ² North Dakota ²	24%
Maine, Wisconsin	27%	Vermont ¹	23%

23 states had similar¹ percentages of students who were at or above Proficient on NAEP:

Indiana, ² Massachusetts ²	24%	Missouri, New York, Pennsylvania	20%
Michigan, ² Utah ²	23%	Wyoming , Virginia, West Virginia	19%
Colorado, Iowa, Maryland, Montana	22%	Rhode Island, Tennessee	17%
U.S. , ² Alaska, North Carolina, Oregon, Washington	21%	Delaware, Hawaii, Kentucky	16%
		Arizona ²	15%

12 states had significantly lower¹ percentages of students who were at or above Proficient on NAEP:

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

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

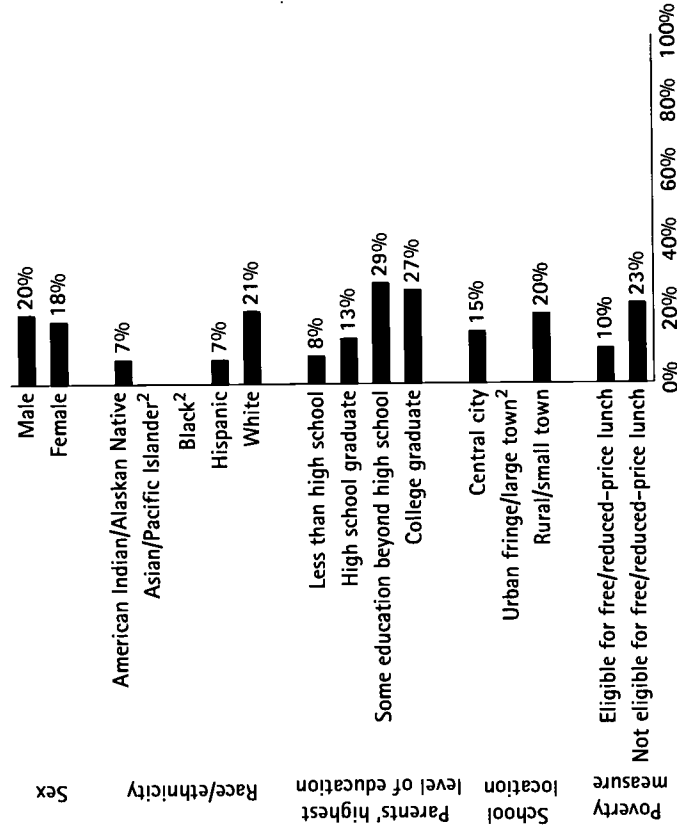
¹ See explanation on pp. 3-4.

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

[•] 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 subgroups¹ in Wyoming 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.

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



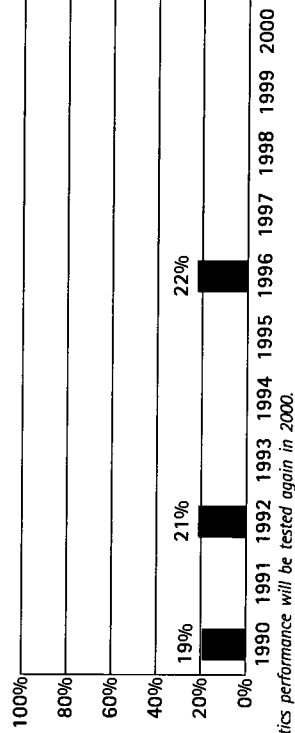
1. Improvement Over Time

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

Yes. The percentage of Wyoming's public school 8th graders who met the Goals Panel's performance standard in mathematics increased from 19% in 1990, to 22% in 1996.

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



2. State Comparisons[†]

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

13 states had significantly higher¹ percentages of students who were at or above Proficient on NAEP:

Minnesota	34%	Alaska	30%
North Dakota	33%	Massachusetts, Michigan	28%
Montana, Wisconsin	32%	Vermont	27%
Connecticut, Iowa, Maine, Nebraska	31%	Washington ²	26%

12 states had similar¹ percentages of students who were at or above Proficient on NAEP:

Oregon ²	26%	Texas, Virginia	21%
Colorado	25%	North Carolina, Rhode Island	20%
U.S., [*] Indiana, Maryland, Utah	24%	Delaware	19%
Wyoming, Missouri, New York	22%		

16 states had significantly lower¹ percentages of students who were at or above Proficient on NAEP:

Arizona	18%	Arkansas	13%
California, Florida	17%	Alabama	12%
Georgia, Hawaii, Kentucky	16%	Louisiana, Mississippi	7%
Tennessee	15%	Guam	6%
New Mexico, South Carolina, West Virginia	14%	District of Columbia	5%

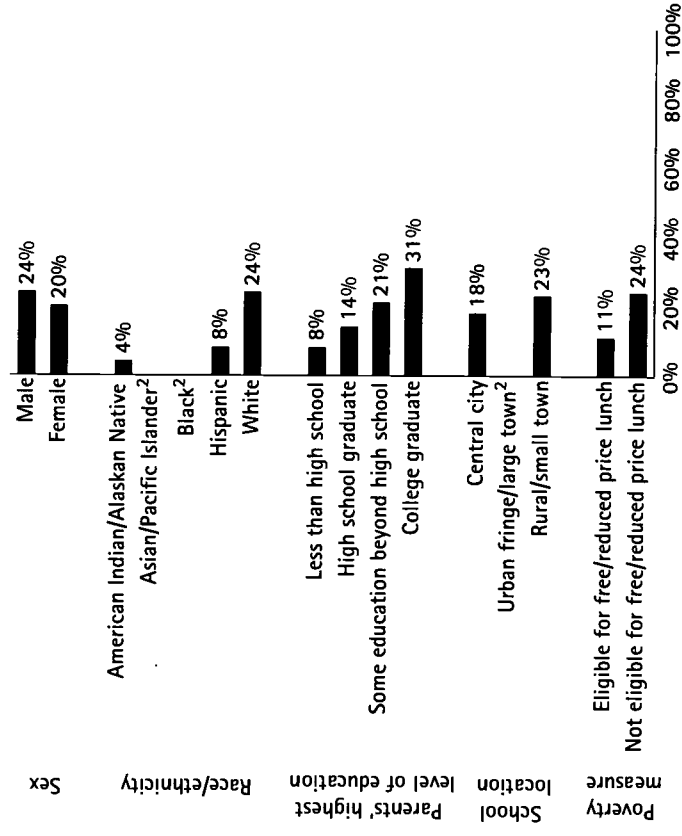
[†] The term "state" is used to refer to the 50 states, the District of Columbia, and the territories.

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

3. Subgroup Performance

What percentages of public school 8th graders in different subgroups¹ in Wyoming 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.

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

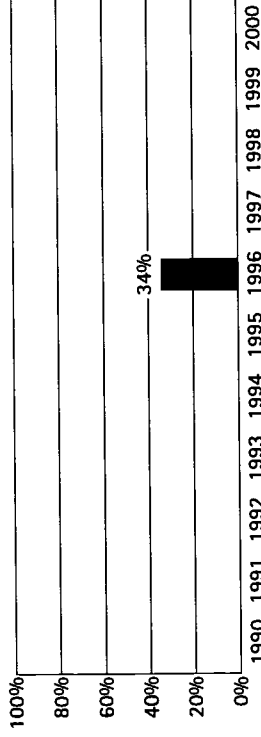
1. Improvement Over Time

Have Wyoming's 8th graders improved in science achievement?

In 1996, 34% of Wyoming's public school 8th graders met the Goals Panel's performance standard in science. The Goals Panel will report whether science performance has improved over time when science is assessed again in 2000.

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 science assessment



Science performance will be tested again in 2000.

2. State Comparisons[†]

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

1 state had a significantly higher¹ percentage of students who were at or above Proficient on NAEP:

North Dakota² 41%

15 states had similar¹ percentages of students who were at or above Proficient on NAEP:

Maine, ² Montana ²	41%	Wyoming , Vermont	34%
Wisconsin	39%	Colorado, Michigan, Oregon, Utah	32%
Massachusetts, Minnesota	37%	Alaska	31%
Connecticut, Iowa	36%	Indiana	30%
Nebraska	35%		

25 states had significantly lower¹ percentages of students who were at or above Proficient on NAEP:

U.S.*	29%	California	20%
Missouri	28%	New Mexico	19%
New York, Virginia, Washington	27%	Alabama	18%
Rhode Island	26%	South Carolina	17%
Maryland	25%	Hawaii	15%
North Carolina	24%	Louisiana	13%
Arizona, Kentucky, Texas	23%	Mississippi	12%
Arkansas, Tennessee	22%	Guam	7%
Delaware, Florida, Georgia, West Virginia	21%	District of Columbia	5%

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

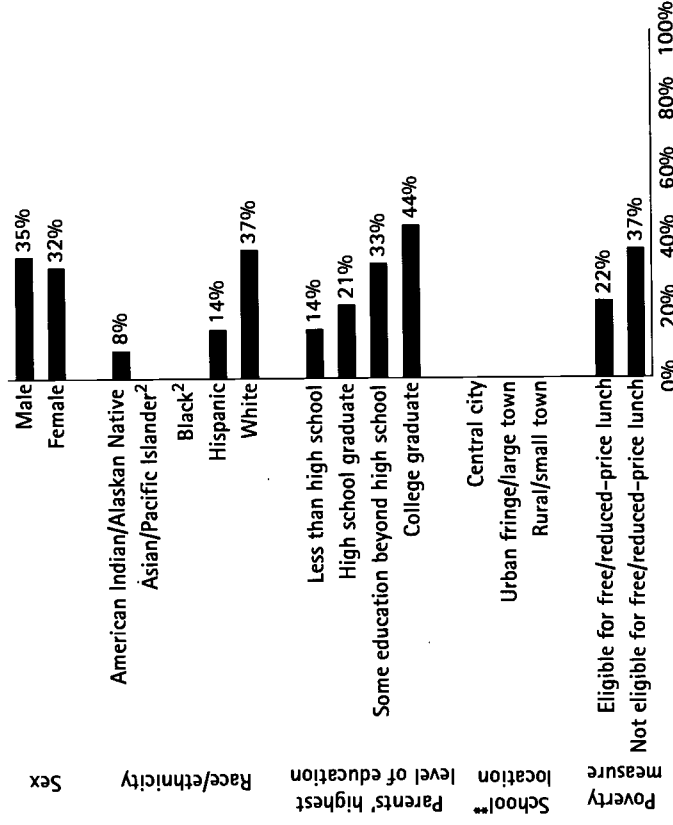
¹ See explanation on pp. 3-4.

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

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

3. Subgroup Performance

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



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

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

** No school location data for science in 1996.

International Comparisons

Mathematics Grade 8

Forty-one nations¹ participated in the Third International Mathematics and Science Study (TIMSS) in 8th grade mathematics in 1995. If public school 8th graders in Wyoming participated in the TIMSS mathematics assessment, how would their average performance compare to that of students who took TIMSS in these nations?

15 nations¹ would be expected to perform significantly higher:¹

(Austria)
Belgium – Flemish?
(Bulgaria)
Czech Republic
France
Hong Kong
Hungary
Japan
Korea
(Netherlands)
Russian Federation
Singapore
Slovak Republic
(Slovenia)
(Switzerland)

16 nations¹ would be expected to perform similarly:¹

(Australia)
(Belgium – French)?
Canada
(Denmark)
(England)
(Germany)
Iceland
Ireland
(Israel)
(Latvia – LSS)²
New Zealand
Norway
(Scotland)
Sweden
(Thailand)
United States
Wyoming

10 nations¹ would be expected to perform significantly lower:¹

(Colombia)
Cyprus
(Greece)
Iran, Islamic Republic
(Kuwait)
(Lithuania)
Portugal
(Romania)
(South Africa)
Spain

† The term "nation" is used to refer to nations, states, or jurisdictions. Performance for nations is based on public school data only. Nations not meeting international guidelines are shown in parentheses.

1 See explanation on pp. 3-4.

2 The Flemish and French educational systems in Belgium participated separately.

3 Latvia is designated LSS because only Latvian-speaking schools were tested, which represent less than 65% of the population.

Wyoming

Science Grade 8 ☆

Forty-one nations¹ participated in the Third International Mathematics and Science Study (TIMSS) in 8th grade science in 1995. If public school 8th graders in Wyoming participated in the TIMSS science assessment, how would their average performance compare to that of students who took TIMSS in these nations?

1 nation¹ would be expected to perform significantly higher:¹

Singapore

14 nations¹ would be expected to perform similarly:¹

(Australia)
(Austria)
Belgium – Flemish?
(Bulgaria)
Czech Republic
(England)
Hungary
Ireland
Japan
Korea
(Netherlands)
Russian Federation
Slovak Republic
(Slovenia)
Wyoming

26 nations¹ would be expected to perform significantly lower:¹

(Belgium – French)?
Canada
(Colombia)
Cyprus
(Denmark)
France
(Germany)
(Greece)
Hong Kong
Iceland
Iran, Islamic Republic
(Israel)
(Kuwait)
(Latvia – LSS)²
(Lithuania)
New Zealand
Norway
Portugal
(Romania)
(Scotland)
(South Africa)
Spain
Sweden
(Switzerland)
(Thailand)
United States

† The term "nation" is used to refer to nations, states, or jurisdictions. Performance for nations is based on public school data only. Nations not meeting international guidelines are shown in parentheses.

1 See explanation on pp. 3-4.

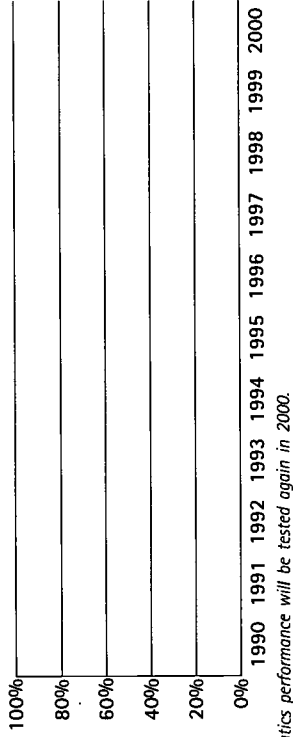
2 The Flemish and French educational systems in Belgium participated separately.

3 Latvia is designated LSS because only Latvian-speaking schools were tested, which represent less than 65% of the population.

1. Improvement Over Time

Have American Samoa's 4th graders improved in mathematics achievement?
American Samoa did not participate in NAEP mathematics in 1992 or 1996.

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



Mathematics performance will be tested again in 2000.

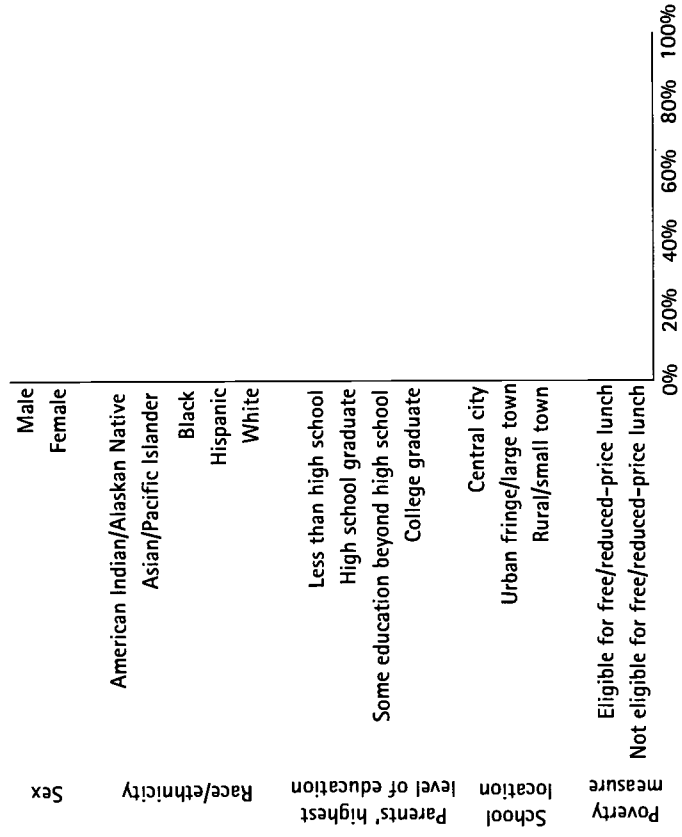
2. State Comparisons[†]

How did American Samoa compare with other states in 4th grade mathematics achievement in public schools in 1996?
American Samoa did not participate in NAEP mathematics in 1996.

3. Subgroup Performance

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

American Samoa did not participate in NAEP mathematics in 1996.

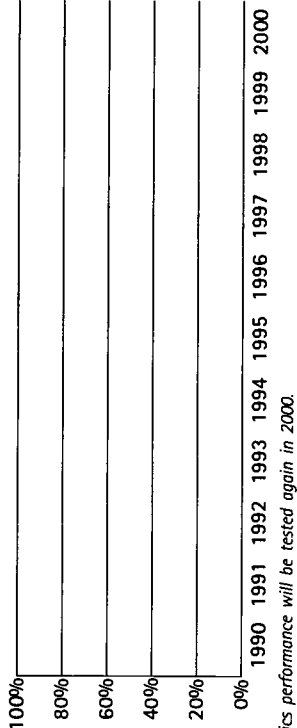


[†] The term "state" is used to refer to the 50 states, the District of Columbia, and the territories.

1. Improvement Over Time

Have American Samoa's 8th graders improved in mathematics achievement?
American Samoa did not participate in NAEP mathematics in 1990, 1992, or 1996.

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



Mathematics performance will be tested again in 2000.

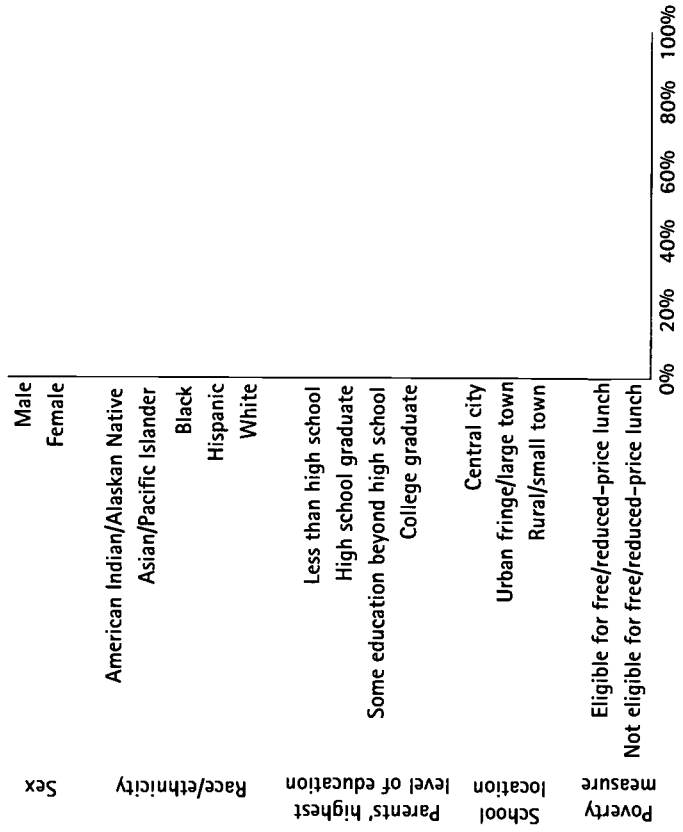
2. State Comparisons[†]

How did American Samoa compare with other states in 8th grade mathematics achievement in public schools in 1996?
American Samoa did not participate in NAEP mathematics in 1996.

3. Subgroup Performance

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

American Samoa did not participate in NAEP mathematics in 1996.

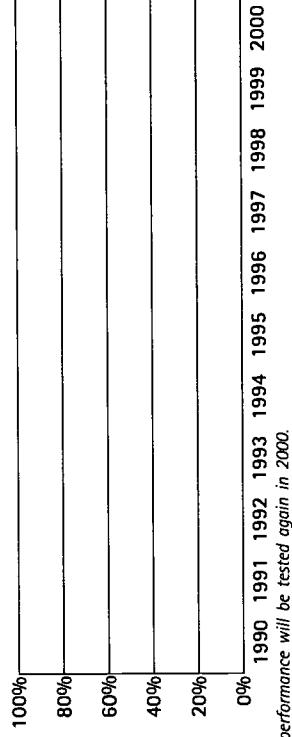


[†] The term "state" is used to refer to the 50 states, the District of Columbia, and the territories.

1. Improvement Over Time

Have American Samoa's 8th graders improved in science achievement?
American Samoa 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.

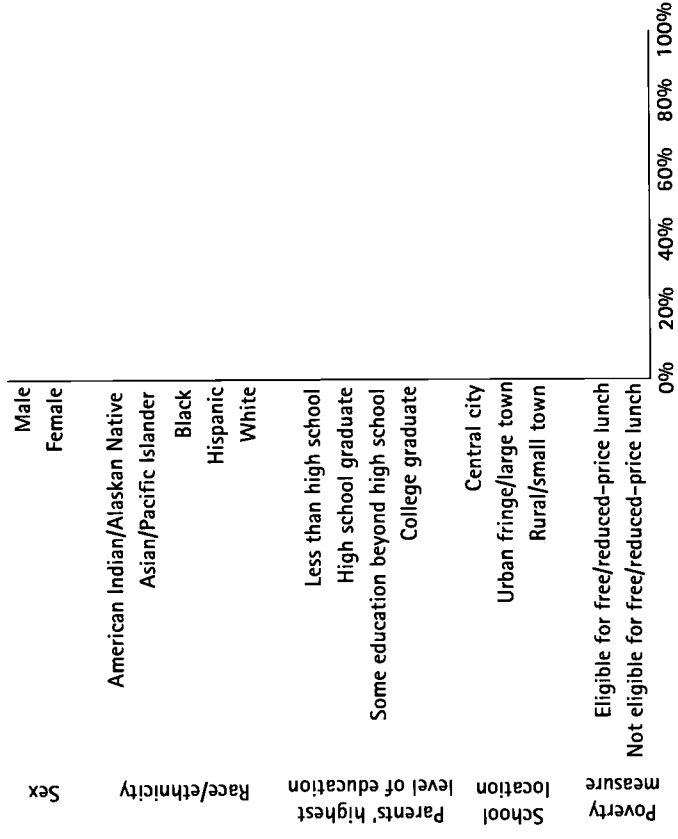
2. State Comparisons[†]

How did American Samoa compare with other states in 8th grade science achievement in public schools in 1996?
American Samoa did not participate in NAEP science in 1996.

3. Subgroup Performance

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

American Samoa did not participate in NAEP science in 1996.



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

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 American Samoa 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 American Samoa would have performed on TIMSS, because the estimate is based on scores from the 1996 NAEP mathematics assessment. American Samoa did not participate in NAEP mathematics in 1996.

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

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 American Samoa participated in the TIMSS science assessment, how would their average performance compare to that of students who took TIMSS in these nations?

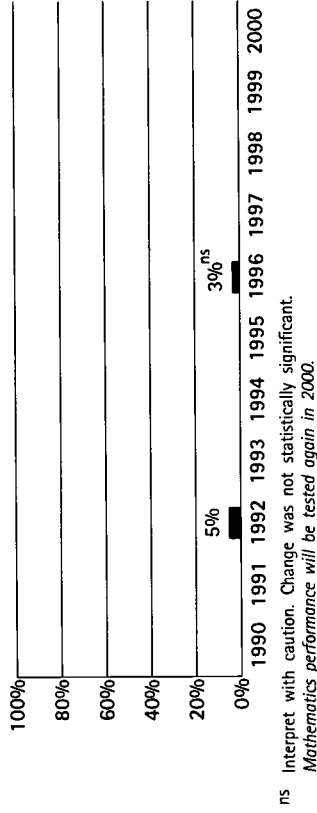
It is not possible to predict how students in American Samoa would have performed on TIMSS, because the estimate is based on scores from the 1996 NAEP science assessment. American Samoa did not participate in NAEP science in 1996.

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

1. Improvement Over Time

Have Guam's 4th graders improved in mathematics achievement?
Nat 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



2. State Comparisons[†]

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

44 states had significantly higher¹ percentages of students who were at or above Proficient on NAEP:

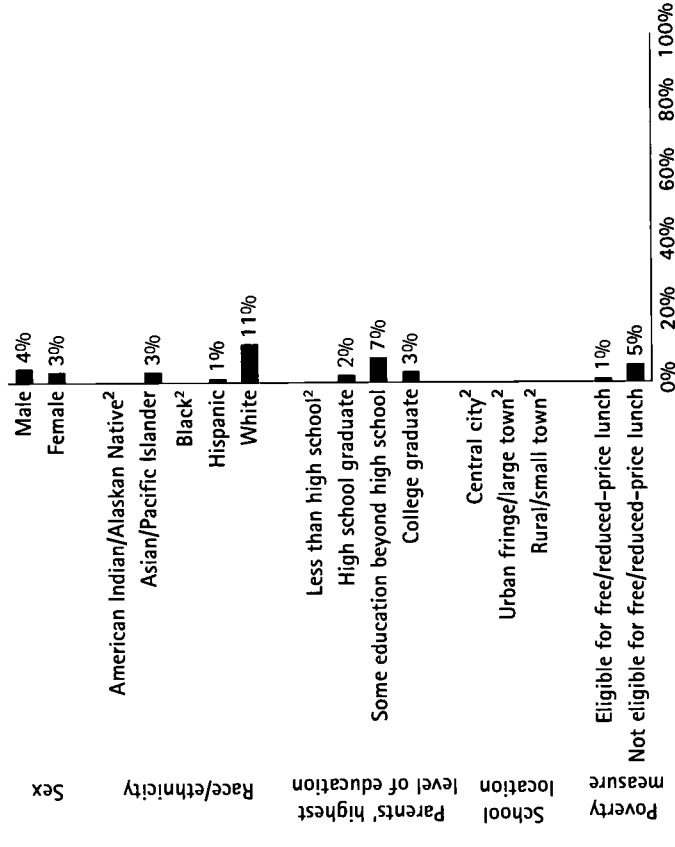
Connecticut	31%	Virginia, West Virginia, Wyoming	19%
Minnesota	29%	Rhode Island, Tennessee	17%
Maine, Wisconsin	27%	Delaware, Hawaii, Kentucky	16%
New Jersey, Texas	25%	Arizona, Florida	15%
Indiana, Massachusetts, Nebraska,	24%	Nevada	14%
North Dakota	23%	Arkansas, Georgia, New Mexico	13%
Michigan, Utah, Vermont	23%	South Carolina	12%
Colorado, Iowa, Maryland, Montana	22%	Alabama, California	11%
U.S.: Alaska, North Carolina, Oregon,	21%	Louisiana, Mississippi	8%
Washington		District of Columbia	5%
Missouri, New York, Pennsylvania	20%		

No state had a similar¹ percentage of students who were at or above Proficient on NAEP:

Guam 3%

3. Subgroup Performance

What percentages of public school 4th graders in different subgroups¹ in Guam were at or above Proficient on the 1996 NAEP mathematics assessment?



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

¹ See explanation on pp. 3-4.

² Figure shown for the U.S. includes both public and nonpublic school data.

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

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

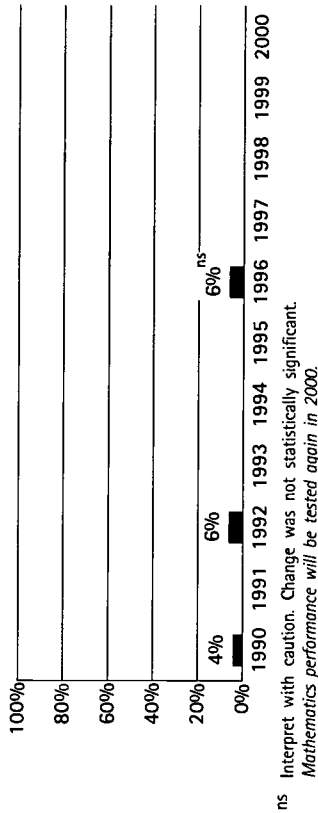
1. Improvement Over Time

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

Not yet. Between 1990 and 1996, 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



2. State Comparisons[†]

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

38 states had significantly higher¹ percentages of students who were at or above Proficient on NAEP:

Minnesota	34%	Texas, Virginia	21%
North Dakota	33%	North Carolina, Rhode Island	20%
Montana, Wisconsin	32%	Delaware	19%
Connecticut, Iowa, Maine, Nebraska	31%	Arizona	18%
Alaska	30%	California, Florida	17%
Massachusetts, Michigan	28%	Georgia, Hawaii, Kentucky	16%
Vermont	27%	Tennessee	15%
Oregon, Washington	26%	New Mexico, South Carolina,	14%
Colorado	25%	West Virginia	13%
U.S.,[*] Indiana, Maryland, Utah	24%	Arkansas	12%
Missouri, New York, Wyoming	22%	Alabama	

3 states had similar¹ percentages of students who were at or above Proficient on NAEP:

Louisiana, Mississippi	7%	District of Columbia	5%
Guam	6%		

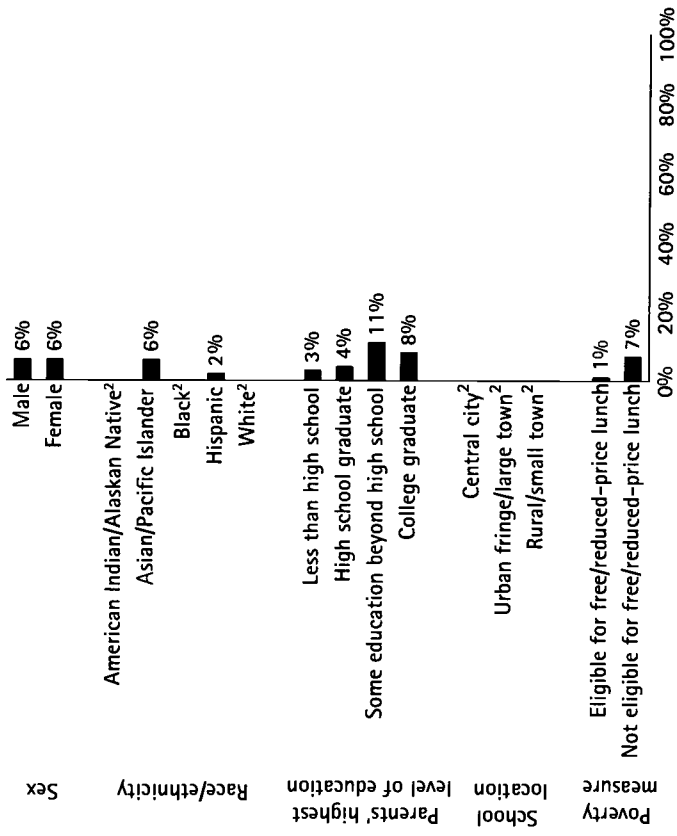
[†] The term "state" is used to refer to the 50 states, the District of Columbia, and the territories.

¹ See explanation on pp. 3-4.

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

3. Subgroup Performance

What percentages of public school 8th graders in different subgroups¹ in Guam 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.

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

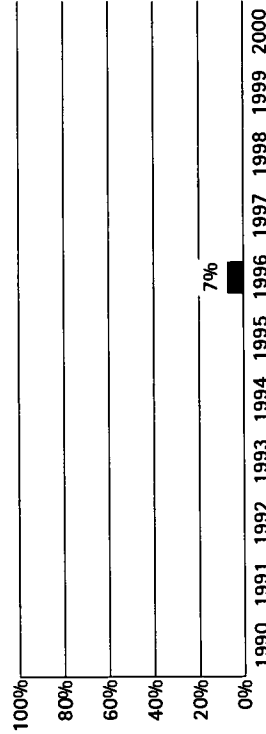
1. Improvement Over Time

Have Guam's 8th graders improved in science achievement?

In 1996, 7% of Guam's public school 8th graders met the Goals Panel's performance standard in science. The Goals Panel will report whether science performance has improved over time when science is assessed again in 2000.

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 science assessment



Science performance will be tested again in 2000.

2. State Comparisons[†]

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

40 states had significantly higher¹ percentages of students who were at or above Proficient on NAEP:

Maine, Montana, North Dakota	41%	Maryland	25%
Wisconsin	39%	North Carolina	24%
Massachusetts, Minnesota	37%	Arizona, Kentucky, Texas	23%
Connecticut, Iowa	36%	Arkansas, Tennessee	22%
Nebraska	35%	Delaware, Florida, Georgia,	21%
Vermont, Wyoming	34%	West Virginia	20%
Colorado, Michigan, Oregon, Utah	32%	California	19%
Alaska	31%	New Mexico	18%
Indiana	30%	Alabama	17%
U.S.*	29%	South Carolina	17%
Missouri	28%	Hawaii	15%
New York, Virginia, Washington	27%	Louisiana	13%
Rhode Island	26%	Mississippi	12%

1 state had a similar¹ percentage of students who were at or above Proficient on NAEP:

Guam	7%
District of Columbia	5%

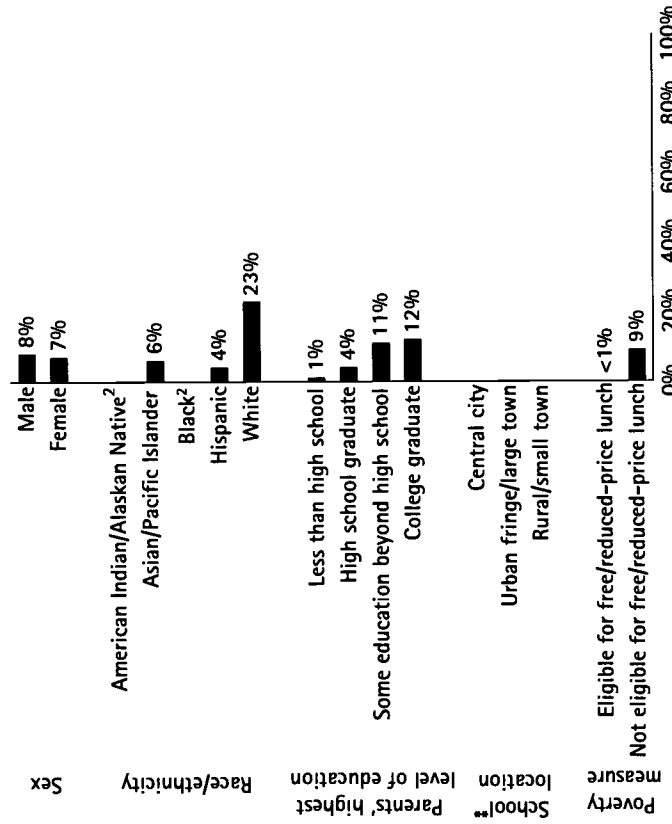
[†] The term "state" is used to refer to the 50 states, the District of Columbia, and the territories.

¹ See explanation on pp. 3-4.

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

3. Subgroup Performance

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



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

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

** No school location data for science in 1996.

International Comparisons

Guam

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 Guam participated in the TIMSS mathematics assessment, how would their average performance compare to that of students who took TIMSS in these nations?

37 nations[†] would be expected to perform significantly higher:¹

(Australia)	Korea
(Austria)	(Latvia – LSS) ³
(Belgium – Flemish) ²	(Lithuania)
(Belgium – French) ²	(Netherlands)
(Bulgaria)	New Zealand
Canada	Norway
Cyprus	Portugal
Czech Republic	(Romania)
(Denmark)	Russian Federation
(England)	(Scotland)
France	Singapore
(Germany)	Slovak Republic
(Greece)	(Slovenia)
Hong Kong	Spain
Hungary	Sweden
Iceland	(Switzerland)
Ireland	(Thailand)
(Israel)	United States
Japan	

1 nation[†] would be expected to perform similarly:¹

Guam Iran, Islamic Republic

3 nations[†] would be expected to perform significantly lower:¹

(Colombia)
(Kuwait)
(South Africa)

[†] The term "nation" is used to refer to nations, states, or jurisdictions. Performance for nations is based on public school data only. Nations not meeting international guidelines are shown in parentheses.

¹ See explanation on pp. 3-4.

² The Flemish and French educational systems in Belgium participated separately.

³ Latvia is designated LSS because only Latvian-speaking schools were tested, which represent less than 65% of the population.

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 Guam participated in the TIMSS science assessment, how would their average performance compare to that of students who took TIMSS in these nations?

37 nations[†] would be expected to perform significantly higher:¹

(Australia)	Korea
(Austria)	(Latvia – LSS) ³
(Belgium – Flemish) ²	(Lithuania)
(Belgium – French) ²	(Netherlands)
(Bulgaria)	New Zealand
Canada	Norway
Czech Republic	Portugal
(Denmark)	(Romania)
(England)	Russian Federation
France	(Scotland)
(Germany)	Singapore
(Greece)	Slovak Republic
Hong Kong	(Slovenia)
Hungary	Spain
Iceland	Sweden
Iran, Islamic Republic	(Switzerland)
Ireland	(Thailand)
(Israel)	United States
Japan	

2 nations[†] would be expected to perform similarly:¹

Cyprus
Guam (Kuwait)

2 nations[†] would be expected to perform significantly lower:¹

(Colombia)
(South Africa)

[†] The term "nation" is used to refer to nations, states, or jurisdictions. Performance for nations is based on public school data only. Nations not meeting international guidelines are shown in parentheses.

¹ See explanation on pp. 3-4.

² The Flemish and French educational systems in Belgium participated separately.

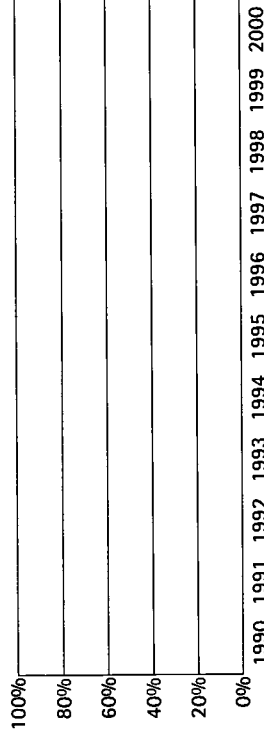
³ Latvia is designated LSS because only Latvian-speaking schools were tested, which represent less than 65% of the population.

1. Improvement Over Time

Have the Northern Marianas' 4th graders improved in mathematics achievement?

The Northern Marianas did not participate in NAEP mathematics in 1992 or 1996.

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



Mathematics performance will be tested again in 2000.

2. State Comparisons[†]

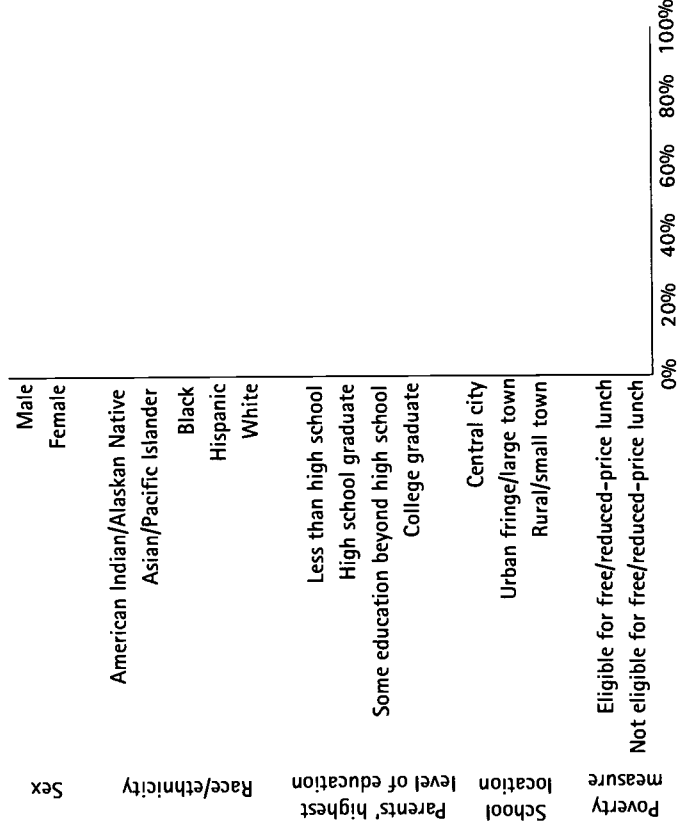
How did the Northern Marianas compare with other states in 4th grade mathematics achievement in public schools in 1996?

The Northern Marianas did not participate in NAEP mathematics in 1996.

3. Subgroup Performance

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

The Northern Marianas did not participate in NAEP mathematics in 1996.



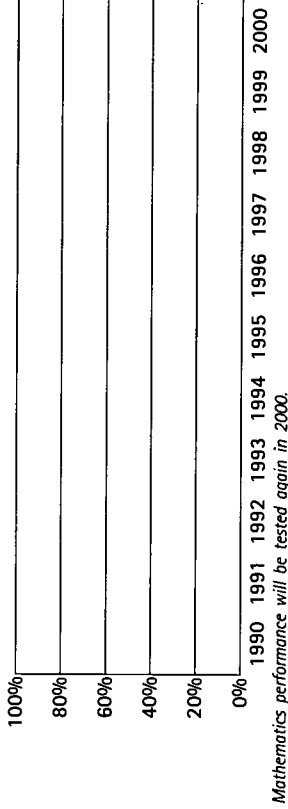
[†] The term "state" is used to refer to the 50 states, the District of Columbia, and the territories.

1. Improvement Over Time

Have the Northern Marianas' 8th graders improved in mathematics achievement?

The Northern Marianas did not participate in NAEP mathematics in 1990, 1992, or 1996.

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



Mathematics performance will be tested again in 2000.

2. State Comparisons[†]

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

The Northern Marianas did not participate in NAEP mathematics in 1996.

3. Subgroup Performance

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

The Northern Marianas did not participate in NAEP mathematics in 1996.

Subgroup	Male	Female
Sex		
American Indian/Alaskan Native		
Asian/Pacific Islander		
Black		
Hispanic		
White		
Race/ethnicity		
Less than high school		
High school graduate		
Some education beyond high school		
College graduate		
Parents' highest level of education		
Central city		
Urban fringe/large town		
Rural/small town		
School location		
Eligible for free/reduced-price lunch		
Not eligible for free/reduced-price lunch		
Poverty measure		

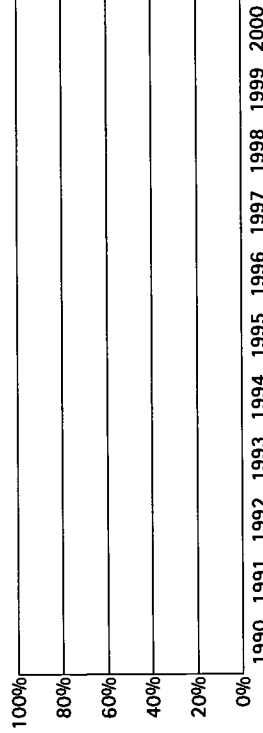
[†] The term "state" is used to refer to the 50 states, the District of Columbia, and the territories.

1. Improvement Over Time

Have the Northern Marianas' 8th graders improved in science achievement?

The Northern Marianas 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[†]

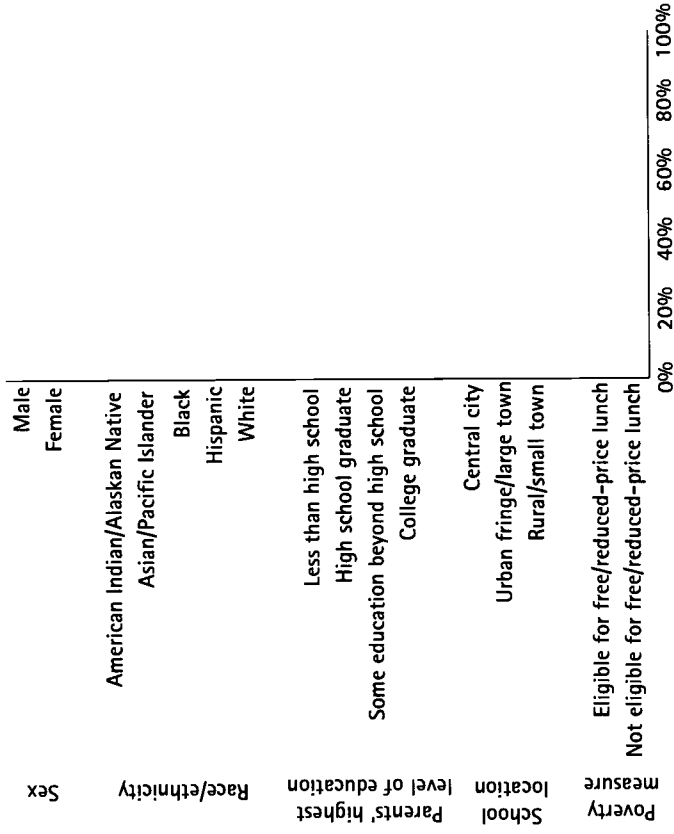
How did the Northern Marianas compare with other states in 8th grade science achievement in public schools in 1996?

The Northern Marianas did not participate in NAEP science in 1996.

3. Subgroup Performance

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

The Northern Marianas did not participate in NAEP science in 1996.



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

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 the Northern Marianas 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 the Northern Marianas would have performed on TIMSS, because the estimate is based on scores from the 1996 NAEP mathematics assessment. The Northern Marianas did not participate in NAEP mathematics in 1996.

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

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 the Northern Marianas participated in the TIMSS science assessment, how would their average performance compare to that of students who took TIMSS in these nations?

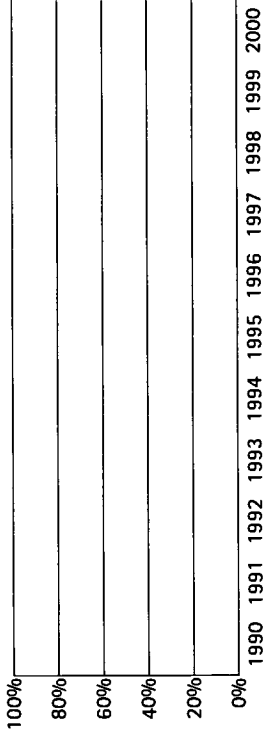
It is not possible to predict how students in the Northern Marianas would have performed on TIMSS, because the estimate is based on scores from the 1996 NAEP science assessment. The Northern Marianas did not participate in NAEP science in 1996.

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

1. Improvement Over Time

Have Puerto Rico's 4th graders improved in mathematics achievement?
Puerto Rico did not participate in NAEP mathematics in 1992 or 1996.

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



Mathematics performance will be tested again in 2000.

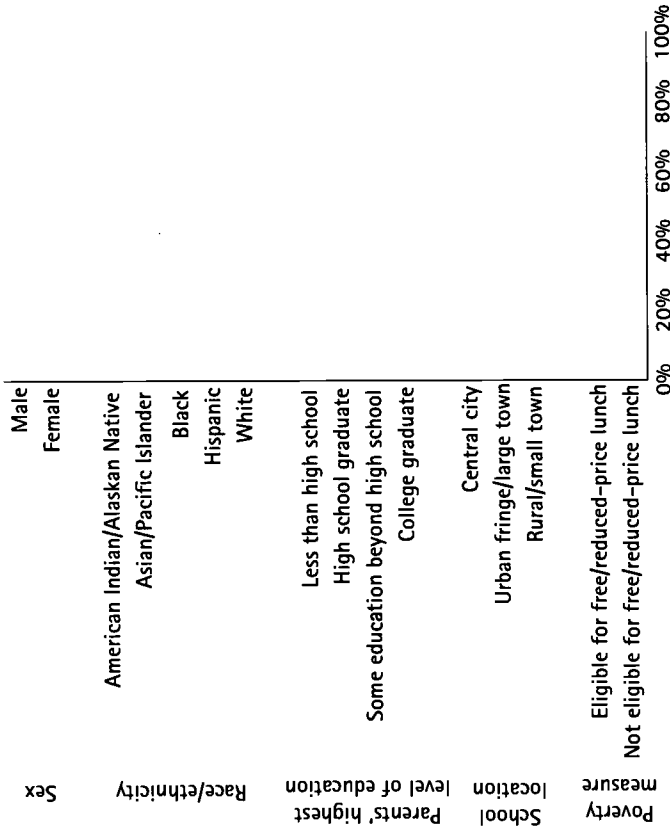
2. State Comparisons[†]

How did Puerto Rico compare with other states in 4th grade mathematics achievement in public schools in 1996?
Puerto Rico did not participate in NAEP mathematics in 1996.

3. Subgroup Performance

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

Puerto Rico did not participate in NAEP mathematics in 1996.

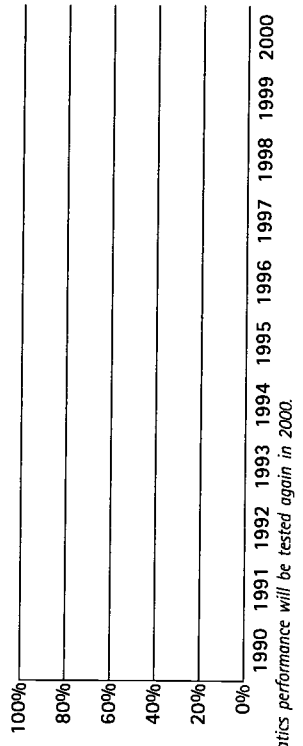


[†] The term "state" is used to refer to the 50 states, the District of Columbia, and the territories.

1. Improvement Over Time

Have Puerto Rico's 8th graders improved in mathematics achievement?
Puerto Rico did not participate in NAEP mathematics in 1990, 1992, or 1996.

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



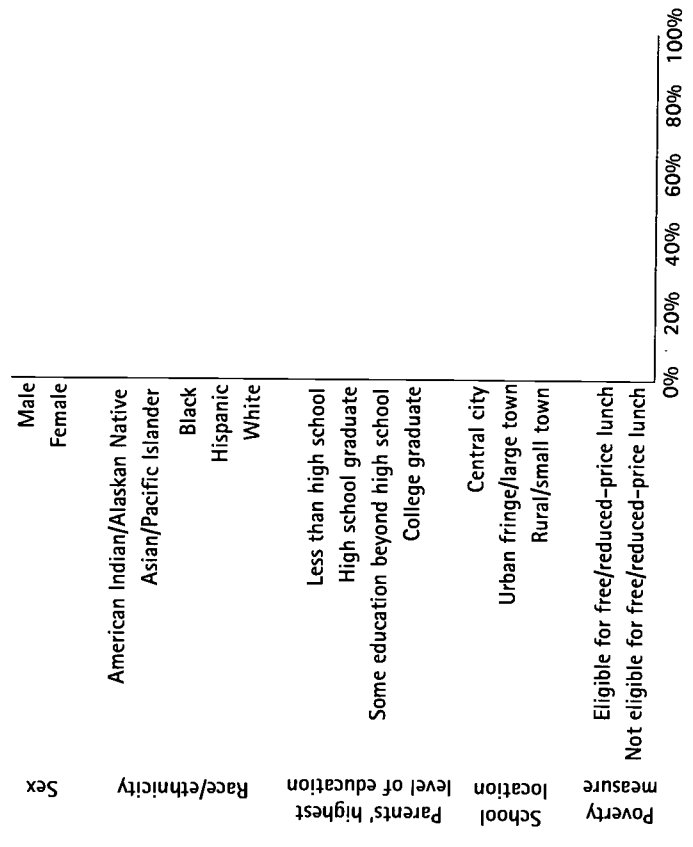
Mathematics performance will be tested again in 2000.

2. State Comparisons[†]

How did Puerto Rico compare with other states in 8th grade mathematics achievement in public schools in 1996?
Puerto Rico did not participate in NAEP mathematics in 1996.

3. Subgroup Performance

What percentages of public school 8th graders in different subgroups in Puerto Rico were at or above Proficient on the 1996 NAEP mathematics assessment?
Puerto Rico did not participate in NAEP mathematics in 1996.



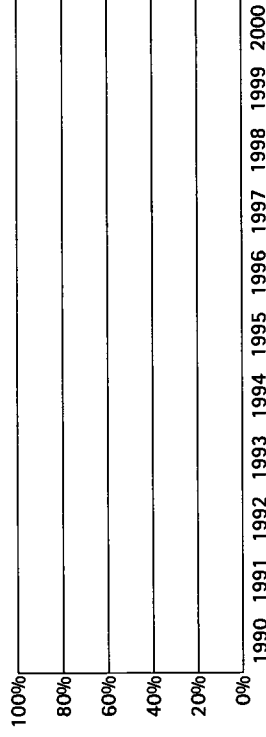
[†] The term "state" is used to refer to the 50 states, the District of Columbia, and the territories.

1. Improvement Over Time

Have Puerto Rico's 8th graders improved in science achievement?

Puerto Rico 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[†]

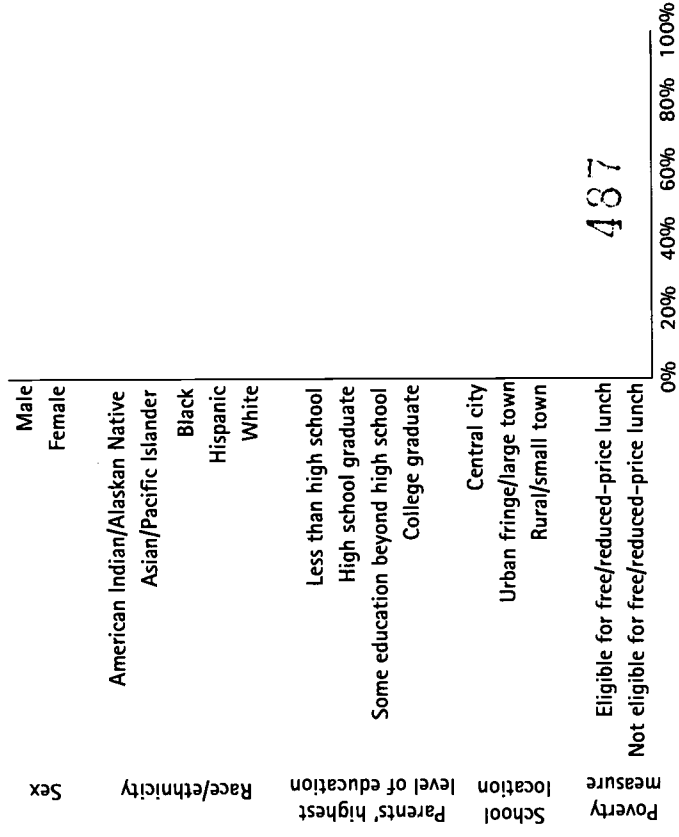
How did Puerto Rico compare with other states in 8th grade science achievement in public schools in 1996?

Puerto Rico did not participate in NAEP science in 1996.

3. Subgroup Performance

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

Puerto Rico did not participate in NAEP science in 1996.



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

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 Puerto Rico 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 Puerto Rico would have performed on TIMSS, because the estimate is based on scores from the 1996 NAEP mathematics assessment. Puerto Rico did not participate in NAEP mathematics 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 Puerto Rico 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 Puerto Rico would have performed on TIMSS, because the estimate is based on scores from the 1996 NAEP science assessment. Puerto Rico did not participate in NAEP science in 1996.

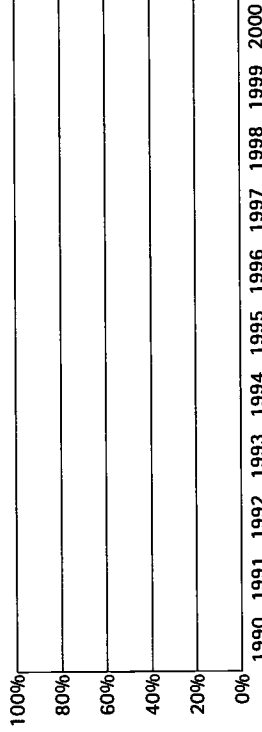
[†] The term "nation" is used to refer to nations, states, or jurisdictions.

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

1. Improvement Over Time

Have the Virgin Islands' 4th graders improved in mathematics achievement?
 The Virgin Islands did not participate in NAEP mathematics in 1992 or 1996.

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



Mathematics performance will be tested again in 2000.

2. State Comparisons[†]

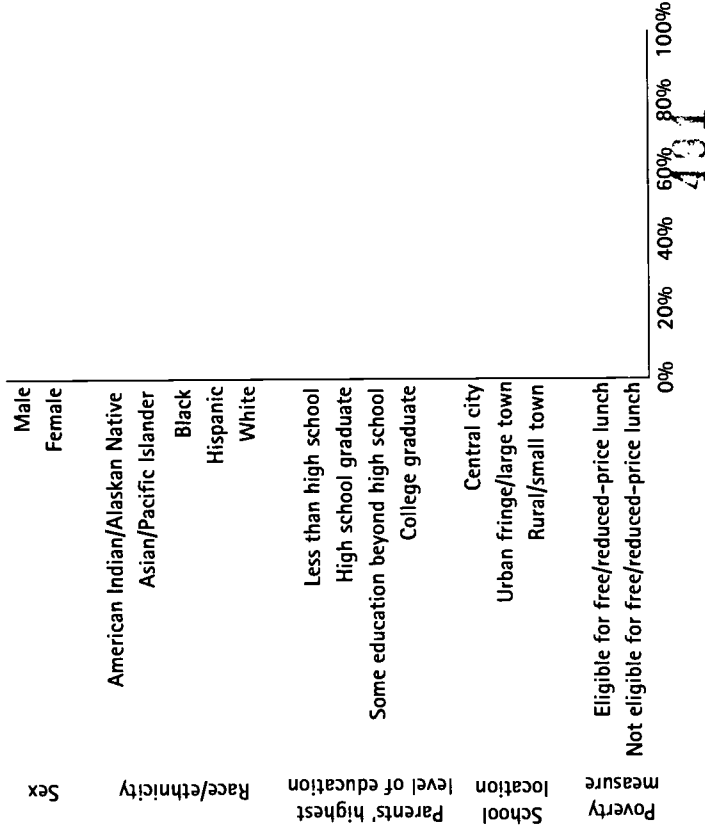
How did the Virgin Islands compare with other states in 4th grade mathematics achievement in public schools in 1996?

The Virgin Islands did not participate in NAEP mathematics in 1996.

3. Subgroup Performance

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

The Virgin Islands did not participate in NAEP mathematics in 1996.



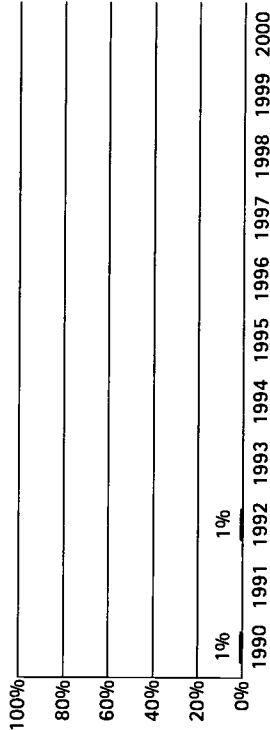
[†] The term "state" is used to refer to the 50 states, the District of Columbia, and the territories.

1. Improvement Over Time

Have the Virgin Islands' 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



Mathematics performance will be tested again in 2002.

2. State Comparisons[†]

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

The Virgin Islands did not participate in NAEP mathematics in 1996.

3. Subgroup Performance

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

The Virgin Islands did not participate in NAEP mathematics in 1996.

Sex	Male Female
Race/ethnicity	American Indian/Alaskan Native Asian/Pacific Islander Black Hispanic White
Parents' highest level of education	Less than high school High school graduate Some education beyond high school College graduate
School location	Central city Urban fringe/large town Rural/small town
Poverty measure	Eligible for free/reduced-price lunch Not eligible for free/reduced-price lunch

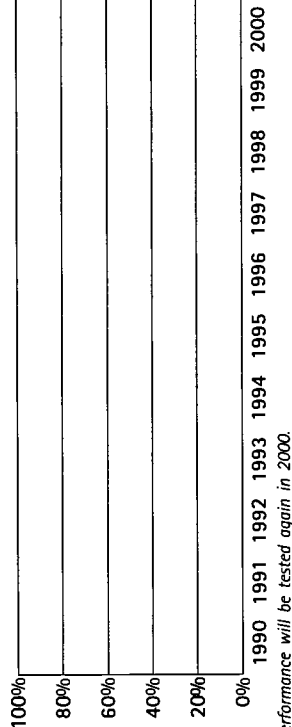
0% 20% 40% 60% 80% 100%

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

1. Improvement Over Time

Have the Virgin Islands' 8th graders improved in science achievement?
The Virgin Islands 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 the Virgin Islands compare with other states in 8th grade science achievement in public schools in 1996?
The Virgin Islands did not participate in NAEP science in 1996.

3. Subgroup Performance

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

The Virgin Islands did not participate in NAEP science in 1996.

	Male	Female
Sex		
American Indian/Alaskan Native		
Asian/Pacific Islander		
Race/ethnicity		
Black		
Hispanic		
White		
Less than high school		
High school graduate		
Some education beyond high school		
Parents' highest level of education		
College graduate		
Central city		
Urban fringe/large town		
Rural/small town		
School location		
Eligible for free/reduced-price lunch		
Poverty measure		
Not eligible for free/reduced-price lunch		

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

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 the Virgin Islands 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 the Virgin Islands would have performed on TIMSS, because the estimate is based on scores from the 1996 NAEP mathematics assessment. The Virgin Islands did not participate in NAEP mathematics in 1996.

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

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 the Virgin Islands 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 the Virgin Islands would have performed on TIMSS, because the estimate is based on scores from the 1996 NAEP science assessment. The Virgin Islands did not participate in NAEP science in 1996.

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

Appendices

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Accuracy of Data

The accuracy of any statistic is determined by the joint effects of "sampling" and "nonsampling" errors. Estimates based on a sample will differ somewhat from the figures that would have been obtained if a complete census had been taken using the same survey instruments, instructions, and procedures. In addition to such sampling errors, all surveys, both universe and sample, are subject to design, reporting, and processing errors and errors due to nonresponse. To the extent possible, these nonsampling errors are kept to a minimum by methods built into the survey procedures. In general, however, the effects of nonsampling errors are more difficult to gauge than those produced by sampling variability.

Sampling Errors

The samples used in surveys are selected from a large number of possible samples of the same size that could have been selected using the same sample design. Estimates derived from the different samples would differ from each other. The difference between a sample estimate and the average of all possible samples is called the sampling deviation. The sampling error of a survey estimate is a measure of the variation among the estimates from all possible samples and, thus, is a measure of the precision with which an estimate from a particular sample approximates the average result of all possible samples.

The sample estimate and an estimate of its standard error permit us to construct interval estimates with prescribed confidence that the interval includes the average result of all possible samples. If all possible samples were selected under essentially the same conditions and an estimate and its estimated standard error were calculated from each sample, then: 1) approximately $2/3$ of the intervals from one standard error below the estimate to one standard error above the estimate would include the average value of the possible samples; and 2) approximately 19/20 of the intervals from two standard errors above the estimate to two standard errors below the estimate would include the average value of all possible samples. We call an interval from two standard errors below the

estimate to two standard errors above the estimate a 95 percent confidence interval.

Analysis of standard errors can help assess how valid a comparison between two estimates might be. The standard error of a difference between two independent sample estimates is equal to the square root of the sum of the squared standard errors of the estimates.

The standard error (se) of the difference between independent sample estimates "a" and "b" is:

$$se_{a,b} = \sqrt{se^2_a + se^2_b}$$

To compare changes in between-group differences (groups "a" and "b") over time (years "1" and "2"), we approximate the standard error of the difference as:

$$se = \sqrt{se^2_{a1} + se^2_{b1} + se^2_{a2} + se^2_{b2}}$$

This method overestimates the standard error because it does not account for covariance (the covariance figures were not available). Because of this overestimation, the approach is conservative; that is, one is less likely to obtain significant results.

State and U.S. Comparisons

For the state-level indicators on student achievement, the state data include public school students only, while the U.S. data include public and nonpublic school students.

Multiple State Comparisons

The procedure used in Part 1 of the state pages to determine whether the test scores in two years are significantly different is a statistical test based on the assumption that only one test of statistical significance is being performed. However, in Part 2 of the state pages, many different average test scores are being compared (one state must be compared to all other participating jurisdictions). In a case such as this where there are multiple comparisons, statistical theory indicates that the certainty associated with the entire data set is less than that attributable to each individual comparison. To hold the significance level for the entire

set of comparisons to 0.05, adjustments called multiple comparison procedures must be made. A powerful multiple comparison procedure designed by Benjamini and Hochberg was used in this case. This method controls the proportion of falsely rejected hypotheses from among all rejections. The Benjamini/Hochberg application of the False Discovery Rate (FDR) criterion can be described as follows. Let m be the number of significance tests made, and let $P_1 \leq P_2 \leq \dots \leq P_m$ be the ordered significance levels of the m tests, from lowest to highest probability. Let α be the combined significance level of 0.05. The procedure will compare P_m with α , P_{m-1} with $\alpha(m-1)/m$, ..., P_j with $\alpha j/m$, stopping the comparisons with the first j such that $P_j \leq \alpha j/m$. All tests associated with P_{j+1}, \dots, P_m are declared significant; all tests associated with P_1, \dots, P_j are declared not significant.

Source: Benjamini, Y., & Hochberg, Y. (1994). Controlling the False Discovery Rate: A practical and powerful approach to multiple testing. *Journal of the Royal Statistical Society, Series B*, 57 (1): 289-300.

National Assessment of Educational Progress (NAEP)

The National Assessment of Educational Progress, or NAEP, is the only nationally representative and ongoing assessment of what students in the United States know and are able to do in various academic subjects. Since 1969, NAEP has periodically assessed U.S. 4th, 8th, and 12th graders in reading, writing, mathematics, science, history, geography, the arts, and civics. NAEP is funded by Congress and is administered by the U.S. Department of Education's National Center for Education Statistics.

Congress expanded NAEP to allow the reporting of comparable state by state results, beginning with the 1990 mathematics assessment. Participation in state-level NAEP is voluntary, and has increased from 40 states and territories in the initial 1990 assessment, to 45 in the 1996 mathematics and science assessments. To date, state-level NAEP assessments have been administered in reading, mathematics, and science. During 1998, a new state-level assessment in writing was administered at Grade 8. Reading was assessed again at Grade

4 and, for the first time, at Grade 8. During 2000, state-level NAEP assessments will be administered once again in mathematics at Grades 4 and 8, and in science at Grade 8. Science will also be assessed at Grade 4 for the first time at the state level.

NAEP assessments include both multiple-choice and open-ended test items. NAEP also collects demographic, curricular, and instructional information through student, teacher, and school administrator surveys. Since NAEP is used for large-scale monitoring and is not designed to be an individual test, no participating student takes the entire NAEP examination. Instead, samples of students in Grades 4, 8, and 12 are selected to take different portions of the test.

This approach, called matrix sampling, minimizes the number of students and the amount of time needed for testing, yet still allows policymakers to draw valid conclusions about how all students would have performed if they had taken the entire test.

National Assessment Governing Board (NAGB) Achievement Levels

The NAEP data shown in this report should be interpreted with caution. The Goals Panel's performance standard classifies student performance according to achievement levels adopted by the National Assessment Governing Board for the National Assessment of Educational Progress. This effort has resulted in three achievement levels: Basic, Proficient, and Advanced. The Goals Panel has set its performance standard at the Proficient or Advanced levels on NAEP.

The NAGB achievement levels are reasoned judgements of what students should know and be able to do. They are attempts to characterize overall student performance in particular subject matters. The NAGB achievement levels represent a useful way to categorize overall performance on NAEP. They are also consistent with the Panel's efforts to report such performance against a high-criterion standard.

Readers should exercise caution, however, in making particular inferences about what students at each level actually know and can do. A NAEP assessment is a complex picture of student achievement,

and applying external standards for performance is a difficult task. The process of setting achievement levels is still in transition and both NAGB and NCES regard the achievement levels as developmental. The Goals Panel acknowledges these limitations but believes that, used with caution, these levels convey important information about how American students are faring in reaching Goal 3.

Basic: *This level, below proficient, denotes partial mastery of knowledge and skills that are fundamental for proficient work at each grade — 4, 8, and 12.*

Proficient: *This central level represents solid academic performance for each grade tested — 4, 8, and 12. It reflects a consensus that students reaching this level have demonstrated competency over challenging subject matter and are well prepared for the next level of schooling.*

Advanced: *This higher level signifies superior performance beyond proficient grade-level mastery at Grades 4, 8, and 12.*

Thus far, state-level assessments have been conducted in reading, mathematics, science, and writing. Student achievement levels have been established by NAGB in these subject areas, with the exception of writing.

Mathematics Achievement

See general technical notes regarding NAEP and the NAGB achievement levels.

Forty jurisdictions (states and territories) participated in the 1990 trial mathematics assessment of 8th graders, and 44 jurisdictions participated in the 1992 state mathematics assessments of 4th and 8th graders.

In 1996, 45 jurisdictions participated in the voluntary assessment of 4th and 8th graders. However, three states (Nevada, New Hampshire, and New Jersey) failed to meet the minimum school participation guidelines for public schools at Grade 8 (i.e., an initial school participation rate of 70% for public schools); therefore, their results were not released. The following states did not satisfy one of the guidelines for school sample participation rates at Grade 4: Alaska, Arkansas, Iowa, Michigan, Montana, Nevada, New Jersey, New York,

Pennsylvania, South Carolina, and Vermont. The following states did not satisfy one of the guidelines for school sample participation rates at Grade 8: Alaska, Arkansas, Iowa, Maryland, Michigan, Montana, New York, South Carolina, Vermont, and Wisconsin.

Sources: Reese, C.M., Miller, K.E., Mazzeo, J., & Dossey, J.A. (1997, February). *NAEP 1996 mathematics report card for the nation and the states*. Washington, DC: National Center for Education Statistics.

National Center for Education Statistics, 1990 and 1992 NAEP mathematics data (revised), October 1996.

Science Achievement

See general technical notes regarding NAEP and the NAGB achievement levels.

In 1996, 45 jurisdictions (states and territories) participated in the voluntary program. However, three states (Nevada, New Hampshire, and New Jersey) failed to meet the minimum school participation rate guidelines for public schools (i.e., an initial school participation rate of 70% for public schools); therefore, their results were not released. The following states did not satisfy one of the guidelines for school sample participation rates: Alaska, Arkansas, Iowa, Maryland, Michigan, Montana, New York, South Carolina, Vermont, and Wisconsin.

No school location data are reported for the 1996 NAEP science assessment. Although these data were collected via NAEP background questionnaires, the definitions used for school location have changed, and the National Assessment Governing Board has expressed reservations about the use of these data.

Source: Bourque, M.L., Champagne, A.B., & Crissman, S. (1997, October). *1996 science performance standards: Achievement results for the nation and the states*. Washington, DC: National Assessment Governing Board.

NAEP Student Subgroups

NAEP results are reported for student subgroups only if they meet minimum requirements for student sample size and school representation. For public schools, the minimum number of

students per subgroup is 62, and students in the sample must be drawn from a minimum of 5 primary sampling units (PSUs). At the state level, a PSU is usually a single school. At the national level, a PSU is a region, such as a county, group of counties, or a metropolitan statistical area.

In this document, NAEP results are reported by five types of subgroups: sex, race/ethnicity, parents' highest level of education, school location, and student eligibility for free/reduced-price lunch, which is often used as a measure of poverty. Brief definitions and technical information about the five subgroups reported in this document follow.

- **Sex.** Student results are reported separately for males and females. This information was collected on general student background questionnaires.
- **Race/ethnicity.** Student results are reported according to five federal reporting categories:
 - ◆ *American Indian/Alaskan Native;*
 - ◆ *Asian/Pacific Islander;*
 - ◆ *Black;*
 - ◆ *Hispanic;* and
 - ◆ *White.*

Classification was based on student self-reports to general background questions. A sixth response category, "Other," was also a response option.

Parents' highest level of education. Parents' highest level of education was based on student self-reports to general background questions. If a student indicated that his or her parents had completed different levels of education, the response was classified according to the higher of the two levels. In this document, student achievement data are reported by four levels of parental education:

- ◆ *less than high school;*
- ◆ *high school graduate;*
- ◆ *some education beyond high school;* and
- ◆ *college graduate.*

A fifth response category, "I don't know," was also a response option. The reader should note that nationally, 36% of 4th graders and 11% of 8th graders did not know the highest level of education completed by either parent.

- **School location.** Each student's school was assigned to one of three mutually exclusive categories of school location:
 - ◆ *central city;*
 - ◆ *urban fringe/large town;* or
 - ◆ *rural/small town.*

The definitions used by the National Center for Education Statistics for school location are as follows:

- ◆ **Central City:** The Central City category includes central cities of all Metropolitan Statistical Areas (MSAs). (Each Metropolitan Statistical Area (MSA) is defined by the Office of Management and Budget.) Central City is a geographic term and is not synonymous with "inner city."
- ◆ **Urban Fringe/Large Town:** An Urban Fringe includes all densely settled places and areas within MSAs that are classified as urban by the Bureau of the Census. A Large Town is defined as places outside MSAs with a population greater than or equal to 25,000.
- ◆ **Rural/Small Town:** Rural includes all places and areas with a population of less than 2,500 that are classified as rural by the Bureau of the Census. A Small Town is defined as places outside MSAs with a population of less than 25,000, but greater than or equal to 2,500.
- **Eligibility for free/reduced-price lunch program.** Student eligibility for the free/reduced-price lunch component of the U.S. Department of Agriculture's National School Lunch Program was based on school records. Eligibility referred only to the school year in which the NAEP assessment was administered.

Third International Mathematics and Science Study (TIMSS)

The Third International Mathematics and Science Study, or TIMSS, is the most comprehensive international study of mathematics and science achievement conducted to date. TIMSS was administered in 1995, and tested half a million students in 30 different languages and in 41 countries, including the United States. In addition to the student assessments, TIMSS collected information through questionnaires administered to teachers, students, and school administrators; comparisons of mathematics and science curriculum guides and textbooks; videotapes of mathematics instruction in 8th grade classrooms in the United States, Japan, and Germany; and detailed case studies of education policies in the same three countries.

Three age groups were tested in the participating countries, corresponding roughly to Grades 4, 8, and 12 in the United States. Twenty-six nations took part in the mathematics and science assessments at Grade 4, 41 participated at Grade 8, and 23 participated at Grade 12. Both public and private schools participated, and the same students were tested in both mathematics and science. TIMSS drew random samples of virtually all students in the participating countries, not just those enrolled in mathematics and science courses. Nearly all countries in TIMSS accomplished high participation rates, and did not exempt large portions of their student bodies from testing. Exceptions among the countries that participated in the Grade 8 assessment follow.

The following countries did not meet international guidelines at Grade 8: Australia, Austria, Belgium (French), Bulgaria, Colombia, Denmark, Germany, Greece, Israel, Kuwait, Netherlands, Romania, Scotland, Slovenia, South Africa, and Thailand. In four countries, more than 10 percent of the population was excluded from testing at Grade 8: England, Germany, Israel, and Lithuania. In Belgium (Flemish), England, Germany, Latvia (LSS), Switzerland, and the United States, a participation rate of 75 percent of the

schools and students combined for Grade 8 was achieved only after replacements for refusals were substituted.

A 1998 research study linked state mathematics and science results from the 1996 National Assessment of Educational Progress (NAEP) and the 1995 country results from TIMSS. The linking study predicts TIMSS results for the states and jurisdictions that participated in the 1996 NAEP on the basis of their actual NAEP scores. Actual TIMSS results are also available for Minnesota, which tested a representative sample of 8th graders with the TIMSS instruments in 1995. Missouri and Oregon also tested representative samples of 8th graders with the TIMSS instruments in 1997, but their results have not yet been publicly released. For more detailed information about the statistical linking and validation procedures involved in this research and development effort, see the forthcoming technical report, *Linking the National Assessment of Educational Progress and the Third International Mathematics and Science Study at the eighth grade: A research report*.

Sources: U.S. Department of Education, National Center for Education Statistics. (1997). *Pursuing excellence: A study of U.S. eighth-grade mathematics and science teaching, learning, curriculum, and achievement in international context*, NCEES 97-198, Washington, DC: U.S. Government Printing Office.

Johnson, E.G., & Siegendorf, A. (1998, May). *Linking the National Assessment of Educational Progress and the Third International Mathematics and Science Study: Eighth grade results*. Report prepared for the U.S. Department of Education, National Center for Education Statistics, NCEES 98-500, Washington, DC: U.S. Government Printing Office.

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	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
1. Reading	X		X		X				X		X
2. Writing ²	X		X						X		
3. Mathematics	X		X				X				X
4. Science	X						X				X
5. Foreign Languages											
6. Civics									X		
7. Economics											
8. Arts ³								X			
9. History					X						
10. Geography					X						

Table prepared June 1998.

¹ The National Assessment of Educational Progress (NAEP) is administered in Grades 4, 8, and 12. Student achievement levels have been established for the reading (1992, 1994), mathematics (1990, 1992, 1996), science (1996), history (1994), and geography (1994) assessments. Preliminary decisions have been made for 2000, subject to continuing legislative authority. Assessments proposed for 2000 include mathematics and science in Grades 4, 8, and 12, and reading in Grade 4 only. There are no current plans to administer NAEP assessments in foreign languages or economics by the year 2000.

² In 1990 and 1992, student achievement levels were not established. However, in 1992, a Writing Portfolio Study was conducted.

³ An arts assessment that covers four subject areas was administered in 1997 in Grade 8 only. Student achievement levels have not been established.

	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
1. Reading • Grade 4 • Grade 8			X		X				X X		
2. Writing • Grade 4 • Grade 8									X		
3. Mathematics • Grade 4 • Grade 8	X		X X				X X				X X
4. Science • Grade 4 • Grade 8							X				X X
5. Foreign Languages											
6. Civics											
7. Economics											
8. Arts											
9. History											
10. Geography											

Table prepared June 1998.

¹ Student achievement levels have been established for the reading (1992, 1994), mathematics (1990, 1992, 1996), and science (1996) assessments. Preliminary decisions have been made for 2000, subject to continuing legislative authority. State-level assessments proposed for 2000 include mathematics (Grades 4 and 8) and science (Grades 4 and 8). There are no current plans to administer state-level NAEP assessments in foreign languages, civics, economics, arts, history, or geography by the year 2000.

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State	Mathematics Grade 4		Mathematics Grade 8		Science Grade 8	
	1992	1996	1990	1992	1996	1996
U.S.♦	1.0	0.9	1.1	1.0	1.1	1.2
Alabama	1.2	1.1	0.7	0.9	1.8	1.5
Alaska	▲	1.2*	▲	▲	1.6*	1.6*
Arizona	0.9	1.6	0.9	1.3	1.2	1.7
Arkansas	0.7	1.4*	0.7	0.8	1.0*	1.5*
California	1.2	1.5	1.1	1.3	1.5	1.7
Colorado	1.0	1.3	1.0	1.2	1.3	1.2
Connecticut	1.4	1.7	0.9	1.1	1.5	1.7
Delaware	0.9	1.2	0.8	1.0	1.0	1.0
District of Columbia	0.3	0.5	0.6	0.9	0.8	0.9
Florida	1.4	1.1	0.9	1.2	1.3	1.6
Georgia	1.2	1.3	1.2	0.9	1.8	1.7
Hawaii	0.9	1.1	0.7	0.7	0.9	1.0
Idaho	1.0	▲	1.1	1.2	▲	▲
Illinois	▲	▲	▲	▲	▲	▲
Indiana	1.1	1.6	1.1	1.2	1.7	1.9
Iowa	1.2	1.4*	1.4	1.3	1.8*	1.6*
Kansas	▲	▲	▲	▲	▲	▲
Kentucky	1.2	1.1	0.8	1.1	1.2	1.3
Louisiana	0.8	0.9	0.6	1.0	1.1	1.2
Maine	1.5	1.4	▲	1.5	1.7	1.8
Maryland	1.2	1.7	1.2	1.2	2.3*	1.8*

State	Mathematics Grade 4		Mathematics Grade 8		Science Grade 8	
	1992	1996	1990	1996		
Massachusetts	1.5	1.9	▲	1.3	1.8	1.7
Michigan	1.7	1.5*	1.2	1.5	1.8*	2.0*
Minnesota	1.3	1.5	1.2	1.2	1.8	1.7
Mississippi	0.6	0.9	▲	0.7	0.8	1.0
Missouri	1.3	1.3	▲	1.2	1.4	1.3
Montana	▲	1.6*	1.4	▲	1.5*	2.1*
Nebraska	1.6	1.4	1.2	1.6	1.5	1.5
Nevada	▲	1.2*	▲	▲	●	●
New Hampshire	1.6	▲	1.2	1.4	●	●
New Jersey	1.5	1.7*	1.1	1.3	●	●
New Mexico	1.3	1.2	0.9	0.8	1.1	0.7
New York	1.3	1.2*	0.9	1.3	1.5*	1.7*
North Carolina	0.8	1.3	0.7	1.0	1.3	1.4
North Dakota	1.1	1.3	1.8	1.6	1.5	1.5
Ohio	1.2	▲	1.1	1.3	▲	▲
Oklahoma	1.2	▲	1.2	1.1	▲	▲
Oregon	▲	1.3	1.1	▲	1.6	1.8
Pennsylvania	1.5	1.5*	1.3	1.5	▲	▲
Rhode Island	1.1	1.3	0.7	1.1	1.3	1.5
South Carolina	1.1	1.3*	▲	1.0	1.2*	1.4*
South Dakota	▲	▲	▲	▲	▲	▲
Tennessee	1.0	1.5	▲	1.0	1.3	1.7

State	Mathematics Grade 4		Mathematics Grade 8		Science Grade 8	
	1992	1996	1990	1992	1996	1996
Texas	1.2	1.5	1.1	1.2	1.5	1.5
Utah	1.1	1.3	▲	1.0	1.3	1.2
Vermont	▲	1.1*	▲	▲	1.4*	1.6*
Virginia	1.5	1.5	1.6	1.1	1.2	2.1
Washington	▲	1.2	▲	▲	1.2	1.6
West Virginia	0.9	1.2	0.8	0.8	0.9	1.1
Wisconsin	1.4	1.3	1.4	1.4	2.0*	1.9*
Wyoming	1.1	1.2	0.9	1.1	1.0	1.3
American Samoa	▲	▲	▲	▲	▲	▲
Guam	0.5	0.5	0.4	0.6	0.8	1.0
Northern Marianas	▲	▲	▲	▲	▲	▲
Puerto Rico	▲	▲	▲	▲	▲	▲
Virgin Islands	▲	▲	0.3	0.3	▲	▲

◆ U.S. data include public and nonpublic school students, while state data include public school students only.

▲ State did not participate in the NAEP assessment at this grade, in this subject, in this year.

* State did not satisfy one of the NAEP guidelines for school sample participation rates.

● State did not meet the minimum school participation guidelines for public schools; therefore, results were not released by the National Center for Education Statistics.

Sources:

Reese, C.M., Miller, K.E., Mazzeo, J., & Dossey, J.A. (1997, February). *NAEP 1996 mathematics report card for the nation and the states*. Washington, DC: National Center for Education Statistics.

Reese, C.M., Jerry, L., & Ballator, N. (1997, June). *NAEP 1996 mathematics state report for [name of state]*. Washington, DC: National Center for Education Statistics.

National Center for Education Statistics, National Assessment of Educational Progress (NAEP). *1996 Science assessment*, as shown in: Bourque, M.L., Champagne, A.B., & Crissman, S. (1997, October). *1996 Science performance standards: Achievement results for the nation and the states*. Washington, DC: National Assessment Governing Board.

State	All students		Sex		Race/ethnicity					Parents' highest level of education				School location			Poverty measure	
	Male	Female	American Indian/Alaskan Native	Asian/Pacific Islander	Black	Hispanic	White	Less than high school	High school graduate	Some education beyond high school	College graduate	Central city	Urban fringe/large town	Rural/small town	Eligible for free/reduced-price lunch	Not eligible for free/reduced-price lunch		
U.S.♦	1.1	1.1	2.5	5.3	1.4	1.0	1.2	1.8	1.9	2.8	1.6	1.4 [†]	1.8 [†]	2.2 [†]	1.1	1.3		
Alabama	1.3	1.2	****	****	0.6	1.9	1.6	1.3	1.4	2.7	2.1	2.5	1.8	1.4	0.7	1.9		
Alaska*	1.6	1.5	1.7	4.3	2.2	2.4	1.7	4.1	3.0	3.8	2.1	2.4	****	1.3	1.7	2.3		
Arizona	2.2	1.5	2.7	****	****	1.3	2.1	1.7	2.7	4.3	2.9	2.0	3.2	2.8	1.0	2.3		
Arkansas*	1.7	1.6	2.5	****	0.9	1.6	1.8	2.6	2.2	3.9	2.5	3.1	2.6	1.8	0.9	1.9		
California	1.9	1.3	****	3.0	****	1.3	2.4	****	2.1	4.1	2.5	3.0	1.3	3.9	1.2	2.6		
Colorado	1.5	1.9	4.0	5.3	2.6	1.3	1.5	3.9	1.9	3.1	1.8	2.2	2.2	2.6	1.6	1.7		
Connecticut	2.2	2.0	****	****	1.7	2.0	1.8	3.6	2.9	4.1	2.3	2.9	3.3	2.6	1.2	2.1		
Delaware	1.6	1.6	****	****	1.0	1.9	1.8	****	2.5	5.4	2.2	1.4	2.3	2.0	0.9	2.2		
DC	0.6	0.5	****	****	0.4	2.2	3.2	****	0.6	1.8	0.9	0.5	****	****	0.2	1.8		
Florida	1.3	1.3	****	****	1.0	1.4	1.4	2.8	2.6	3.6	1.9	1.8	1.5	3.0	0.8	1.7		
Georgia	1.7	1.6	****	****	0.6	1.9	1.9	2.0	2.0	3.2	2.5	2.3	2.2	1.7	0.7	2.0		
Hawaii	1.3	1.4	5.0	1.8	2.5	1.2	2.3	****	2.0	4.0	1.9	3.5	1.5	1.8	1.0	1.5		
Idaho	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲		
Illinois	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲		
Indiana	2.2	1.9	****	****	1.4	2.7	1.7	5.8	2.4	3.4	2.6	2.9	3.2	1.5	1.4	2.0		
Iowa*	1.7	1.9	****	****	2.5	2.5	1.5	****	2.6	3.6	2.0	3.0	8.6	1.5	1.5	1.8		

State	Sex		Race/ethnicity					Parents' highest level of education			School location			Poverty measure			
	All students	Male	Female	American Indian/Alaskan Native	Asian/Pacific Islander	Black	Hispanic	White	Less than high school	High school graduate	Some education beyond high school	College graduate	Central city	Urban fringe/large town	Rural/small town	Eligible for free/reduced-price lunch	Not eligible for free/reduced-price lunch
Kansas	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲
Kentucky	1.1	1.8	1.2	****	****	1.4	2.4	1.3	1.8	1.2	3.8	2.2	3.1	3.9	1.4	0.9	1.7
Louisiana	0.9	1.4	0.9	****	****	0.8	1.9	1.6	1.4	1.0	2.3	1.6	1.8	1.7	1.1	0.6	1.9
Maine	1.4	2.0	1.5	****	****	****	4.5	1.5	6.3	4.0	4.4	1.8	4.6	5.6	1.6	1.7	1.7
Maryland	1.7	2.0	2.1	****	6.2	0.9	3.1	2.5	2.3	2.5	3.4	2.8	4.2	2.2	2.8	0.8	2.4
Massachusetts	1.9	2.4	1.9	****	8.2	2.7	2.8	2.1	4.1	2.7	3.5	2.9	2.3	3.0	3.6	1.4	2.4
Michigan*	1.5	1.7	1.8	4.5	****	1.1	1.9	1.6	3.6	2.8	4.5	2.5	3.0	2.1	2.3	1.4	1.8
Minnesota	1.5	1.9	1.6	5.4	4.7	****	3.7	1.7	****	3.4	4.1	2.0	2.8	2.5	2.1	1.7	1.9
Mississippi	0.9	1.0	1.2	****	****	0.6	1.7	1.4	2.1	1.2	3.0	1.8	3.7	4.2	0.7	0.5	2.1
Missouri	1.3	1.5	1.7	****	****	0.8	3.1	1.4	3.1	2.1	3.2	2.0	2.6	2.3	1.9	1.2	1.6
Montana*	1.6	1.8	2.3	2.2	****	****	3.4	1.9	4.1	3.6	3.9	2.3	2.1	****	1.9	2.0	1.9
Nebraska	1.4	1.7	1.6	6.0	****	1.9	2.6	1.5	3.1	2.7	3.3	2.2	2.7	6.5	1.9	1.3	1.8
Nevada*	1.2	1.8	1.1	2.9	5.7	1.3	1.2	1.5	2.3	2.2	4.6	1.9	1.8	1.9	2.7	1.2	2.7
New Hampshire	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲
New Jersey*	1.7	2.6	1.9	****	5.0	1.8	2.0	2.1	5.2	3.7	5.1	2.6	4.6	2.1	****	1.5	2.1
New Mexico	1.2	1.6	1.3	****	****	1.9	1.0	1.8	2.2	1.7	3.3	2.1	2.1	3.4	1.7	0.9	1.7
New York*	1.2	1.6	1.6	****	4.1	1.6	1.7	1.7	****	2.7	4.1	2.0	1.8	2.5	3.3	1.2	1.9

State	All students	Sex		Race/ethnicity					Parents' highest level of education			School location			Poverty measure		
		Male	Female	American Indian/Alaskan Native	Asian/Pacific Islander	Black	Hispanic	White	Less than high school	High school graduate	Some education beyond high school	College graduate	Central city	Urban fringe/large town	Rural/small town	Eligible for free/reduced-price lunch	Not eligible for free/reduced-price lunch
North Carolina	1.3	1.5	1.6	***	***	0.7	3.6	1.7	2.5	2.4	4.2	2.3	3.1	2.6	1.9	1.3	1.9
North Dakota	1.3	1.9	1.7	3.1	***	***	6.2	1.4	***	3.4	3.9	2.0	2.6	4.9	2.0	1.9	1.5
Ohio	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲
Oklahoma	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲
Oregon	1.3	1.7	1.6	3.9	5.2	***	1.6	1.5	2.6	3.0	4.3	2.2	2.8	2.3	2.2	1.1	1.6
Pennsylvania*	1.5	2.0	1.7	***	***	1.2	2.1	1.8	△	△	△	△	1.4	2.3	2.6	1.2	2.0
Rhode Island	1.3	1.7	1.5	***	4.6	1.7	2.0	1.4	3.1	1.8	4.9	2.0	1.5	1.7	3.5	0.9	1.8
South Carolina*	1.3	1.6	1.5	***	***	0.7	1.7	2.1	3.1	1.6	4.4	2.1	2.8	2.3	1.6	0.8	2.2
South Dakota	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲
Tennessee	1.5	1.9	1.4	***	***	1.0	4.2	1.9	1.7	1.9	4.0	2.5	3.0	2.5	2.5	0.9	2.1
Texas	1.5	2.0	1.9	***	***	2.0	1.4	2.2	2.7	3.1	3.3	2.7	2.7	2.7	3.2	1.1	2.1
Utah	1.3	1.7	1.6	4.9	***	***	2.4	1.4	***	2.7	3.4	2.2	3.0	1.6	2.4	1.8	1.8
Vermont*	1.1	1.5	1.5	***	***	***	4.1	1.2	***	2.5	3.8	1.8	***	***	1.2	1.4	1.5
Virginia	1.5	2.0	1.4	***	6.1	0.8	3.1	1.9	3.0	1.8	4.1	2.3	3.0	2.6	1.7	0.9	1.9
Washington	1.2	1.4	1.6	3.0	3.5	2.8	2.2	1.3	5.0	3.1	4.0	1.8	2.0	1.6	3.3	1.5	1.4
West Virginia	1.2	1.6	1.5	***	***	3.4	2.9	1.3	2.3	2.1	3.6	1.8	2.5	2.6	1.5	1.3	1.6
Wisconsin	1.3	1.6	1.8	***	***	1.4	3.5	1.5	***	2.6	3.6	2.0	2.6	2.7	1.9	1.2	1.9

State	All students		Sex		Race/ethnicity					Parents' highest level of education			School location			Poverty measure				
			Male	Female	American Indian/Alaskan Native	Asian/Pacific Islander	Black	Hispanic	White	Less than high school	High school graduate	Some education beyond high school	College graduate	Central city	Urban fringe/large town	Rural/small town	Eligible for free/reduced-price lunch	Not eligible for free/reduced-price lunch		
Wyoming	1.2	1.8	1.2	1.2	3.2	***	***	2.1	1.3	4.6	2.3	6.5	1.8	2.5	***	1.4	1.6	1.6		
Am. Samoa	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	
Guam	0.5	0.7	0.8	0.8	***	0.7	***	0.8	4.3	***	1.4	3.3	1.0	***	***	***	0.5	1.0	1.0	
N. Marianas	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲
Puerto Rico	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲
Virgin Islands	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲

◆ U.S. data include public and nonpublic school students, while state data include public school students only.

† School location data for the nation include public school students only, while all other national data include public and nonpublic school students combined.

* State did not satisfy one of the NAEP guidelines for school sample participation rates at Grade 4.

▲ State did not participate in the 1996 NAEP mathematics assessment at Grade 4.

*** Standard error estimates cannot be accurately determined.

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

Source: Reese, C.M., Jerry, L., & Ballator, N. (1997, June). NAEP 1996 mathematics state report for [name of state]. Washington, DC: National Center for Education Statistics.

State	Sex		Race/ethnicity					Parents' highest level of education				School location			Poverty measure			
	All students	Male	Female	American Indian/Alaskan Native	Asian/Pacific Islander	Black	Hispanic	White	Less than high school	High school graduate	Some education beyond high school	College graduate	Central city	Urban fringe/large town	Rural/small town	Eligible for free/reduced-price lunch	Not eligible for free/reduced-price lunch	
U.S.♦	1.1	1.5	1.2	5.0	▼	0.9	1.6	1.4	2.1	1.3	1.8	1.9	1.4	2.8	1.7	1.1	1.6	
Alabama	1.8	2.3	1.7	****	****	0.5	2.6	2.7	1.6	1.1	2.2	3.2	4.1	2.4	1.9	0.6	2.6	
Alaska*	1.6	2.1	2.1	2.6	9.1	****	4.9	1.9	****	2.7	3.3	2.6	3.3	****	1.9	3.6	2.5	
Arizona	1.2	1.6	1.3	5.3	****	2.7	1.1	1.7	1.6	2.1	2.5	1.8	1.5	2.9	2.2	1.8	1.8	
Arkansas*	1.0	1.4	1.1	****	****	0.9	****	1.3	1.3	1.4	2.3	2.4	2.3	3.7	1.3	1.1	1.5	
California	1.5	2.0	1.4	****	4.1	****	0.8	2.3	1.5	1.3	2.3	2.7	2.2	2.1	****	1.1	2.3	
Colorado	1.3	1.7	1.7	****	8.6	3.6	1.5	1.4	2.1	1.6	2.8	2.0	2.2	2.2	2.7	1.5	1.6	
Connecticut	1.5	2.1	1.6	****	7.9	1.5	1.9	1.6	3.1	1.9	2.4	2.2	2.8	2.9	2.9	2.3	1.6	
Delaware	1.0	2.0	1.8	****	****	1.2	3.2	1.4	2.4	2.0	2.1	2.0	1.7	1.2	2.7	1.5	1.3	
DC	0.8	1.0	1.0	****	****	0.6	1.5	9.2	****	0.7	1.4	1.7	0.8	****	****	0.8	2.1	
Florida	1.3	1.6	1.7	****	****	1.1	1.6	1.9	****	1.7	2.0	2.4	3.0	1.5	3.2	0.9	1.9	
Georgia	1.8	2.0	2.0	****	****	0.8	4.2	2.6	1.8	1.0	2.0	3.4	2.8	3.3	2.0	0.8	2.8	
Hawaii	0.9	1.1	1.4	****	1.3	****	1.6	3.5	4.1	1.5	2.0	1.9	1.8	1.6	1.6	1.3	1.3	
Idaho	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲
Illinois	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲
Indiana	1.7	2.0	1.9	****	****	1.0	3.1	1.8	2.1	1.7	2.6	2.5	3.1	3.5	2.1	1.7	1.7	
Iowa*	1.8	2.3	2.1	****	****	4.1	5.0	1.8	3.3	2.0	3.2	2.3	3.5	3.9	2.2	3.0	2.0	

State	All students	Sex		Race/ethnicity					Parents' highest level of education			School location			Poverty measure			
		Male	Female	American Indian/Alaskan Native	Asian/Pacific Islander	Black	Hispanic	White	Less than high school	High school graduate	Some education beyond high school	College graduate	Central city	Urban fringe/large town	Rural/small town	Eligible for free/reduced-price lunch	Not eligible for free/reduced-price lunch	
Kansas	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	
Kentucky	1.2	1.6	1.5	***	***	***	***	1.3	1.2	1.4	2.1	2.6	3.2	4.0	1.2	1.1	1.8	
Louisiana	1.1	1.3	1.3	***	***	0.5	***	1.6	1.7	1.0	1.7	2.3	2.0	2.1	1.5	0.8	1.8	
Maine	1.7	2.1	2.0	***	***	***	***	1.7	3.3	2.2	3.0	2.1	3.5	5.6	1.8	2.8	1.8	
Maryland*	2.3	2.8	2.3	***	5.9	1.0	3.7	2.8	2.0	1.8	2.3	3.3	3.2	3.1	3.3	1.2	3.1	
Massachusetts	1.8	2.2	2.1	***	6.5	3.3	2.2	2.1	2.0	1.9	2.9	2.3	2.5	2.7	4.3	1.5	2.2	
Michigan*	1.8	2.1	2.0	***	***	2.0	4.6	1.8	3.2	1.4	2.5	2.6	4.1	2.6	2.6	1.8	2.1	
Minnesota	1.8	2.4	1.9	***	5.5	3.5	6.4	1.9	5.0	2.5	2.3	2.4	6.2	3.0	1.9	2.2	1.7	
Mississippi	0.8	0.9	1.0	***	***	0.3	1.7	1.6	1.3	0.8	2.3	1.4	2.6	2.0	0.8	0.5	1.7	
Missouri	1.4	1.8	1.6	***	***	1.7	4.3	1.6	2.4	1.5	2.5	2.3	5.2	2.3	2.0	1.8	1.4	
Montana*	1.5	1.9	2.3	2.6	***	***	4.1	1.5	2.9	2.6	2.9	2.3	2.3	***	1.8	2.7	1.5	
Nebraska	1.5	2.1	2.1	***	***	3.3	2.8	1.6	3.2	2.2	3.2	1.6	1.8	3.4	2.0	2.6	1.7	
Nevada	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
New Hampshire	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
New Jersey	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
New Mexico	1.1	1.5	1.4	1.6	***	***	1.2	1.8	2.0	1.4	1.9	2.2	1.7	2.9	1.6	0.9	1.8	
New York*	1.5	1.6	2.3	***	6.3	1.8	1.4	1.8	3.6	2.6	3.1	2.5	1.7	2.4	2.7	1.5	2.1	

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		Male	Female	American Indian/Alaskan Native	Asian/Pacific Islander	Black	Hispanic	White	Less than high school	High school graduate	Some education beyond high school	College graduate	Central city	Urban fringe/large town	Rural/small town	Eligible for free/reduced-price lunch	Not eligible for free/reduced-price lunch	
North Carolina	1.3	1.6	1.6	***	***	1.0	2.8	1.6	1.8	1.6	2.2	2.4	3.0	2.1	1.7	1.0	1.7	
North Dakota	1.5	1.3	2.4	3.6	***	***	4.9	1.5	5.4	1.9	3.6	1.8	2.6	***	1.9	2.5	1.6	
Ohio	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	
Oklahoma	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	
Oregon	1.6	2.1	1.8	3.7	5.5	***	3.7	1.7	2.8	2.1	2.6	2.5	4.5	2.4	1.7	2.1	1.9	
Pennsylvania	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	
Rhode Island	1.3	1.6	1.5	***	5.5	3.6	1.4	1.5	2.2	1.9	3.2	2.3	1.3	1.7	2.7	1.8	1.6	
South Carolina*	1.2	1.5	1.3	***	***	0.6	2.9	2.1	1.6	1.3	2.7	2.4	2.8	1.9	1.6	1.2	1.7	
South Dakota	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	
Tennessee	1.3	1.6	1.4	***	***	1.2	2.7	1.5	1.5	1.1	2.3	3.0	2.8	2.5	1.6	1.0	1.9	
Texas	1.5	1.9	1.9	***	10.0	1.7	1.4	1.8	1.9	2.0	2.3	2.2	2.5	3.2	2.7	1.2	1.9	
Utah	1.3	1.6	1.5	***	7.5	***	1.8	1.3	4.2	1.4	2.3	1.9	2.5	1.8	2.0	2.0	1.3	
Vermont*	1.4	2.1	1.8	***	***	***	***	1.4	4.6	1.6	3.9	2.0	***	5.4	1.5	2.1	1.5	
Virginia	1.2	1.5	1.6	***	6.8	0.8	3.4	1.4	1.9	1.3	2.7	1.9	2.5	2.0	1.5	1.2	1.4	
Washington	1.2	1.5	1.6	2.6	4.8	2.7	2.8	1.4	2.1	2.6	2.5	1.9	2.8	1.8	3.1	1.7	1.4	
West Virginia	0.9	1.0	1.2	***	***	***	4.2	0.9	1.4	1.2	1.8	2.0	1.8	1.9	1.2	1.1	1.3	
Wisconsin*	2.0	2.3	2.2	***	***	***	2.9	2.0	3.5	2.7	3.0	2.4	3.9	3.1	2.5	2.3	2.0	

State	All students		Sex		Race/ethnicity					Parents' highest level of education			School location		Poverty measure	
	Male	Female	American Indian/Alaskan Native	Asian/Pacific Islander	Black	Hispanic	White	Less than high school	High school graduate	Some education beyond high school	College graduate	Central city	Urban fringe/large town	Rural/small town	Eligible for free/reduced-price lunch	Not eligible for free/reduced-price lunch
Wyoming	1.0	1.5	1.4	2.5	****	****	1.0	3.1	1.7	2.1	1.7	1.6	1.3	1.5	1.3	
Am. Samoa	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	
Guam	0.8	1.3	1.0	****	1.1	1.4	****	****	1.5	3.0	2.1	****	****	****	1.0	
N. Marianas	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	
Puerto Rico	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	
Virgin Islands	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	

◆ U.S. data include public and nonpublic school students, while state data include public school students only.

▼ NAEP quality control activities involving state assessment data raised concerns about the accuracy and precision of national Grade 8 Asian/Pacific Islander data. As a result, they have not been included in this report.

* State did not satisfy one of the NAEP guidelines for school sample participation rates at Grade 8.

▲ State did not participate in the 1996 NAEP mathematics assessment at Grade 8.

● State did not meet the minimum school participation guidelines for public schools at Grade 8; therefore, results were not released by the National Center for Education Statistics.

**** Standard error estimates cannot be accurately determined.

Source: Reese, C.M., Jerry, L., & Ballator, N. (1997, June). NAEP 1996 mathematics state report for [name of state]. Washington, DC: National Center for Education Statistics.

State	All students	Sex		Race/ethnicity					Parents' highest level of education				School location		Poverty measure		
		Male	Female	American Indian/Alaskan Native	Asian/Pacific Islander	Black	Hispanic	White	Less than high school	High school graduate	Some education beyond high school	College graduate	Central city	Urban fringe/large town	Rural/small town	Eligible for free/reduced-price lunch	Not eligible for free/reduced-price lunch
U.S.♦	1.2	1.2	1.7	5.7	3.7	0.8	1.1	1.7	1.8	1.7	2.2	1.7	○	○	○	1.6	1.8
Alabama	1.5	1.9	1.7	***	***	1.1	3.2	2.0	2.4	1.3	2.1	2.4	○	○	○	1.0	2.2
Alaska*	1.6	2.2	2.3	2.7	6.2	***	3.8	1.9	***	3.2	3.5	2.6	○	○	○	2.9	2.6
Arizona	1.7	2.0	1.8	3.9	***	3.5	1.9	1.9	1.6	2.4	2.7	2.4	○	○	○	1.5	2.4
Arkansas*	1.5	2.3	1.4	***	***	1.5	4.0	1.9	1.6	2.0	2.6	2.3	○	○	○	1.6	1.8
California	1.7	1.9	1.8	***	3.6	2.5	1.5	2.7	1.5	1.9	2.2	2.6	○	○	○	1.2	2.5
Colorado	1.2	1.5	1.8	6.5	6.5	4.2	2.0	1.4	3.3	2.7	2.4	1.5	○	○	○	2.1	1.6
Connecticut	1.7	1.9	2.3	***	6.3	2.9	1.8	2.0	3.6	3.4	3.0	2.4	○	○	○	3.0	2.1
Delaware	1.0	1.8	1.2	***	***	1.2	2.5	1.3	3.1	2.1	2.3	2.1	○	○	○	1.6	1.5
DC	0.9	1.1	1.1	***	***	0.8	2.2	***	***	0.8	2.2	1.8	○	○	○	0.5	2.2
Florida	1.6	1.9	2.0	***	***	1.3	1.4	2.2	3.0	1.8	2.7	2.7	○	○	○	1.5	2.1
Georgia	1.7	2.0	1.7	***	***	1.2	4.1	2.0	1.9	2.0	2.1	3.1	○	○	○	1.0	2.3
Hawaii	1.0	1.2	1.5	***	1.2	4.1	1.1	3.6	3.9	1.7	3.3	1.5	○	○	○	1.5	1.3
Idaho	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	○	○	○	▲	▲
Illinois	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	○	○	○	▲	▲
Indiana	1.9	2.3	2.2	***	***	2.3	3.2	2.0	3.3	2.6	2.5	3.0	○	○	○	2.7	1.9
Iowa*	1.6	2.1	2.0	***	***	3.0	5.7	1.7	4.6	2.5	2.8	2.2	○	○	○	2.0	1.8
Kansas	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	○	○	○	▲	▲

State	All students	Sex		Race/ethnicity					Parents' highest level of education				School location			Poverty measure	
		Male	Female	American Indian/Alaskan Native	Asian/Pacific Islander	Black	Hispanic	White	Less than high school	High school graduate	Some education beyond high school	College graduate	Central city	Urban fringe/large town	Rural/small town	Eligible for free/reduced-price lunch	Not eligible for free/reduced-price lunch
Kentucky	1.3	1.6	1.6	***	***	1.8	4.3	1.3	1.5	1.6	2.4	2.8	○	○	○	1.5	1.6
Louisiana	1.2	1.9	1.2	***	***	0.9	2.9	1.6	2.0	1.3	2.5	2.1	○	○	○	1.1	2.0
Maine	1.8	1.7	2.5	***	***	***	7.3	1.7	4.0	2.5	3.8	2.2	○	○	○	2.4	2.3
Maryland*	1.8	2.2	2.2	***	6.7	1.3	2.8	2.3	3.6	3.0	2.8	2.9	○	○	○	1.2	2.4
Massachusetts	1.7	2.1	2.0	***	7.9	2.7	2.8	1.8	4.0	2.8	3.6	2.0	○	○	○	1.6	2.0
Michigan*	2.0	2.4	2.5	***	***	1.5	4.4	2.3	3.6	2.7	2.5	2.5	○	○	○	2.7	2.1
Minnesota	1.7	2.0	2.0	***	10.8	3.2	5.7	1.7	5.2	3.1	3.4	2.0	○	○	○	1.9	1.9
Mississippi	1.0	1.4	1.1	***	***	0.6	1.7	1.5	2.0	1.2	2.3	2.0	○	○	○	0.8	1.7
Missouri	1.3	1.7	1.7	***	***	1.3	3.6	1.6	2.2	2.2	2.7	2.0	○	○	○	1.8	1.6
Montana*	2.1	2.9	2.3	3.6	***	***	4.8	2.0	5.8	4.0	3.7	2.7	○	○	○	2.9	2.4
Nebraska	1.5	1.9	1.9	***	***	2.6	4.0	1.6	2.3	2.2	2.9	2.2	○	○	○	2.3	1.7
Nevada	●	●	●	●	●	●	●	●	●	●	●	●	○	○	○	●	●
New Hampshire	●	●	●	●	●	●	●	●	●	●	●	●	○	○	○	●	●
New Jersey	●	●	●	●	●	●	●	●	●	●	●	●	○	○	○	●	●
New Mexico	0.7	1.2	1.2	1.6	***	***	0.8	1.4	1.1	1.4	2.1	1.6	○	○	○	1.0	1.5
New York*	1.7	2.7	1.8	***	8.3	1.2	2.3	2.2	5.5	3.0	3.4	2.5	○	○	○	1.6	2.5
North Carolina	1.4	2.0	1.5	5.0	***	1.0	3.2	1.7	2.2	1.8	2.4	2.1	○	○	○	0.8	1.8
North Dakota	1.5	1.9	1.8	4.6	***	***	4.8	1.6	5.9	3.1	3.0	1.6	○	○	○	2.9	1.7

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Ohio	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	○	○	○	▲	▲
Oklahoma	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	○	○	○	▲	▲
Oregon	1.8	2.3	1.9	1.9	6.9	5.2	***	2.7	1.9	3.7	2.3	2.7	2.4	○	○	○	2.2	1.8
Pennsylvania	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	○	○	○	▲	▲
Rhode Island	1.5	1.6	2.0	2.0	***	4.7	2.4	1.2	1.8	1.8	2.5	3.1	2.2	○	○	○	1.5	1.9
South Carolina*	1.4	2.2	1.3	1.3	***	***	0.9	2.7	2.3	3.3	1.7	2.6	2.9	○	○	○	1.1	2.1
South Dakota	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	○	○	○	▲	▲
Tennessee	1.7	1.9	2.1	2.1	***	***	1.6	***	2.0	2.3	2.0	2.6	2.9	○	○	○	1.3	2.2
Texas	1.5	1.9	1.8	1.8	***	5.7	2.1	1.1	2.1	2.4	2.0	3.0	2.0	○	○	○	1.2	2.1
Utah	1.2	1.6	1.6	1.6	***	4.7	***	2.8	1.3	5.1	2.5	2.3	1.7	○	○	○	2.6	1.5
Vermont*	1.6	2.3	2.0	2.0	***	***	***	6.2	1.7	2.8	2.4	3.2	2.7	○	○	○	2.7	1.9
Virginia	2.1	2.4	2.5	2.5	***	7.1	1.4	4.1	2.4	2.0	1.9	2.5	2.9	○	○	○	1.2	2.5
Washington	1.6	2.2	1.5	1.5	4.5	4.8	2.5	2.2	1.8	3.4	2.2	2.3	2.4	○	○	○	1.8	1.9
West Virginia	1.1	1.7	1.6	1.6	***	***	2.8	***	1.1	1.4	1.4	2.5	1.9	○	○	○	1.0	1.4
Wisconsin*	1.9	2.5	2.3	2.3	***	***	2.7	6.4	1.9	5.4	4.1	2.3	2.2	○	○	○	2.8	2.1
Wyoming	1.3	1.5	1.6	1.6	3.2	***	***	2.3	1.4	4.5	3.1	2.5	1.8	○	○	○	2.0	1.4
Am. Samoa	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	○	○	○	▲	▲
Guam	1.0	1.3	1.5	1.5	***	1.1	***	1.5	4.7	***	1.2	2.9	2.0	○	○	○	***	1.2

State	Sex		All students	Race/ethnicity						Parents' highest level of education				School location			Poverty measure	
	Male	Female		American Indian/Alaskan Native	Asian/Pacific Islander	Black	Hispanic	White	Less than high school	High school graduate	Some education beyond high school	College graduate	Central city	Urban fringe/large town	Rural/small town	Eligible for free/reduced-price lunch	Not eligible for free/reduced-price lunch	
N. Marianas	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	○	○	▲	▲	
Puerto Rico	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	○	○	▲	▲	
Virgin Islands	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	○	○	▲	▲	

◆ U.S. data include public and nonpublic school students, while state data include public school students only.

◆◆◆ Standard error estimates cannot be accurately determined.

○ No school location data for science in 1996.

* State did not satisfy one of the NAEP guidelines for school sample participation rates at Grade 8.

▲ State did not participate in the 1996 NAEP science assessment at Grade 8.

● State did not meet the minimum school participation guidelines for public schools at Grade 8; therefore, results were not released by the National Center for Education Statistics.

Source: National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 1996 Science assessment, as shown in: Bourque, M.L., Champagne, A.B., & Crissman, S. (1997, October). 1996 Science performance standards: Achievement results for the nation and the states. Washington, DC: National Assessment Governing Board.

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This section of the report provides additional information about the student subgroups profiled in Part 3 on each of the state pages. Part 3 shows the percentages of students in different subgroups who met the Goals Panel's performance standard (that is, a score at or above the Proficient level) on the most recent NAEP mathematics and science assessments.¹ Results are presented by sex, race/ethnicity, parents' highest level of education, school location, and eligibility for free/reduced-price lunch programs.

The summaries in this appendix indicate whether differences between subgroups were statistically significant. (See explanation of statistical significance on pp. 3-4.) Each list shows the number of states in which the percentage of students in one group who scored at or above Proficient was significantly higher than that of students in a second group. This is shortened to read, for example, males outperformed females nationally and in 9 states. If a state is not shown on a particular list, either differences between the subgroups in that state were not statistically significant, or sample sizes were too small to permit reliable estimates. The reader is cautioned to avoid interpreting these subgroup differences as causal relationships.

Mathematics, Grade 4 – 1996

Males outperformed females nationally and in 9 states

U.S.
Connecticut
District of Columbia
Minnesota
Montana
New Jersey
Rhode Island
Utah
Washington
Wisconsin

Subgroup differences were statistically significant nationally and in 9 out of 45 states.

Whites outperformed American Indians/Alaskan Natives nationally and in 14 states

U.S.
Alaska
Arizona
Arkansas
Colorado
Michigan
Minnesota
Montana
Nebraska
Nevada
North Dakota
Oregon
Utah
Washington
Wyoming

Subgroup differences were statistically significant nationally and in 14 out of 15 states.

Whites outperformed Asians/Pacific Islanders in 2 states

Alaska
Minnesota

Subgroup differences were statistically significant in 2 out of 15 states.

¹ U.S. data include public and nonpublic school students, while state data include public school students only.

Mathematics, Grade 4 – 1996

Whites outperformed Blacks nationally and in 34 states

- | | |
|----------------------|----------------|
| U.S. | Mississippi |
| Alabama | Missouri |
| Alaska | Nebraska |
| Arkansas | Nevada |
| Colorado | New Jersey |
| Connecticut | New Mexico |
| Delaware | New York |
| District of Columbia | North Carolina |
| Florida | Pennsylvania |
| Georgia | Rhode Island |
| Hawaii | South Carolina |
| Indiana | Tennessee |
| Iowa | Texas |
| Kentucky | Virginia |
| Louisiana | Washington |
| Maryland | West Virginia |
| Massachusetts | Wisconsin |
| Michigan | |

Subgroup differences were statistically significant nationally and in 34 out of 34 states.

Whites outperformed Hispanics nationally and in 43 states

- | | | |
|----------------------|---------------|----------------|
| U.S. | Kentucky | North Carolina |
| Alabama | Louisiana | Oregon |
| Alaska | Maine | Pennsylvania |
| Arizona | Maryland | Rhode Island |
| Arkansas | Massachusetts | South Carolina |
| California | Michigan | Texas |
| Colorado | Minnesota | Utah |
| Connecticut | Mississippi | Vermont |
| Delaware | Missouri | Virginia |
| District of Columbia | Montana | Washington |
| Florida | Nebraska | West Virginia |
| Georgia | Nevada | Wisconsin |
| Hawaii | New Jersey | Wyoming |
| Indiana | New Mexico | Guam |
| Iowa | New York | |

Subgroup differences were statistically significant nationally and in 43 out of 45 states.

Asians/Pacific Islanders outperformed American Indians/Alaskan Natives nationally and in 2 states

- U.S.
- Nevada
- Oregon

Subgroup differences were statistically significant nationally and in 2 out of 7 states.

Asians/Pacific Islanders outperformed Blacks nationally and in 11 states

- U.S.
- Alaska
- Colorado
- Hawaii
- Maryland
- Massachusetts
- Nevada
- New Jersey
- New York
- Rhode Island
- Virginia
- Washington

Subgroup differences were statistically significant nationally and in 11 out of 11 states.

Asians/Pacific Islanders outperformed Hispanics nationally and in 10 states

- U.S.
- California
- Colorado
- Maryland
- Massachusetts
- Nevada
- New Jersey
- New York
- Oregon
- Virginia
- Washington

Subgroup differences were statistically significant nationally and in 10 out of 12 states.

Appendix D

Mathematics, Grade 4 – 1996

Asians/Pacific Islanders outperformed Whites in 3 states

Maryland
New Jersey
Virginia

Subgroup differences were statistically significant in 3 out of 15 states.

Students whose parents *did* complete high school, outperformed students whose parents *did not* complete high school, nationally and in 10 states

U.S.
Arkansas
Connecticut
Kentucky
Michigan
Nebraska
Nevada
Oregon
Tennessee
Texas
West Virginia

Subgroup differences were statistically significant nationally and in 10 out of 32 states.

Students whose parents had some education beyond high school outperformed students whose parents did not complete high school, nationally and in 30 states

U.S.	Missouri
Alabama	Montana
Alaska	Nebraska
Arizona	Nevada
Arkansas	New Jersey
Colorado	New Mexico
Connecticut	North Carolina
Florida	Oregon
Georgia	Rhode Island
Kentucky	Tennessee
Louisiana	Texas
Maine	Virginia
Maryland	Washington
Massachusetts	West Virginia
Michigan	Wyoming
Mississippi	

Subgroup differences were statistically significant nationally and in 30 out of 32 states.

Students whose parents were college graduates outperformed students whose parents did not complete high school, nationally and in 32 states

U.S.	Missouri
Alabama	Montana
Alaska	Nebraska
Arizona	Nevada
Arkansas	New Jersey
Colorado	New Mexico
Connecticut	North Carolina
Florida	Oregon
Georgia	Rhode Island
Indiana	South Carolina
Kentucky	Tennessee
Louisiana	Texas
Maine	Virginia
Maryland	Washington
Massachusetts	West Virginia
Michigan	Wyoming
Mississippi	

Subgroup differences were statistically significant nationally and in 32 out of 32 states.

Mathematics, Grade 4 – 1996

Students in central cities outperformed students in urban fringes/large towns in 1 state

Hawaii

Subgroup differences were statistically significant in 1 out of 39 states.

Students in central cities outperformed students in rural areas/small towns in 4 states

Arizona
Hawaii
North Carolina
South Carolina

Subgroup differences were statistically significant in 4 out of 41 states.

Students in urban fringes/large towns outperformed students in central cities nationally and in 15 states

U.S.
Connecticut
Georgia
Iowa
Maryland
Massachusetts
Michigan
Minnesota
Missouri
New Jersey
New York
Pennsylvania
Rhode Island
Texas
Virginia
Wisconsin

Subgroup differences were statistically significant nationally and in 15 out of 39 states.

Students in urban fringes/large towns outperformed students in rural areas/small towns in 10 states

Georgia
Louisiana
Maryland
Minnesota
Mississippi
Missouri
New York
Pennsylvania
South Carolina
Virginia

Subgroup differences were statistically significant in 10 out of 38 states.

Students in rural areas/small towns outperformed students in central cities in 5 states

Connecticut
Massachusetts
Michigan
Pennsylvania
Rhode Island

Subgroup differences were statistically significant in 5 out of 41 states.

Mathematics, Grade 4 – 1996

Students who were *not* eligible for the free/reduced-price school lunch program outperformed students who were eligible, nationally and in 45 states

U.S.	Missouri
Alabama	Montana
Alaska	Nebraska
Arizona	Nevada
Arkansas	New Jersey
California	New Mexico
Colorado	New York
Connecticut	North Carolina
Delaware	North Dakota
District of Columbia	Oregon
Florida	Pennsylvania
Georgia	Rhode Island
Hawaii	South Carolina
Indiana	Tennessee
Iowa	Texas
Kentucky	Utah
Louisiana	Vermont
Maine	Virginia
Maryland	Washington
Massachusetts	West Virginia
Michigan	Wisconsin
Minnesota	Wyoming
Mississippi	Guam

Subgroup differences were statistically significant nationally and in 45 out of 45 states.

Mathematics, Grade 8 – 1996

Males outperformed females in 6 states

Colorado
Nebraska
North Carolina
South Carolina
Utah
Virginia

Subgroup differences were statistically significant in 6 out of 43 states.

Whites outperformed Blacks nationally and in 27 states

U.S.
Alabama
Arizona
Arkansas
Colorado
Connecticut
Delaware
District of Columbia
Florida
Georgia
Indiana
Iowa
Louisiana
Maryland
Massachusetts
Michigan
Minnesota
Mississippi
Missouri
Nebraska
New York
North Carolina
Rhode Island
South Carolina
Tennessee
Texas
Virginia
Washington

Subgroup differences were statistically significant nationally and in 27 out of 27 states.

Whites outperformed Hispanics nationally and in 35 states

U.S.
Alabama
Alaska
Arizona
California
Colorado
Connecticut
Delaware
District of Columbia
Florida
Georgia
Hawaii
Indiana
Iowa
Maryland
Massachusetts
Michigan
Minnesota
Mississippi
Montana
Nebraska
New Mexico
New York
North Carolina
North Dakota
Oregon
Rhode Island
South Carolina
Tennessee
Texas
Utah
Virginia
Washington
Wisconsin
Wyoming

Subgroup differences were statistically significant nationally and in 35 out of 36 states.

Asians/Pacific Islanders outperformed Blacks in 9 states

Colorado
Connecticut
Maryland
Massachusetts
Minnesota
New York
Texas
Virginia
Washington

Subgroup differences were statistically significant in 9 out of 10 states.

Appendix D

Mathematics, Grade 8 – 1996

Asians/Pacific Islanders outperformed
American Indians/Alaskan Natives in 2 states

Oregon
Washington

Subgroup differences were statistically significant in 2 out of 3 states.

Asians/Pacific Islanders outperformed Hispanics in 14 states

California
Colorado
Connecticut
Hawaii
Maryland
Massachusetts
New York
Oregon
Rhode Island
Texas
Utah
Virginia
Washington
Guam

Subgroup differences were statistically significant in 14 out of 16 states.

Asians/Pacific Islanders outperformed Whites in 2 states

Maryland
Texas

Subgroup differences were statistically significant in 2 out of 15 states.

Students whose parents *did* complete high school
outperformed students whose parents *did not* complete high school,
nationally and in 18 states

U.S.
Arizona
Arkansas
California
Indiana
Kentucky
Maine
Maryland
Massachusetts
Michigan
Missouri
Montana
Nebraska
North Carolina
Rhode Island
Tennessee
Texas
West Virginia
Wisconsin

Subgroup differences were statistically significant nationally and in 18 out of 39 states.

Students whose parents had some education beyond high school
outperformed students whose parents did not complete high school,
nationally and in 38 states

U.S.
Alabama
Arizona
Arkansas
California
Colorado
Connecticut
Delaware
Georgia
Indiana
Iowa
Kentucky
Louisiana
Maine
Maryland
Massachusetts
Michigan
Minnesota
Mississippi
Missouri
Montana
Nebraska
New Mexico
New York
North Carolina
North Dakota
Oregon
Rhode Island
South Carolina
Tennessee
Texas
Utah
Vermont
Virginia
Washington
West Virginia
Wisconsin
Wyoming
Guam

Subgroup differences were statistically significant nationally and in 38 out of 39 states.

Mathematics, Grade 8 – 1996

Students whose parents were college graduates outperformed students whose parents did not complete high school, nationally and in 39 states

- U.S.
- Alabama
- Arizona
- Arkansas
- California
- Colorado
- Connecticut
- Delaware
- Georgia
- Hawaii
- Indiana
- Iowa
- Kentucky
- Louisiana
- Maine
- Maryland
- Massachusetts
- Michigan
- Minnesota
- Mississippi
- Missouri
- Montana
- Nebraska
- New Mexico
- New York
- North Carolina
- North Dakota
- Oregon
- Rhode Island
- South Carolina
- Tennessee
- Texas
- Utah
- Vermont
- Virginia
- Washington
- West Virginia
- Wisconsin
- Wyoming
- Guam

Subgroup differences were statistically significant nationally and in 39 out of 39 states.

Students in central cities outperformed students in urban fringes/large towns in 2 states

- Hawaii
- North Carolina

Subgroup differences were statistically significant in 2 out of 35 states.

563

Students in central cities outperformed students in rural areas/small towns in 8 states

- Alaska
- Arizona
- Hawaii
- Kentucky
- North Carolina
- Oregon
- South Carolina
- West Virginia

Subgroup differences were statistically significant in 8 out of 38 states.

Students in urban fringes/large towns outperformed students in central cities nationally and in 13 states

- U.S.
- California
- Connecticut
- Georgia
- Maine
- Maryland
- Massachusetts
- Michigan
- Nebraska
- New York
- Rhode Island
- Tennessee
- Virginia
- Wisconsin

Subgroup differences were statistically significant nationally and in 13 out of 35 states.

564

Appendix D

Mathematics, Grade 8 – 1996

Students in urban fringes/large towns outperformed students
in rural areas/small towns in 13 states

Arkansas
Georgia
Maine
Maryland
Minnesota
Mississippi
Nebraska
New York
Oregon
South Carolina
Tennessee
Virginia
West Virginia

Subgroup differences were statistically significant in 13 out of 35 states.

Students in rural areas/small towns outperformed students
in central cities nationally and in 7 states

U.S.
Connecticut
Massachusetts
Michigan
New York
Rhode Island
Wisconsin
Wyoming

Subgroup differences were statistically significant nationally and in 7 out of 38 states.

Students in rural areas/small towns outperformed students
in urban fringes/large towns in 1 state

Rhode Island

Subgroup differences were statistically significant in 1 out of 35 states.

Students who were *not* eligible for the free/reduced-price school lunch
program outperformed students who were eligible, nationally and in 41 states

U.S.	Missouri
Alabama	Mississippi
Alaska	Minnesota
Arizona	Montana
Arkansas	Nebraska
California	New Mexico
Colorado	New York
Connecticut	North Carolina
Delaware	North Dakota
District of Columbia	Oregon
Florida	Rhode Island
Georgia	South Carolina
Hawaii	Tennessee
Iowa	Texas
Indiana	Utah
Kentucky	Vermont
Louisiana	Virginia
Maine	Washington
Maryland	West Virginia
Massachusetts	Wisconsin
Michigan	Wyoming

Subgroup differences were statistically significant nationally and in 41 out of 41 states.

Science, Grade 8 – 1996

Males outperformed females in 19 states

Alaska	Nebraska
Arkansas	New Mexico
Colorado	New York
Georgia	North Dakota
Louisiana	Oregon
Maine	Texas
Massachusetts	Utah
Michigan	Washington
Minnesota	Wisconsin
Missouri	

Subgroup differences were statistically significant in 19 out of 42 states.

Whites outperformed American Indians/Alaskan Natives nationally and in 9 states

U.S.
Alaska
Arizona
Colorado
Montana
New Mexico
North Carolina
North Dakota
Washington
Wyoming

Subgroup differences were statistically significant nationally and in 9 out of 10 states.

Whites outperformed Asians/Pacific Islanders in 3 states

Rhode Island
Utah
Guam

Subgroup differences were statistically significant in 3 out of 16 states.

Whites outperformed Blacks nationally and in 31 states

U.S.	Massachusetts
Alabama	Michigan
Arizona	Minnesota
Arkansas	Mississippi
California	Missouri
Colorado	Nebraska
Connecticut	New York
Delaware	North Carolina
Florida	Rhode Island
Georgia	South Carolina
Hawaii	Tennessee
Indiana	Texas
Iowa	Virginia
Kentucky	Washington
Louisiana	West Virginia
Maryland	Wisconsin

Subgroup differences were statistically significant nationally and in 31 out of 31 states.

Science, Grade 8 – 1996

Whites outperformed Hispanics nationally and in 39 states

U.S.
 Alabama
 Alaska
 Arizona
 Arkansas
 California
 Colorado
 Connecticut
 Delaware
 Florida
 Georgia
 Hawaii
 Indiana
 Iowa
 Kentucky
 Louisiana
 Maine
 Maryland
 Massachusetts
 Michigan

Subgroup differences were statistically significant nationally and in 39 out of 39 states.

Asians/Pacific Islanders outperformed American Indians/Alaskan Natives in 1 state

Alaska

Subgroup differences were statistically significant in 1 out of 4 states.

Asians/Pacific Islanders outperformed Blacks nationally and in 9 states

U.S.
 California
 Colorado
 Connecticut
 Maryland
 Massachusetts
 New York
 Texas
 Virginia
 Washington

Subgroup differences were statistically significant nationally and in 9 out of 12 states.

Asians/Pacific Islanders outperformed Hispanics nationally and in 12 states

U.S.
 Alaska
 California
 Colorado
 Connecticut
 Hawaii
 Maryland
 Massachusetts
 New York
 Oregon
 Rhode Island
 Texas
 Virginia

Subgroup differences were statistically significant nationally and in 12 out of 16 states.

Science, Grade 8 – 1996

Students whose parents *did* complete high school outperformed students whose parents *did not* complete high school, nationally and in 13 states

- U.S.
- Arizona
- Arkansas
- California
- Kentucky
- Michigan
- Montana
- Nebraska
- North Carolina
- Rhode Island
- Tennessee
- Utah
- West Virginia
- Wisconsin

Subgroup differences were statistically significant nationally and in 13 out of 39 states.

571

Students whose parents had some education beyond high school outperformed students whose parents did not complete high school, nationally and in 37 states

- | | |
|---------------|----------------|
| U.S. | Mississippi |
| Alabama | Missouri |
| Arizona | Montana |
| Arkansas | Nebraska |
| California | New Mexico |
| Colorado | New York |
| Connecticut | North Carolina |
| Delaware | Oregon |
| Florida | Rhode Island |
| Georgia | South Carolina |
| Indiana | Tennessee |
| Iowa | Texas |
| Kentucky | Utah |
| Louisiana | Vermont |
| Maine | Virginia |
| Maryland | Washington |
| Massachusetts | West Virginia |
| Michigan | Wisconsin |
| Minnesota | Wyoming |

Subgroup differences were statistically significant nationally and in 37 out of 39 states.

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Science, Grade 8 – 1996

Students whose parents were college graduates outperformed students whose parents did not complete high school, nationally and in 39 states

U.S.	Mississippi
Alabama	Missouri
Arizona	Montana
Arkansas	Nebraska
California	New Mexico
Colorado	New York
Connecticut	North Carolina
Delaware	North Dakota
Florida	Oregon
Georgia	Rhode Island
Hawaii	South Carolina
Indiana	Tennessee
Iowa	Texas
Kentucky	Utah
Louisiana	Vermont
Maine	Virginia
Maryland	Washington
Massachusetts	West Virginia
Michigan	Wisconsin
Minnesota	Wyoming

Subgroup differences were statistically significant nationally and in 39 out of 39 states.

573

Students who were not eligible for the free/reduced-price school lunch program outperformed students who were eligible, nationally and in 41 states

U.S.	Minnesota
Alabama	Mississippi
Alaska	Missouri
Arizona	Montana
Arkansas	Nebraska
California	New Mexico
Colorado	New York
Connecticut	North Carolina
Delaware	North Dakota
District of Columbia	Oregon
Florida	Rhode Island
Georgia	South Carolina
Hawaii	Tennessee
Indiana	Texas
Iowa	Utah
Kentucky	Vermont
Louisiana	Virginia
Maine	Washington
Maryland	West Virginia
Massachusetts	Wisconsin
Michigan	Wyoming

Subgroup differences were statistically significant nationally and in 41 out of 41 states.

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