Mathematics Grade 4

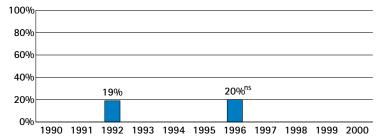
1. Improvement Over Time

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 higher percentages of students who were at or above Proficient on NAEP:

Connecticut	31%	Maine, Wisconsin	27%
Minnesota	29%		

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

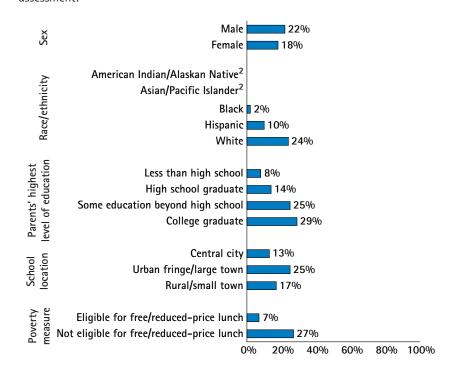
New Jersey, Texas Indiana, Massachusetts, Nebraska,	25% 24%	U.S.,* Alaska, North Carolina, Oregon, Washington	21%
North Dakota		Missouri, New York, Pennsylvania	20%
Michigan, Utah, Vermont	23%	Virginia, West Virginia, Wyoming	19%
Colorado, Iowa, Maryland, Montana	22%	Rhode Island, Tennessee	17%

16 states had significantly lower 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%		

3. Subgroup Performance

What percentages of public school 4th graders in different subgroups in Missouri 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.

^{*} 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.

Missouri

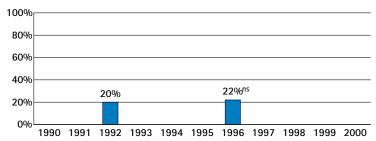
1. Improvement Over Time

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 higher' 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 similar 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.,* Indiana, Maryland, Utah	24%	Delaware	19%
Missouri, New York, Wyoming	22%		

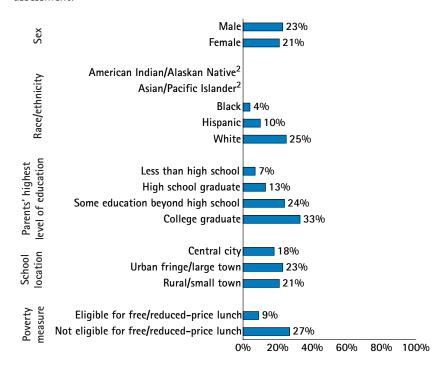
16 states had significantly lower percentages of students who were at or above Proficient on NAEP:

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

[†] 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.

3. Subgroup Performance

What percentages of public school 8th graders in different subgroups 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.

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

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

Science Grade 8

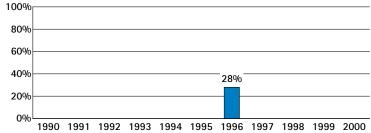
1. Improvement Over Time

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 higher' 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 similar' 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%		

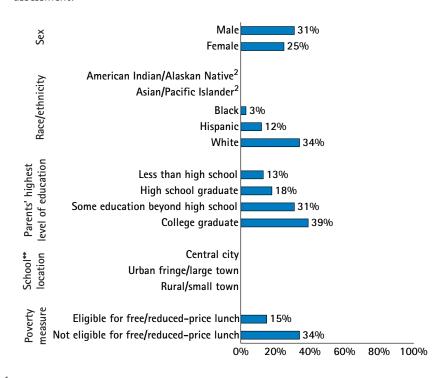
18 states had significantly lower' percentages of students who were at or above Proficient on NAEP:

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

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

3. Subgroup Performance

What percentages of public school 8th graders in different subgroups 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.

¹ See explanation on pp. 3-4.

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

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

^{**} No school location data for science in 1996.

International Comparisons

Missouri

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

15 nations would be expected to perform significantly higher:

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

19 nations would be expected to perform similarly:

(Australia) (Latvia - LSS)3 (Belgium - French)2 Missouri Canada New Zealand (Denmark) Norway (Romania) (England) (Germany) (Scotland) (Greece) Spain Iceland Sweden (Thailand) Ireland (Israel) **United States**

7 nations would be expected to perform significantly lower:1

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

(Kuwait)

- † 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

(Australia)

Missouri

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 Missouri 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:

Czech Republic Korea Singapore Japan

23 nations would be expected to perform similarly:1

(Netherlands)

(Austria) New Zealand Belgium - Flemish² Norway (Bulgaria) Russian Federation Canada (Scotland) (England) Slovak Republic (Germany) (Slovenia) Hong Kong Spain Hungary Sweden (Switzerland) Ireland (Israel) (Thailand) **United States**

14 nations would be expected to perform significantly lower:1

(Belgium - French)2 Iran, Islamic Republic (Colombia) (Kuwait) (Latvia - LSS)3 Cvprus (Denmark) (Lithuania) France Portugal (Romania) (Greece) Iceland (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.
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