Minnesota

Mathematics Grade 4

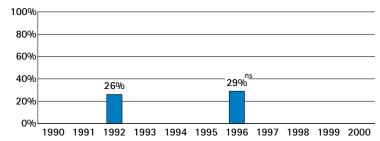
1. Improvement Over Time

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 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 Minnesota compare with other states in 4th grade mathematics achievement in public schools in 1996?

9 states had similar' percentages of students who were at or above Proficient on NAEP: Connecticut 31% New Jersey, Texas Minnesota 29% Indiana, Massachusetts, Nebraska.

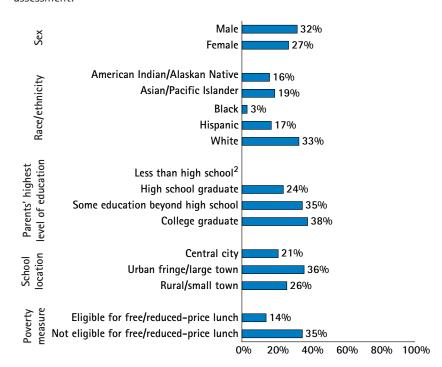
27%

35 states had significantly lower' 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		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%

North Dakota

3. Subgroup Performance

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



Maine, Wisconsin

25%

24%

[†] 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.

Minnesota

1. Improvement Over Time

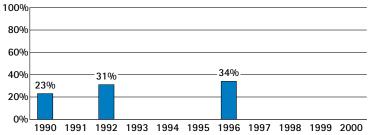


Have Minnesota's 8th graders improved in mathematics achievement?

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:

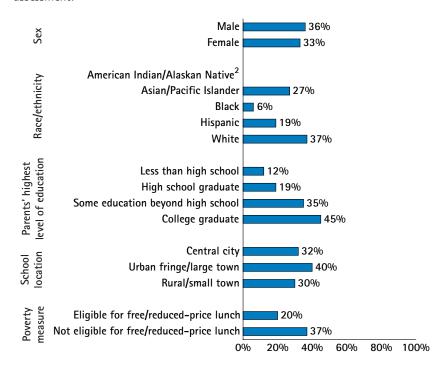
Minnesota	34%	Connecticut, Iowa, Maine, Nebraska	31%
North Dakota	33%	Alaska	30%
Montana, Wisconsin	32%	Massachusetts, Michigan	28%

31 states had significantly lower 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%		

3. Subgroup Performance

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

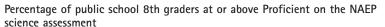
² Characteristics of the sample do not permit a reliable estimate.

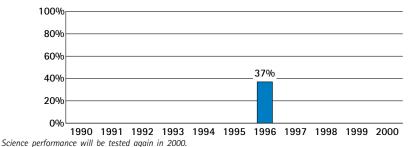
1. Improvement Over Time

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.





2. State Comparisons⁺

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

13 states had similar' 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:

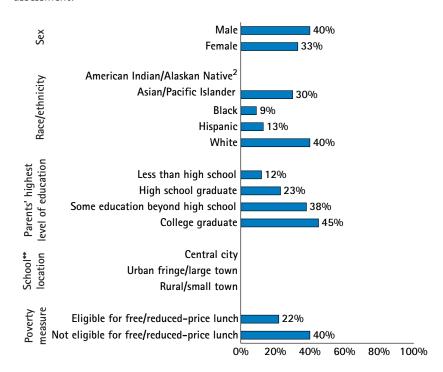
Utah ² Alaska	32% 31%	Delaware, Florida, Georgia, West Virginia	21%
Indiana	30%	California	20%
U.S.*	29 %	New Mexico	19%
Missouri	28%	Alabama	18%
New York, Virginia, Washington	27%	South Carolina	17%
Rhode Island	26%	Hawaii	15%
Maryland	25%	Louisiana	13%
North Carolina	24%	Mississippi	12%
Arizona, Kentucky, 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.

* 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 subgroups 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.

¹ See explanation on pp. 3-4.

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

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

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

International Comparisons

Minnesota

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 Japan Czech Republic Korea Hong Kong Singapore

19 nations performed similarly:1

(Australia) (Israel) (Austria) Minnesota (Belgium - French)² (Netherlands) (Bulgaria) New Zealand Canada Russian Federation Slovak Republic (England) France (Slovenia) Sweden (Germany) Hungary (Switzerland) (Thailand) Ireland

16 nations performed significantly lower:1

(Colombia) (Lithuania) Cyprus Norway (Denmark) Portugal (Greece) (Romania) Iceland (Scotland) Iran, Islamic Republic (South Africa) (Kuwait) Spain (Latvia - LSS)3 **United States**

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:

Singapore

12 nations performed similarly:1

(Australia) Japan (Austria) Korea Belaium - Flemish² Minnesota (Bulgaria) (Netherlands) Czech Republic Slovak Republic (England) (Slovenia) Hungary

28 nations performed significantly lower:1

(Latvia - LSS)3

(Lithuania) Canada New Zealand (Colombia) Cyprus Norway (Denmark) Portugal (Romania) France (Germany) Russian Federation (Greece) (Scotland) (South Africa) Hong Kong Iceland Spain Iran, Islamic Republic Sweden Ireland (Switzerland) (Israel) (Thailand) (Kuwait) **United States**

(Belgium - French)2

[†] 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 quidelines 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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