Mathematics Grade 4

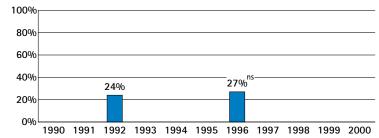
1. Improvement Over Time

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?

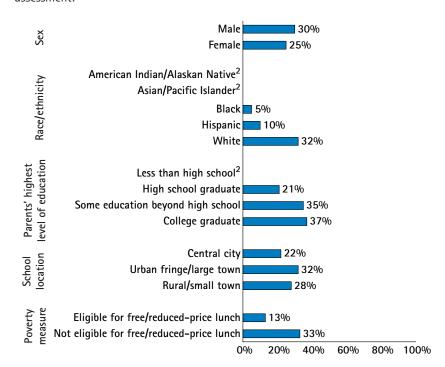
13 states had similar' percentages of students who were at or above Proficient on NAEP:			
Connecticut	31%	Indiana, Massachusetts, Nebraska,	24%
Minnesota	29%	North Dakota	
Wisconsin, Maine	27%	Michigan, Utah, Vermont	23%
New Jersey, Texas	25%	Marvland ²	22%

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

Colorado,² Iowa,² Montana²	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%
Arizona, Florida	15%		

3. Subgroup Performance

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

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.

Wisconsin

1. Improvement Over Time

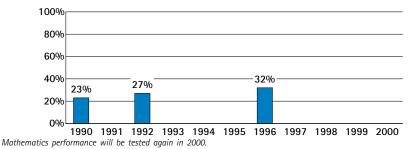


Have Wisconsin's 8th graders improved in mathematics achievement?

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



2. State Comparisons⁺

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

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

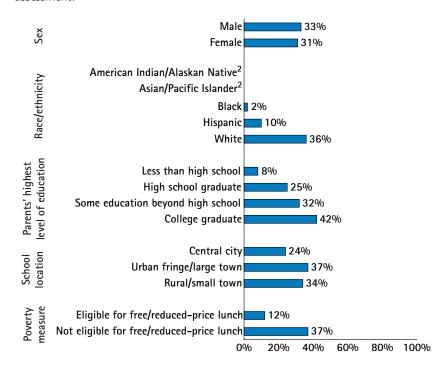
Minnesota	34%	Alaska	30%
North Dakota	33%	Massachusetts, Michigan	28%
Wisconsin, Montana	32 %	Vermont	27%
Connecticut, Iowa, Maine, Nebraska	31%	Oregon ²	26%

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

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

3. Subgroup Performance

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

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.

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.

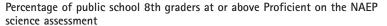
Science Grade 8

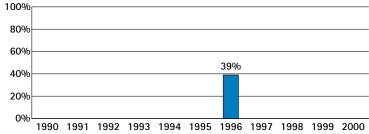
1. Improvement Over Time

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.





Science performance will be tested again in 2000.

2. State Comparisons⁺

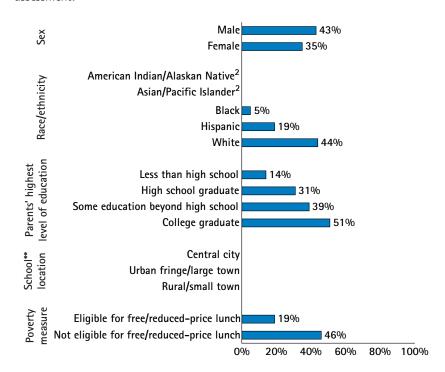
How did Wisconsin compare with other states in 8th grade science achievement in public schools in 1996?

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 lower' 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%	

3. Subgroup Performance

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



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

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

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.

International Comparisons

Wisconsin

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 Wisconsin 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:

Belgium - Flemish² Japan Czech Republic Korea Hong Kong Singapore

19 nations would be expected to perform similarly:1

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

16 nations would be expected to perform significantly lower:

(Colombia) (Lithuania) Cvprus Norway (Denmark) Portugal (Greece) (Romania) Iceland (Scotland) Iran, Islamic Republic (South Africa) (Kuwait) Spain (Latvia – LSS)³ **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 Wisconsin 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:

Singapore

(Belgium - French)2

12 nations would be expected to perform similarly:1

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

28 nations would be expected to perform significantly lower:1

(Latvia - LSS)3

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