North Dakota

Mathematics Grade 4

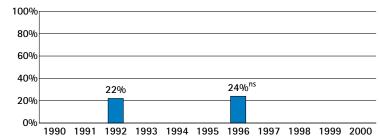
1. Improvement Over Time

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

1 state had a significantly higher' 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%	Michigan, Utah, Vermont	23%
		9	
Maine, Wisconsin	27%	Colorado, Iowa, Maryland, Montana	22%
New Jersey, Texas	25%	U.S.,* Alaska, North Carolina, Oregon,	21 %
North Dakota, Indiana, Massachusetts,	24%	Washington	
Nebraska		Missouri. ² Pennsylvania ²	20%

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

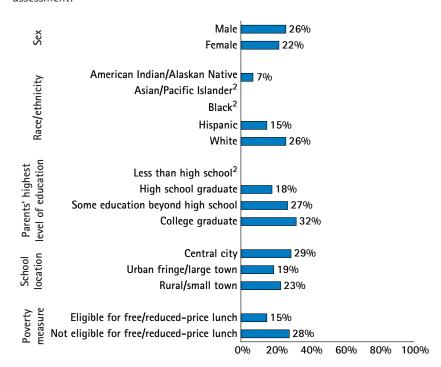
New York ²	20%	Arkansas, Georgia, New Mexico	13%
Virginia, West Virginia, Wyoming	19%	South Carolina	12%
Rhode Island, Tennessee	17%	Alabama, California	11%
Delaware, Hawaii, Kentucky	16%	Louisiana, Mississippi	8%
Arizona, Florida	15%	District of Columbia	5%
Nevada	14%	Guam	3%

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

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

3. Subgroup Performance

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

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.

North Dakota

1. Improvement Over Time

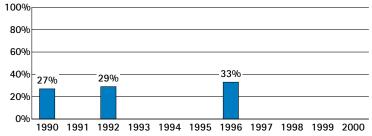


Have North Dakota's 8th graders improved in mathematics achievement?

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 similar percentages of students who were at or above Proficient on NAEP:				
Minnesota		Connecticut, Iowa, Maine, Nebraska		

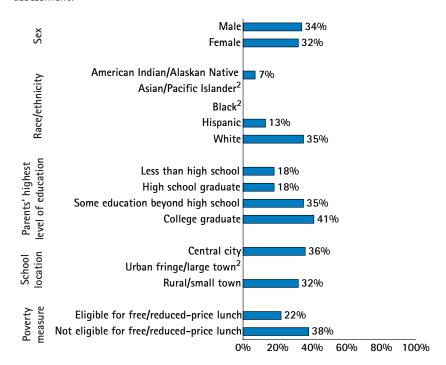
Minnesota	34%	Connecticut, Iowa, Maine, Nebraska	31%
North Dakota	33%	Alaska	30%
Montana, Wisconsin	32%	Massachusetts, Michigan	28%

31 states had significantly lower percentages of students who were

at or above Proficient on MAEP:			
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 North Dakota 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.

North Dakota

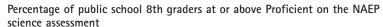
Science Grade 8

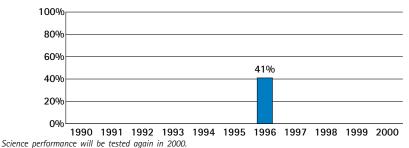
1. Improvement Over Time

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.





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:

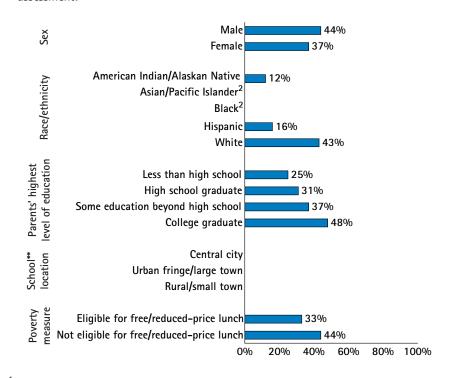
North Dakota, Maine, Montana	41%	Massachusetts, Minnesota	37%
Wisconsin	39%	Connecticut, Iowa	36%

34 states had significantly lower' 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%

3. Subgroup Performance

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

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.

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

International Comparisons

North Dakota

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 Dakota 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

17 nations would be expected to perform similarly:1

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

18 nations would be expected to perform significantly lower:

(Colombia) (Lithuania) Cyprus New Zealand (Denmark) Norway (England) 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 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 nation would be expected to perform significantly higher:

Singapore

9 nations would be expected to perform similarly:

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

31 nations would be expected to perform significantly lower:1

(Australia) (Latvia - LSS)3 Belgium - Flemish² (Lithuania) (Belgium - French)2 New Zealand Canada Norway (Colombia) Portugal Cyprus (Romania)

Russian Federation (Denmark)

France (Scotland) Slovak Republic (Germany) (Greece) (South Africa) Hong Kong Spain Sweden Iceland Iran, Islamic Republic (Switzerland) Ireland (Thailand) (Israel) **United States**

(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.
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