

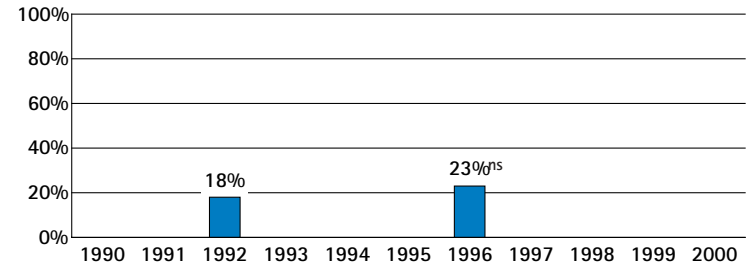
1. Improvement Over Time

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 higher¹ percentage of students who were at or above Proficient on NAEP:

Connecticut	31%
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25 states had similar¹ percentages of students who were at or above Proficient on NAEP:

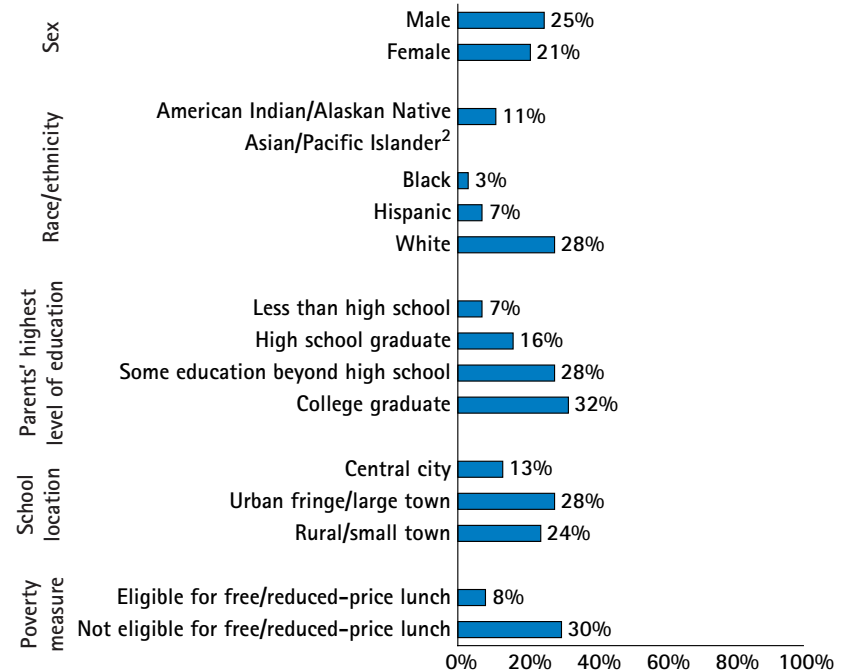
Minnesota	29%	Colorado, Iowa, Maryland, Montana	22%
Maine, Wisconsin	27%	U.S.* Alaska, North Carolina, Oregon,	21%
New Jersey, Texas	25%	Washington	
Indiana, Massachusetts, Nebraska,	24%	Missouri, New York, Pennsylvania	20%
North Dakota		Virginia, West Virginia, Wyoming	19%
Michigan, Utah, Vermont	23%		

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%

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.

[†] 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.

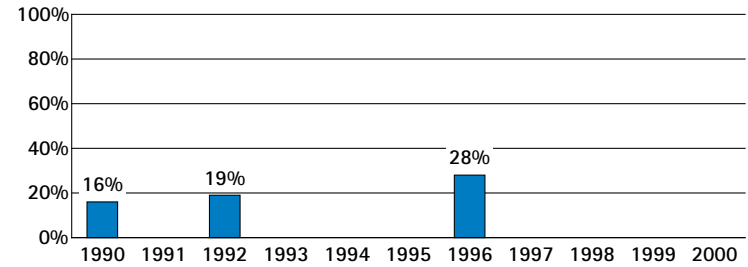
1. Improvement Over Time

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:

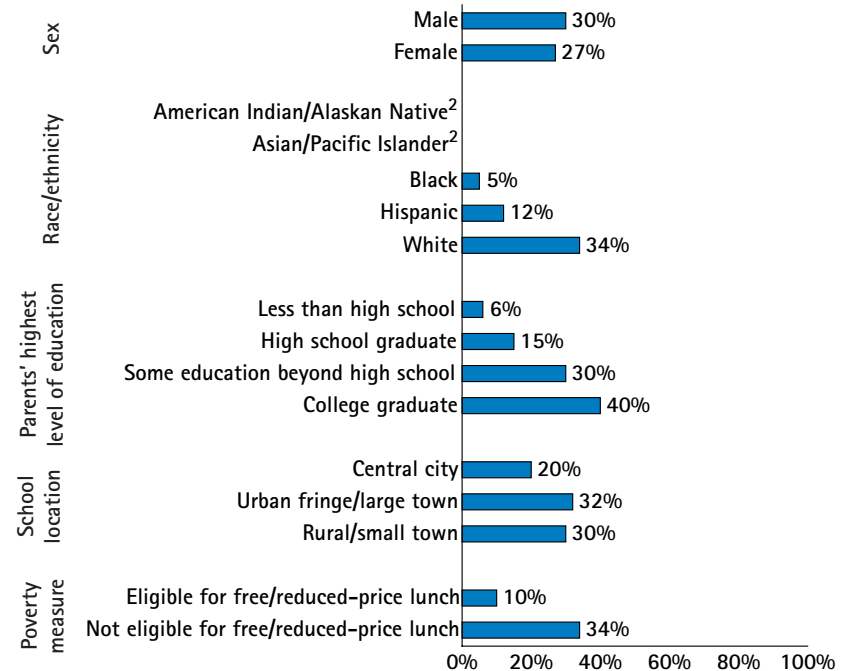
Minnesota	34%	Michigan , Massachusetts	28%
North Dakota	33%	Vermont	27%
Montana, Wisconsin	32%	Oregon, Washington	26%
Connecticut, Iowa, Maine, Nebraska	31%	Colorado	25%
Alaska	30%	U.S.* , Indiana, Maryland, Utah	24%

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	
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%		

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?



[†] 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.

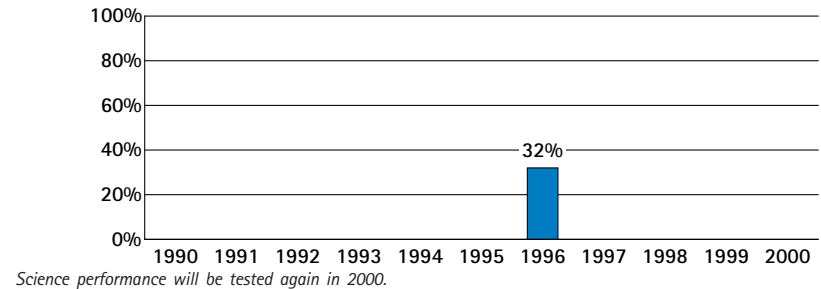
1. Improvement Over Time

Have 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



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%
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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, West Virginia	21%	Mississippi	12%
California	20%	Guam	7%
		District of Columbia	5%

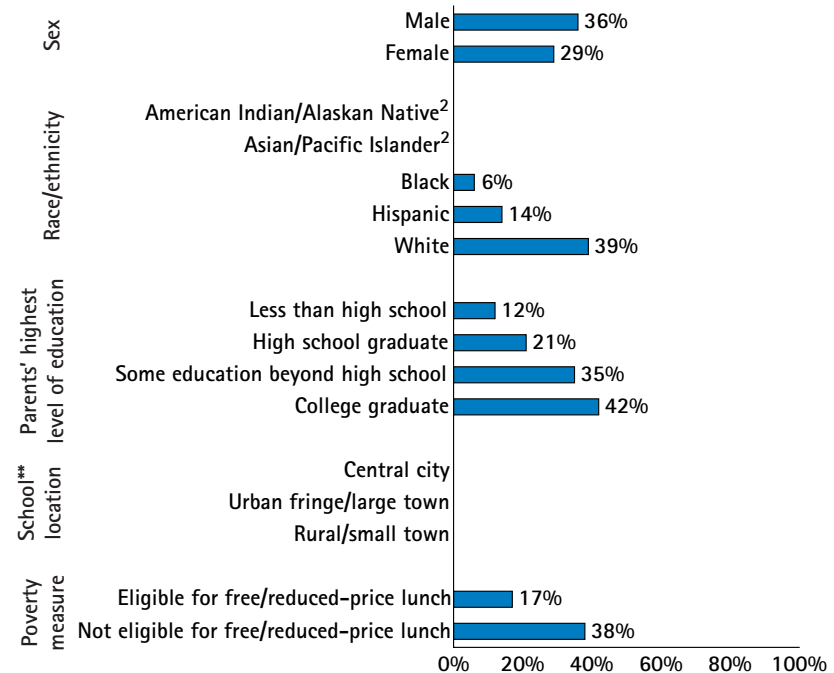
[†] The term "state" is used to refer to the 50 states, the District of Columbia, and the territories.

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 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.

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)	Korea
Belgium – Flemish ²	Singapore
Czech Republic	Slovak Republic
Hong Kong	(Slovenia)
Japan	(Switzerland)

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

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

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

(Colombia)	(Lithuania)
Cyprus	Portugal
(Greece)	(Romania)
Iran, Islamic Republic	(South Africa)
(Kuwait)	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
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23 nations[†] would be expected to perform similarly:¹

(Australia)	Korea
(Austria)	Michigan
Belgium – Flemish ²	(Netherlands)
(Bulgaria)	New Zealand
Canada	Norway
(England)	Russian Federation
(Germany)	Slovak Republic
Hong Kong	(Slovenia)
Hungary	Sweden
Ireland	(Switzerland)
(Israel)	(Thailand)
Japan	United States

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

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

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

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