Arkansas

Mathematics Grade 4

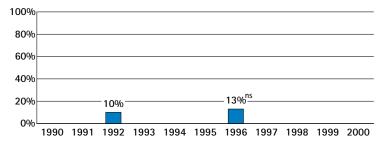
1. Improvement Over Time

Have Arkansas' 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 Arkansas compare with other states in 4th grade mathematics achievement in public schools in 1996?

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

Connecticut Minnesota Maine, Wisconsin New Jersey, Texas	31% 29% 27% 25%	Michigan, Utah, Vermont Colorado, Iowa, Maryland, Montana U.S.,* Alaska, North Carolina, Oregon, Washington	23% 22% 21%
Indiana, Massachusetts, Nebraska,	24%	Missouri, New York, Pennsylvania	20%
North Dakota		Virginia, West Virginia, Wyoming	19%

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

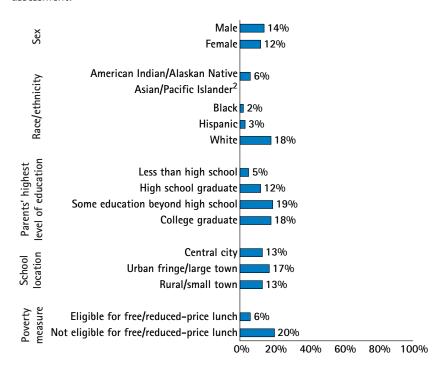
Rhode Island, Tennessee	17%	Arkansas, Georgia, New Mexico	13%
Delaware, Hawaii, Kentucky	16%	South Carolina	12%
Arizona, Florida	15%	Alabama, California	11%
Nevada	14%		

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

Louisiana, Mississippi	8%	Guam	3%
District of Columbia	5%		

3. Subgroup Performance

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

Arkansas

1. Improvement Over Time

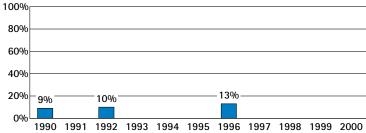


Have Arkansas' 8th graders improved in mathematics achievement?

Yes. The percentage of Arkansas' public school 8th graders who met the Goals Panel's performance standard in mathematics increased from 9% in 1990, to 13% 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 Arkansas compare with other states in 8th grade mathematics achievement in public schools in 1996?

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

Minnesota	34%	U.S.,* Indiana, Maryland, Utah	24%
North Dakota	33%	Missouri, New York, Wyoming	22%
Montana, Wisconsin	32%	Texas, Virginia	21%
Connecticut, Iowa, Maine, Nebraska	31%	North Carolina, Rhode Island	20%
Alaska	30%	Delaware	19%
Massachusetts, Michigan	28%	Arizona	18%
Vermont	27%	California, Florida	17%
Oregon, Washington	26%	Hawaii ²	16%
Colorado	25%		

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

Georgia,² Kentucky²	16%	Arkansas	13%
Tennessee	15%	Alabama	12%
New Mexico, South Carolina,	14%		
West Virginia			

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

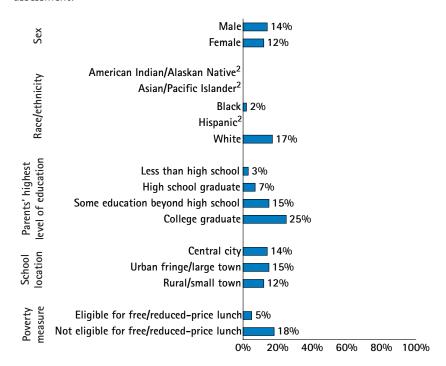
Louisiana, Mississippi	7%	District of Columbia	5%
Guam	6%		

[†] 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 Arkansas 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.

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.

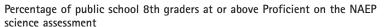
² Characteristics of the sample do not permit a reliable estimate.

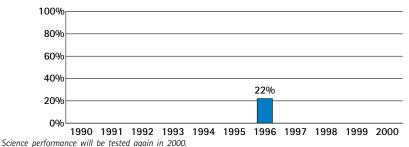
1. Improvement Over Time

Have Arkansas' 8th graders improved in science achievement?

In 1996, 22% of Arkansas' 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 Arkansas compare with other states in 8th grade science achievement in public schools in 1996?

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

Maine, Montana, North Dakota	41%	Colorado, Michigan, Oregon, Utah	32%
Wisconsin	39%	Alaska	31%
Massachusetts, Minnesota	37%	Indiana	30%
Connecticut, Iowa	36%	U.S.*	29 %
Nebraska	35%	Missouri	28%
Vermont, Wyoming	34%	Washington ²	27%

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

New York, ² Virginia ²	27%	Delaware, Florida, Georgia,	21%
Rhode Island	26%	West Virginia	
Maryland	25%	California	20%
North Carolina	24%	New Mexico	19%
Arizona, Kentucky, Texas	23%	Alabama	18%
Arkansas, Tennessee	22%		

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

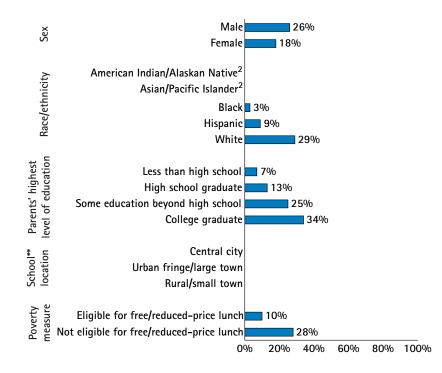
South Carolina	17%	Mississippi	12%
Hawaii	15%	Guam	7%
Louisiana	13%	District of Columbia	5%

- [†] 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.
- 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.

3. Subgroup Performance

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

** No school location data for science in 1996.

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

International Comparisons

Arkansas

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

27 nations would be expected to perform significantly higher:

(Australia)(Israel)(Austria)JapanBelgium - Flemish²Korea(Belgium - French)²(Netherlands)

(Bulgaria) New Zealand Canada Norway

Czech Republic
(Denmark)
(England)
France
(Germany)
Hong Kong
Hungary

Russian Federation
Singapore
(Slovak Republic
(Slovenia)
Sweden
(Switzerland)
(Thailand)

Ireland

10 nations* would be expected to perform similarly:

ArkansasPortugalCyprus(Romania)(Greece)(Scotland)IcelandSpain(Latvia – LSS)³United States

(Lithuania)

4 nations would be expected to perform significantly lower:

(Colombia) (Kuwait)
Iran, Islamic Republic (South Africa)

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 Arkansas participated in the TIMSS science assessment, how would their average performance compare to that of students who took TIMSS in these nations?

13 nations would be expected to perform significantly higher:

(Australia)Japan(Austria)KoreaBelgium - Flemish²(Netherlands)(Bulgaria)SingaporeCzech RepublicSlovak Republic(England)(Slovenia)Hungary

17 nations would be expected to perform similarly:1

ArkansasNew ZealandCanadaNorway

France Russian Federation

(Germany)(Scotland)(Greece)SpainHong KongSwedenIceland(Switzerland)Ireland(Thailand)(Israel)United States

11 nations would be expected to perform significantly lower:1

(Belgium – French)²(Latvia – LSS)³(Colombia)(Lithuania)CyprusPortugal(Denmark)(Romania)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.

[†] 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.