

Chapter 8. State Indicators

8-8E Eighth Grade Science Proficiency, Female Students

Description

This indicator represents the proportion of a state's eighth grade students in public schools that met or exceeded the proficiency standard in science. The National Assessment Governing Board sets performance standards that provide a context for interpreting National Assessment of Educational Progress (NAEP) results. The standards define "proficiency," as well as "advanced" and "basic" accomplishment. For the eighth grade, the basic level (scores 141–169) denotes partial mastery of knowledge and skills that are prerequisite for proficient work. The proficient level (170–214) represents solid academic performance and demonstrates competency over challenging subject-matter knowledge. The advanced level (215–300) signifies superior performance.

The National Center for Education Statistics has determined that achievement levels are to be used on a trial basis and should be interpreted with caution. However, both the Commissioner of Education Statistics and the National Assessment Governing Board state these performance standards are useful for understanding trends in student achievement.

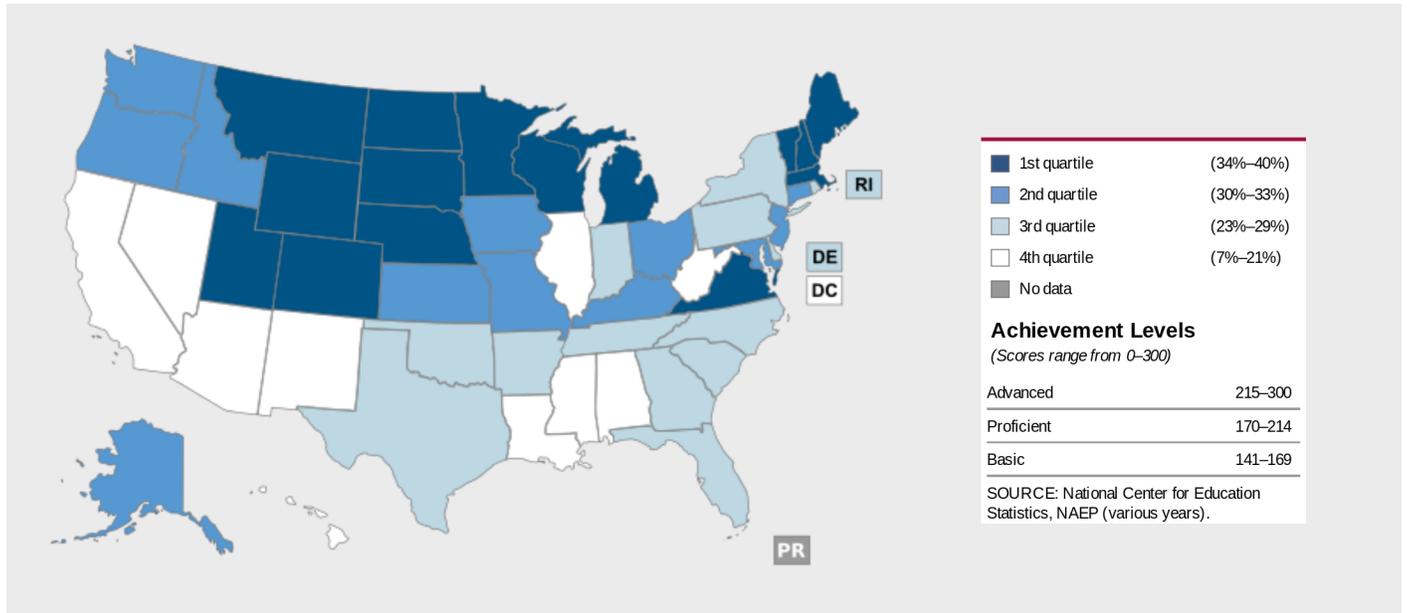
Approximately 119,600 eighth grade students in 6,690 schools participated in the 2011 NAEP science assessment. NAEP allows students with disabilities or limited English-language proficiency to use certain accommodations (e.g., extra testing time or individual rather than group administration). All data presented here represent scores from tests taken with accommodations offered. Demographic percentages of test takers by state are included in this indicator's standard error table. For national data across all demographic groups, see indicator 8-8.

Findings

- In 2011, 27% of eighth grade female students nationwide performed at or above the proficient level in science, an increase from the 2009 percentage of 26%. In 2011, 31% of eighth grade students nationwide performed at or above the proficient level in science.
- Among the states, there were significant differences in the percentage of eighth grade female students who demonstrated proficiency in science. State values ranged from 15% to 40%.
- The reported percentage of eighth grade Asian and Pacific Islander students in most reporting states (38) was the same in 2011 and 2009, except in Colorado, Delaware, Florida, Hawaii, Maryland, New Hampshire, Rhode Island, and Virginia, where the percentage increased between 2009 and 2011.

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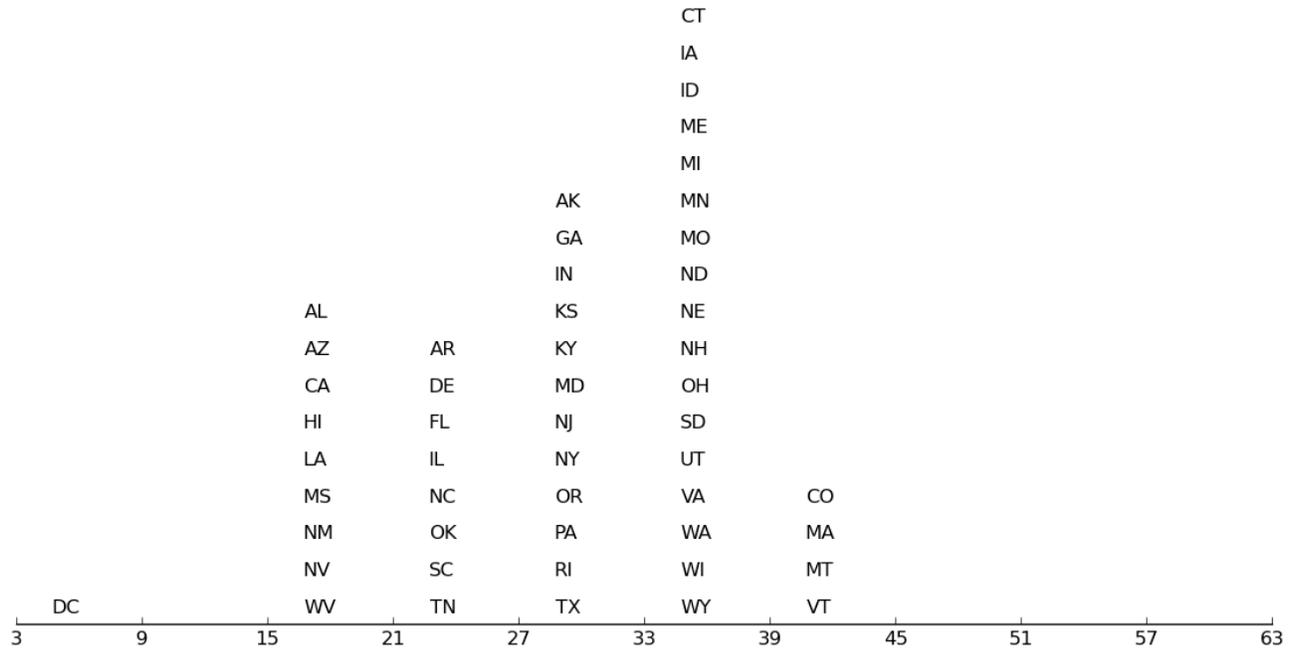
Year: 2011



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Year: 2011

Distribution of states across indicator values



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Table 8-8E Eighth Grade Science Proficiency, Female Students

State	8th grade science proficiency, female students (Percent)	
	2009	2011
United States	26	27
Alabama	15	16
Alaska	NA	32
Arizona	18	19
Arkansas	20	23
California	17	20
Colorado	32	40
Connecticut	32	33
Delaware	21	26
District of Columbia	NA	7
Florida	21	26
Georgia	24	27
Hawaii	15	20
Idaho	33	33
Illinois	25	21
Indiana	28	27
Iowa	31	33
Kansas	NA	30
Kentucky	30	31
Louisiana	18	19
Maine	33	34
Maryland	25	32
Massachusetts	38	40
Michigan	31	34
Minnesota	36	38

State	8th grade science proficiency, female students (Percent)	
	2009	2011
Mississippi	13	15
Missouri	33	33
Montana	38	39
Nebraska	NA	35
Nevada	19	18
New Hampshire	33	38
New Jersey	31	30
New Mexico	18	19
New York	27	27
North Carolina	22	23
North Dakota	37	38
Ohio	32	33
Oklahoma	22	23
Oregon	32	32
Pennsylvania	31	28
Rhode Island	22	27
South Carolina	22	24
South Dakota	35	36
Tennessee	24	25
Texas	26	29
Utah	36	38
Vermont	NA	39
Virginia	33	38
Washington	30	33
West Virginia	18	19
Wisconsin	33	36
Wyoming	30	34
Puerto Rico	NA	NA



8th grade science proficiency, female students (Percent)

State

2009

2011

NA = not available.

NOTES: The National Assessment of Educational Progress (NAEP) scores are for public schools only. The national value for the United States is the reported value in the NAEP reports.

SOURCE: National Center for Education Statistics, NAEP (various years).

Science and Engineering Indicators 2016