

2011 NAEP: CO Science 8th Grade Results

2011 Science Grade 8: Average Scale Score (Figure 1)

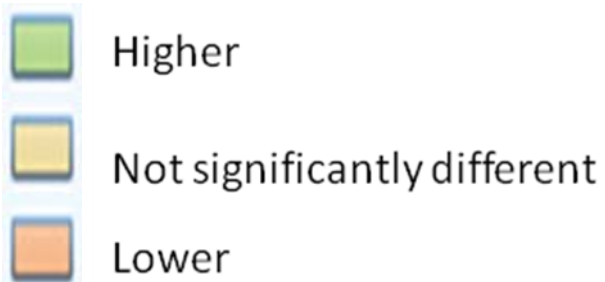
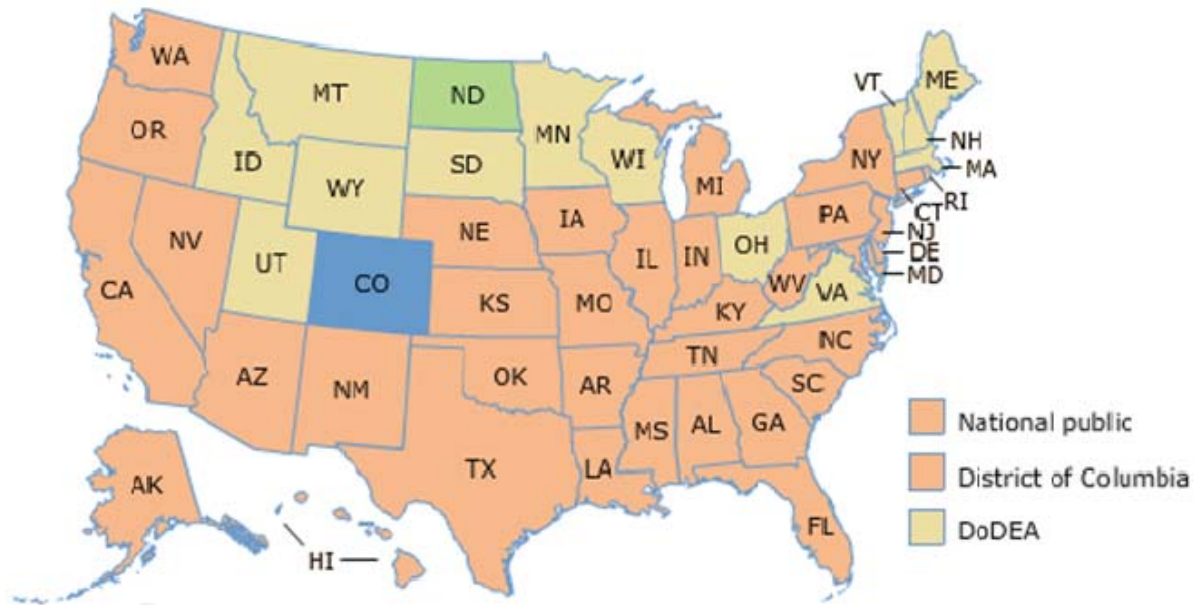


Figure 1 shows how Colorado performed in the 2011 NAEP *Science* assessment in comparison to the other 49 states, the District of Columbia and the Department of Defense schools. This is a comparison using the average scale score for each state. Because NAEP results are based on samples, there is a margin of error associated with each score or percentage. Therefore, only those differences in scores or percentages that meet NAEP’s standards for statistical significance are reported.

CO, the focal state, is shaded blue. States shaded green performed higher than CO. Only North Dakota scored higher. States/jurisdictions that are shaded yellow performed about the same as CO. The fourteen states that scored the same as CO are shaded yellow and listed below in rank order with their respective scores.

Rank Order	2011 NAEP Grade 8 Science Average Scale Score	2011 Scale Score
1	North Dakota	164.009
2	Montana	163.329
3	Vermont	162.918
4	New Hampshire	162.286
5	South Dakota	162.051
6	Utah	161.400
7	Massachusetts	161.225
8	Minnesota	160.895
9	Department of Defense	160.762
10	Colorado	160.576
11	Wyoming	160.283
12	Maine	160.012
13	Virginia	159.545
14	Idaho	159.007
15	Wisconsin	158.897

Rank Order	2011 NAEP Grade 8 Science Average Scale Score	2011 Scale Score
16	Ohio	158.382

The states that are shaded peach scored lower than Colorado. The thirty-six states that scored lower than CO are listed below in rank order with respective scores.

Rank Order	2011 NAEP Grade 8 Science Average Scale Score	2011 Scale Score
18	Michigan	157.117
19	Kentucky	156.846
20	Nebraska	156.729
21	Missouri	156.339
22	Washington	156.292
23	Kansas	155.917
24	Oregon	155.460
25	New Jersey	154.757
26	Connecticut	154.668
27	Alaska	153.480
28	Indiana	152.955
30	Maryland	151.505
31	Pennsylvania	151.371
	National public	150.741
32	Georgia	150.570

Rank Order	2011 NAEP Grade 8 Science Average Scale Score	2011 Scale Score
33	Tennessee	150.234
34	Delaware	150.055
35	West Virginia	149.319
36	Rhode Island	148.969
37	South Carolina	148.871
38	New York	148.583
39	Florida	148.392
40	Oklahoma	148.332
41	North Carolina	147.727
42	Arkansas	147.665
43	Illinois	147.211
44	New Mexico	144.762
45	Nevada	144.389
46	Arizona	143.754
47	Louisiana	142.851
48	Hawaii	142.056
49	California	140.416
50	Alabama	139.978
51	Mississippi	137.359
52	District of Columbia	111.719

How Colorado Compares to Other States/Jurisdictions in Average Scale Score (Figure 2)

	8 th Grade
	Science
Number of States Scoring <u>Better</u> than Colorado	1 (North Dakota)
Number of States/Jurisdictions Scoring the <u>Same</u> as Colorado	14
Number of States/Jurisdictions Scoring <u>Lower</u> than Colorado	36

Figure 2 shows how Colorado performed in comparison to other states/jurisdictions in the 2011 NAEP *Science* assessment using the average scale score. Only one state, North Dakota performed higher than CO. Fourteen states/jurisdictions scored the same as CO. Last, thirty-six states scored lower than CO.

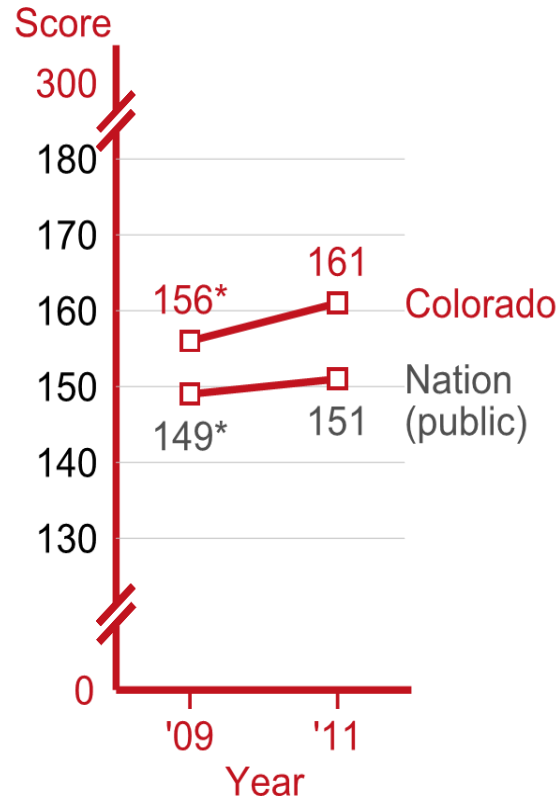
Average Scale Score: CO v. the National Public (Figure 3)

	8 th Grade
	Science
Colorado	161*
National Public	151*
Did Colorado perform (statistically) significantly higher than the National Public?	Yes

*Significantly higher than 2009

Figure 3 shows how CO compares to the National Public in the 2011 grade 8 NAEP *Science* assessment using average scale score. CO had an average scale score of 161 and the National Public sample had a score of 151. CO performed significantly higher than the National Public in the science assessment. In addition, both CO and the National Public scored significantly higher than they did in the 2009 test.

2011 Science Grade 8: Average Scores Trend for CO and Nation (public)



(Figure 4)

***Significantly lower than 2011**

Figure 4 shows a comparison of the trend results for CO and the National Public using average scale score. In 2009, CO scored 156 and in 2011 scored 161. In 2009, the National Public scored 149 and in 2011 scored 151. Both CO and the National Public scored significantly lower in 2009 than they did in 2011.

Percent of Students Scoring at *Basic* or Above (Figure 5)

	8 th Grade
	Science
Colorado	75*
National Public	64*
Did Colorado perform (statistically) significantly higher than the National Public?	Yes

* Significantly higher than 2009.

Figure 5 shows the percent of students for CO and the National Public scoring at the *Basic* achievement level and above on the 2011 grade eight science test. CO had 75 percent of its students that scored at the *Basic* and above achievement levels. The National Public had 64 percent of the students that scored at the *Basic* and above achievement levels. Colorado had significantly more students score at *Basic* and above than the National Public in the 2011 NAEP 8th grade science test.

Achievement Level Percentages and Average Score Results (Figure 6)

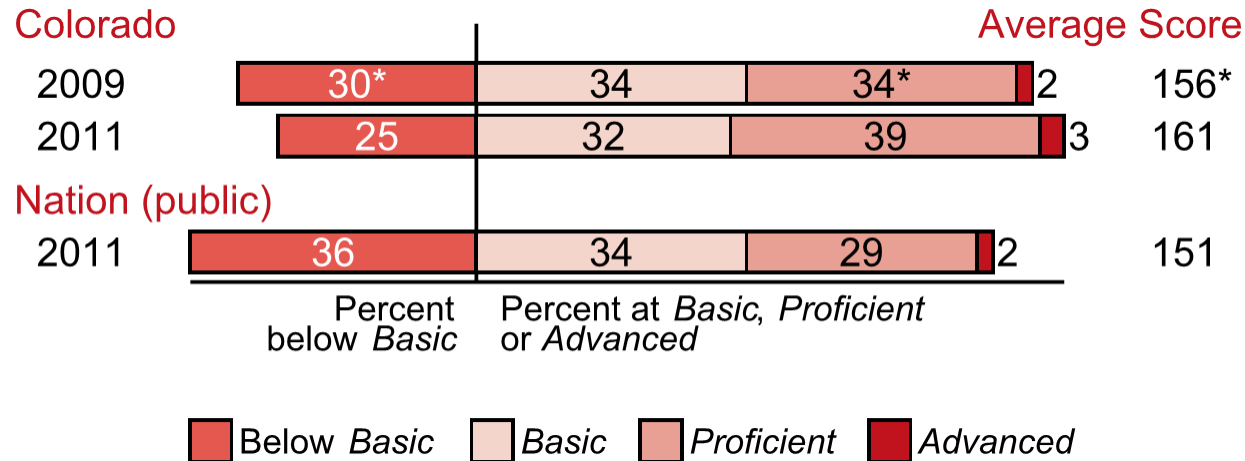


Figure 6 shows the following:

- In 2011, the average score of eighth-grade students in Colorado was 161. This was higher than the average score of 151 for public school students in the nation.
- The average score for students in Colorado in 2011 (161) was higher than their average score in 2009 (156).
- The percentage of students in Colorado who performed at or above the NAEP *Proficient* level was 42 percent in 2011. This percentage was greater than that the 2009 score of 36 percent.
- The percentage of students in Colorado who performed at or above the NAEP *Basic* level was 75 percent in 2011. This percentage was greater than the 2009 score of 70 percent.

- In 2011, the average score of eighth-grade students in public schools in the nation was 151. This was lower than the average score of 161 for Colorado.
- The percentage of students in public schools in the nation who performed at or above the NAEP *Proficient* level was 31 percent in 2011. This percentage was lower than the 42 percent of Colorado students who performed at or above the NAEP *Proficient* level in 2011.
- The percentage of students in public schools in the nation who performed at or above the NAEP *Basic* level was 65 percent in 2011. This percentage was lower than the 75 percent of Colorado students who performed at or above the NAEP *Basic* level in 2011.

NOTE: Statistical comparisons are calculated on the basis of unrounded scale scores or percentages.

SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 2009 and 2011 Science Assessments.