

Summary of Facts: 2013 National Assessment of Educational Progress (NAEP) Reading Grades 4 and 8

Background Knowledge

- NAEP was established in 1969 and is a project of the National Center for Education Statistics (NCES) under the U.S. Department of Education.
- NAEP provides national and state achievement results of elementary and secondary students in the United States in eight subject areas, including mathematics, reading, writing and science.
- It is the only federal nationally representative assessment of what young students know and can do in key subject areas. Commonly referred to as the “Nation’s Report Card,” it is used to provide a point of reference for comparisons between states and to provide an accurate and representative picture of student performance over time.
- The NAEP 2013 reading assessment was administered to a representative sample of fourth and eighth-graders at the national level and at the state level.
- The assessments are not designed to produce individual district, school or student data.
- The President and Congress use NAEP results in setting education policy. States are neither rewarded nor sanctioned based on their results. The Nation’s Report Card is produced by the U.S. Department of Education and has generated more than 600 reports in its history.
- The NAEP reading assessment window for Colorado students was January 28 – March 8, 2013.
- Each student received two 25-minute reading tests, in addition to general background questions and reading-specific background questions. The test requires about an hour per student to administer.

Participation Facts:

- Nationwide: 190,400 fourth-grade students in 7,920 schools participated.
- Nationwide: 171,800 eighth-grade students in 6,510 schools participated.
- Colorado: 3,100 fourth-grade students in 118 schools participated.
- Colorado: 2,800 eighth-grade students in 111 schools participated.
- All 50 states, the District of Columbia and Department of Defense schools participated.

Scoring:

- Both the NAEP grade 4 and 8 math scales range from 0 to 500.
- Achievement levels for grade 4 correspond to the following points on the NAEP reading scales: below *Basic*, 207 or lower; *Basic*, 208–237; *Proficient*, 238–267; and *Advanced*, 268 and above.
- Achievement levels for grade 8 correspond to the following points on the NAEP reading scales: below *Basic*, 242 or lower; *Basic*, 243–280; *Proficient*, 281–322; and *Advanced*, 323 and above.
- At or above *Basic* includes *Basic*, *Proficient*, and *Advanced*. At or above *Proficient* includes *Proficient* and *Advanced*.
- In addition, the scores are reported by two reading subscales: gain information and literary experience.

- NAEP only reports scores as higher or lower if they are statistically significantly different.

Frameworks

- The 2013 grades 4 and 8 reading assessments are based on the 2013 NAEP framework that was approved by the National Assessment Governing Board which oversees NAEP, <http://www.nagb.org/>. The 2013 reading assessment uses the same framework used in 2009.
- Link to Frameworks (standards): <http://www.nagb.org/publications/frameworks/reading/2013-reading-framework.html>

Overall Key Findings for grade four

- In 2013, the average scale score for students in grade 4 reading in Colorado was 227. This was significantly higher than the score for public school students across the nation (221).
- In 2013, there were 4 states that outperformed Colorado in average scale score (Massachusetts, New Hampshire, Maryland and Department of Defense), 17 states that were not significantly different than Colorado and 30 scored significantly lower than Colorado.
- The Colorado grade 4 reading 2013 average scale score (227) has significantly risen 10 points since the 1992 test administration (217).
- The percentage of Colorado's grade 4 students who performed at or above NAEP *Proficient* level was 41 percent in 2013. This is significantly higher than the percentage of the nation's public school grade 4 students who performed at the same level (34 percent).
- The percentage of Colorado's students who performed at or above NAEP *Proficient* level in 2013 (41 percent) is not significantly different than the 2011 score (39 percent).
- The percentage of Colorado's students who performed at or above NAEP *Basic* level was 74 percent in 2013. This is significantly higher than the percentage of the nation's public school students who performed at the same level (67 percent).
- The percentage of Colorado's students who performed at or above NAEP *Basic* level in 2013 (74 percent) is not significantly different than that in 2011 (71 percent).
- The percentage of students in Colorado who performed at the *Advanced* level in 2013 (10 percent) was not significantly different than that in 2011 (9 percent).

Overall Key Findings for grade eight

- In 2013, the average scale score for students in grade 8 reading in Colorado was 271. This was significantly higher than the score for public school students across the nation (266).
- In 2013, there were 6 states that outperformed Colorado in average scale score (Vermont, New Hampshire, Massachusetts, Connecticut, New Jersey and Department of Defense schools), 15 states that were not significantly different than Colorado and 30 scored significantly lower than Colorado.
- The 2013 Colorado grade 8 reading average scale score (271) is *not significantly different* than the 2011 score (223) and has significantly increased *since the 1998 test* (264).

- In 2013, the percentage of Colorado's students who performed at or above the NAEP *Proficient* level was 40 percent. This is significantly higher compared to the percentage of the nation's public school students who performed at the same level (34 percent).
- The percentage of students in Colorado who performed at or above NAEP *Proficient* in 2013 (40 percent) and has remained steady since the 2011 score (40 percent).
- In 2013, the percentage of Colorado's students who performed at or above the NAEP *Basic* level was 81 percent. This is significantly higher than the percentage of the nation's public school students who performed at the same level (77 percent).
- The percentage of students in Colorado who performed at or above *Basic* in 2013 (81 percent) was not significantly different than that in 2011 (81 percent).
- The percentage of students in Colorado who performed at the *Advanced* level in 2013 (5 percent) was not significantly different than that in 2011 (4 percent).

Trend Results: overall and by subgroups

Nation

- Compared to 1992, average scores are up 5 points at grade 4 and 8 points at grade 8. Eighth-graders made a 2-point gain since 2011.
- White students made gains since 2011 at both grades, and Black, Hispanic, and Asian/Pacific Islander students made gains at grade 8.
- Compared to 2011, higher percentages of students at both grades are performing at the *Proficient* and *Advanced* levels.

Colorado

- Colorado is one of only 9 states/jurisdictions (the District of Columbia, Indiana, Iowa, Maine, Minnesota, Tennessee, Washington and Department of Defense schools) that increased in the reading grade 4 average score since the 2011 test.
- In 2013, there is no achievement gap in average score between the Colorado grade 4 former English language learners and those who are not English language learners.
- Colorado is one of only two states that narrowed the 4th grade White-Hispanic achievement gap from 2011 to 2013. Colorado narrowed the gap by 6 points and Indiana narrowed the gap by 9 points.
- In 2013 NAEP, grade 8 reading, no state scored higher than Colorado's grade 8 former English language learners (CO = 268). Two scored the same (New Mexico and Florida) and 6 states scored lower than CO (Oregon, California, Utah, Arizona, Texas and Massachusetts). Other states either did not have a representative sample of these students or did not report on this group.
- In 2013, the Colorado grade 8 former English language learners and those who are not English language learners scored significantly the same in the *At or Above Basic* level (Former ELLs = 84%, Not ELLs = 85%).
- In 2013, Colorado grade 8 males and females scored significantly higher in average scale score compared to the male and female grade 8 public school students across the nation (CO females = 275, National females = 271, CO males = 267, National males = 261).

- In 2013, there is a significant 8 points achievement gap between 4th grade Colorado female and male students (CO females = 231, CO males = 223).
- In 2013, there is a significant 8 points achievement gap between 8th grade Colorado females and males (CO females = 275, CO males = 267).
- In the 2013 NAEP reading assessment, the 8th grade students in Colorado scored *significantly higher* than the public school students across the nation in both of the reading subscales: gain information and literary experience.
- The Colorado grade 4 White student population has *significantly decreased* from 75% of the total population in 1998 to 57% in 2013.
- The Colorado grade 4 Black student population has *not changed significantly* since the 1998 test administration (7% in 1998, 5% in 2013).
- The Colorado grade 4 Hispanic population has *significantly increased* from 15% of the total population in 1998 to 31% in 2013.
- In 2013, there is *34 points* achievement gap in average score between Colorado fourth grade White students and Black students (Whites = 237; Blacks= 203). This gap was wider than that in 1992 (*21 points*).
- In 2013, there is *27 points achievement gap* in average score between Colorado fourth grade White students and Hispanic students (Whites = 237; Hispanics= 210). This gap was wider than that in 1992 (*20 points*).
- The Colorado grade 8 White population has *significantly decreased* from 73% of the total population in 1998 to 58% in 2013.
- The Colorado grade 8 Black population has *not changed significantly* since the 1998 test administration (5% in 1998, 4% in 2013).
- The Colorado grade 8 Hispanic population has *significantly increased* from 19% of the total population in 1998 to 30% in 2013.
- In 2013, there is a 32 points achievement gap in average score between Colorado eighth grade White students and Black students (Whites = 279; Blacks = 247). This gap was not significantly different than that in 1998 (22 points).
- In 2013, there is a 23 points achievement gap in average score between Colorado eighth grade White students and Hispanic students (Whites = 279; Hispanics = 257). The gap was not significantly different than that in 1998 (26 points).
- In 2013, there is a 25 points achievement gap in average score between Colorado eighth grade students who qualify for free and reduced lunch and those who don't. This gap was not significantly different than that in 1998 (21 points).

State Comparisons

- Four states/jurisdictions, New Hampshire, Massachusetts, Maryland and Department of Defense schools scored higher than Colorado in the 2013 grade 4 reading assessment in scale score (CO = 227, NH = 232, MA = 232, MD = 232, DoDEA = 232).
- In the 2013 grade 4 reading test, Colorado outperformed 30 states and was not significantly different than 17 states.
- In 2013, six states/jurisdictions, Department of Defense schools, New Jersey, Vermont, New Hampshire, Massachusetts and Connecticut scored higher than Colorado in the 2013 grade 8 reading assessment in scale score (CO = 271, DoDEA = 277, NJ = 276, VT = 274, NH = 274, MA = 277, CT = 274).
- In the 2013 grade 8 reading test, Colorado outperformed 30 states and was not significantly different than 15 states.

- In the 2013 NAEP assessment, the 8th grade students in Colorado scored *significantly higher* than the public school students across the nation in average score in both of the reading subscales: gain information and literary experience
- In 2013, only two states/jurisdictions had higher performing 4th grade White students than Colorado (DC = 259, Maryland = 244, CO = 237).
- In the 2013 assessment, just three states/jurisdictions, Maryland, Department of Defense schools and Delaware had higher performing 4th grade Black males than Colorado (Department of Defense = 220, MD = 208, DE = 211, CO = 192).
- In the 2013 assessment, just three states/jurisdictions, Department of Defense schools, Massachusetts and New Jersey had higher performing 8th grade males than Colorado (Department of Defense = 274, Massachusetts = 273, New Jersey = 271, CO = 267).
- In 4th grade, no state narrowed the White-Black gap from 2011 to 2013.
- Colorado is one of only two states that narrowed the 4th grade White-Hispanic achievement gap from 2011 to 2013. Colorado narrowed the gap by 6 points and Indiana narrowed the gap by 9 points.
- In 8th grade, no state narrowed the White-Black gap from 2011 to 2013.
- In 8th grade, four states, New Jersey, Ohio, Utah and Wisconsin narrowed the White-Hispanic gap from 2011 to 2013.

Links for further information

- For more information about the 2013 Colorado NAEP reading results go to the state profile site:
<http://nces.ed.gov/nationsreportcard/states>
- Links to the 2013 Colorado NAEP grades 4 and 8 Reading Snapshot Reports:
<https://publicsite.naepdev.org/nationsreportcard/pdf/stt2013/2014464CO4.pdf>
<https://publicsite.naepdev.org/nationsreportcard/pdf/stt2013/2014464CO8.pdf>
- Link to Item Maps:
<https://publicsite.naepdev.org/nationsreportcard/itemmaps/>
- Sample NAEP questions/released items:
<http://nces.ed.gov/nationsreportcard/itmrlsx/>