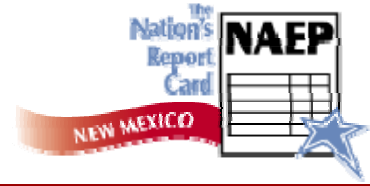




Dr. Karen Kay Harvey,  
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**Bill Richardson, Governor**  
**Dr. Veronica C. Garcia, Secretary of Education**

## NAEP Science Results for 2005

### Key Findings: Grade 4

- Average science score in New Mexico was 141 and is not significantly different from 2000 (140).
- New Mexico's average score (141) was lower than that of the nation's public schools (149).
- In New Mexico, 18% of students performed at or above Proficient. This was not significantly different from 2000 (17%).
- The percentage of students in New Mexico who performed at or above Basic was 55%. This was not significantly different from 2000 (54%).

### Key Findings: Grade 8

- Average science score for students in New Mexico was 138 and this is lower than in 1996 (141).
- New Mexico's average score (138) was lower than that of the nation's public schools (147).
- In New Mexico, 18% of students performed at or above Proficient. This was not significantly different from that in 1996 (19%).
- The percentage of students in New Mexico who performed at or above Basic was 46%. This was not significantly different from that in 1996 (49%).



The National Assessment of Educational Progress was administered in 2005 to 44 states and the Department of Defense Schools. The sample included 148,000 Grade 4 students, 143,000 Grade 8 students, and 14,000 Grade 12 students. The results are reported to states for Grade 4 and 8 only. Approximately 100 schools at each grade were tested and 3,000 students per subject, per grade. The assessments were in reading, math, and science

Data is reported in scale scores and percentage of students at or above each of the achievement levels.

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### Special points of interest:

- *What is Different for NAEP Science?*
  1. *Bilingual booklet introduced in 2005 at Grade 4 and 8.*
  2. *Within-grade scale of 0-300*
  3. *Reported sample sizes rounded to nearest 100.*

### Inside this issue:

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## New Mexico NAEP 2007

The National Assessment of Educational Progress (NAEP) will be assessed in grades 4, 8, and 12. The assessment window is January 22-March 2, 2007. Districts and schools selected were notified the first week in May.

### Operational components include:

**Reading:** Grades 4, 8, and 12

**Math:** Grades 4 and 8

**Writing:** Grades 8 and 12

Assessments will be conducted by NAEP Test Administrators.

Preassessment visits occur in every school between the NAEP School Test Coordinator and the Supervisor for NAEP Test Administration in New Mexico.

The NAEP School Coordinator plays an integral part in motivating students to do their best.

## Student's with Disabilities

Student's with Disabilities Average Scale Scores for Science 2000 and 2005

| Jurisdiction    | Grade | Year | Average Scale Score |
|-----------------|-------|------|---------------------|
| New Mexico      | 4     | 2000 | 120                 |
| Nation's Public | 4     | 2000 | 119*                |
| New Mexico      | 4     | 2005 | 121                 |
| Nation's Public | 4     | 2005 | 133*                |
| New Mexico      | 8     | 2000 | 109                 |
| Nation's Public | 8     | 2000 | 117                 |
| New Mexico      | 8     | 2005 | 111                 |
| Nation's Public | 8     | 2005 | 120                 |

## English Language Learners

English Language Learners Average Scale Scores for Science 2000 and 2005:

| Jurisdiction    | Grade | Year | Average Scale Score |
|-----------------|-------|------|---------------------|
| New Mexico      | 4     | 2000 | 116                 |
| Nation's Public | 4     | 2000 | 102 *               |
| New Mexico      | 8     | 2000 | 109                 |
| Nation's Public | 8     | 2000 | 102                 |
| New Mexico      | 4     | 2005 | 120                 |
| Nation's Public | 4     | 2005 | 120 *               |
| New Mexico      | 8     | 2005 | 108                 |
| Nation's Public | 8     | 2005 | 107                 |

*By law (P.L. 107-110 as amended by P.L. 107-279), the National Assessment is carried out by the Commissioner of Educational Statistics under policy guidance of the National Assessment Governing Board (NAGB). The Commissioner is head of the National Center for Educational Statistics (NCES).*

## New Mexico's Standing in NAEP State Science 2005

**Grade 4:** States in which scores were not significantly different from New Mexico:

Louisiana, Alabama, Arizona, Nevada, and Hawaii

**States that scored higher than New Mexico:**

The nation and 37 other jurisdictions

**States that scored lower than New Mexico:**

California and Mississippi

**Grade 8:** States in which scores were not significantly different from New Mexico:

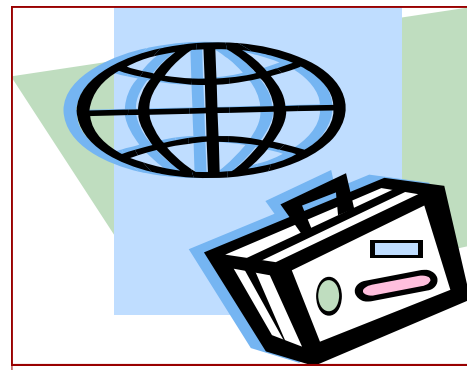
California, Nevada, Arizona, Hawaii, Louisiana, Alabama, and Florida

**States that scored higher than New Mexico:**

The nation and 36 other jurisdictions

**States that scored lower than New Mexico:**

Mississippi



## Difference Between States

| State      | Grade | Avg. Scale Score | Per Pupil | Class Size | FRLP: Free/Reduced Lunch Program | Title I | Native American | Hispanic | ELL   |
|------------|-------|------------------|-----------|------------|----------------------------------|---------|-----------------|----------|-------|
| New Mexico | 4     | 141              | \$7,124   | 15.0       | 58.2%                            | 54.5%   | 11.2%           | 32.8%    | 16.9% |
| Arizona    | 4     | 139              | \$6,388   | 21.3       | 45.1%                            | 53.8%   | 6.6%            | 37.2%    | 15.4% |
| California | 4     | 137              | \$7,680   | 21.1       |                                  | 60.5%   | .8%             | 46.7%    | 25.4% |
| Nevada     | 4     | 140              | \$6,308   | 21.3       | 33.7%                            | 38.6%   |                 | 30%      | 18.9% |
| Oklahoma   | 4     | 150              | \$6,115   | 16.0       | 53%                              | 61%     | 18.5%           |          | 6.4%  |
| Texas      | 4     | 150              | \$7,301   | 15.0       | 46.8%                            | 62%     |                 | 43.8%    | 15.3% |

## Definitions

### Scale Scores:

Student performance is reported as an average score based on the NAEP science scale, which ranges from 0-300 and is linked to the corresponding scales in 1996 and 2000. Subscales were created to reflect performance on each of the three content areas defined in the NAEP science framework.

### Item Map:

An Item Map describes the knowledge or skill associated with answering individual science questions. The map identifies the score point

at which students had a high probability of successfully answering the question.

### NAEP Questions Tool:

This tool provides educators, researchers, parents, and students with access to released questions from NAEP assessments in nearly all subject areas, dating from 1990.

### To access the NAEP Question Tool:

<http://nces.ed.gov/nationsreportcard/itmlr/>

Or click NAEP Questions on the Nation's Report Card home page.

NAEP has two major goals:

- To report what students know and are able to do in key subject areas for the nation and states/jurisdictions.
- To measure educational progress over long periods of time.

## Reading and Mathematics Variables That Impact Performance on NAEP

**Grade 4 and 8:** Students who report that they have been asked to write long answers to questions on tests or assignments that involved reading 1-2 times a year, 1-2 times per month, or 1-2 times a week score significantly higher than students who responded never.

**Grade 8:** Students who report teachers ask them to explain or support their understanding of what they have read once or twice a month, 1-2 times a week, or almost every day score significantly higher than students who respond never or hardly ever.

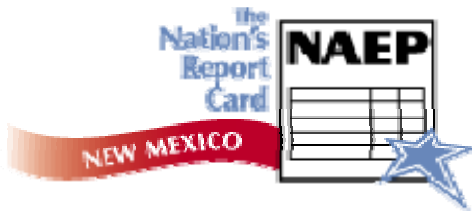
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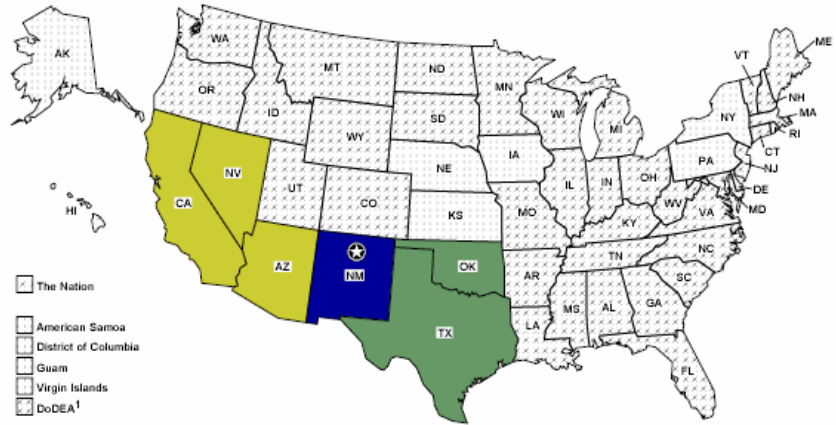
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*“The Nation’s Report Card”*  
*National Assessment of Educational Progress*



NAEP Science Grade 8 - Science  
 Difference in Average Scale Score Between Jurisdictions  
 For All students [TOTAL] = All students  
 2005

Color



- The Nation
- American Samoa
- District of Columbia
- Guam
- Virgin Islands
- DoDEA<sup>1</sup>

- Focal state/jurisdiction (New Mexico)
- Has a higher average scale score than the focal state/jurisdiction
- Is not significantly different from the focal state/jurisdiction
- Has a lower average scale score than the focal state/jurisdiction
- Did not participate or did not meet minimum participation rates
- Was not selected for comparison

<sup>1</sup> Department of Defense Education Activity schools (domestic and overseas).  
 SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 2005 Science Assessments.

## Results by Subscore for Science Grade 4 and 8

| NAEP Science Results by Subscales Average Scale Score-Overall |       |          |      |      |
|---|-------|----------|------|------|
| Jurisdiction  | Grade | Subscale | 2000 | 2005 |
| National Public   | 4     | Physical | 144  | 150  |
| New Mexico  | 4     | Physical | 140  | 143  |
| National Public   | 8     | Physical | 147  | 144  |
| New Mexico  | 8     | Physical | 136  | 136  |
| National Public   | 4     | Earth    | 147  | 150  |
| New Mexico  | 4     | Earth    | 141  | 140  |
| National Public   | 8     | Earth    | 149  | 149  |
| New Mexico  | 8     | Earth    | 143  | 140  |
| National Public   | 4     | Life     | 144  | 148  |
| New Mexico  | 4     | Life     | 138  | 139  |
| National Public   | 8     | Life     | 148  | 148  |
| New Mexico  | 8     | Life     | 138  | 138  |