Testing Brief<br>National Assessment of Educational Progress (NAEP) January 26 - March 6, 2009

The Nation's Report Card, the National Assessment of Educational Progress (NAEP), is a nationally representative and continuing assessment of what America's students know and can do in various subject areas. Since 1969, assessments have been conducted periodically in reading, mathematics, science, writing, history, geography, and other fields. By making objective information on student performance available to policymakers at the national, state, and local levels, NAEP is an integral part of our nation's evaluation of the condition and progress of education. Only information related to academic achievement is collected under this program. NAEP guarantees the privacy of individual students and their families. This report provides selected results from NAEP for Georgia's public school students in science at grades 4 and 8. Student performance is reported as an average score based on the NAEP science scale, which ranges from 0 to 300 . Forty-six states and the Department of Defense Education Activity schools (DoDEA) participated in the 2009 science assessment at grades 4 and 8 . Because of the recent changes to the assessment, the results from 2009 cannot be compared to those from previous assessment years.

Georgia's participation in NAEP supports Goal 5 of the Superintendent's Strategic Plan: Improve the SAT, ACT, and achievement scores of Georgia students. This is achieved through providing an effective curriculum and assessment system designed to improve student achievement.

## Key Findings in Science

## Grade 4

- The average scale score for students in Georgia was 144 . This was significantly different than that of the nation's public schools (149).
- The gap between the average score for Blacks students and White students was 33 points, which was not significantly different from the nation ( 35 points). The gap between the average score for Hispanic students and White students was 26 points, which was not significantly different from the nation ( 32 points).
- The average scale score for students who were eligible for the National School Lunch Program (i.e., free/reduced-price school lunch) was 132, which was not significantly different from the nation (134).
- In 2009, students in Georgia who were eligible for free/reduced-price school lunch had an average scale score that was lower than that of students who were not eligible for free/reducedprice school lunch by 29 points. In the nation, this gap was also 29 points.
- The percentage of students in Georgia who performed at or above Basic was 66 percent. This was significantly different from the nation ( 71 percent).
- The percentage of students in Georgia who performed at or above Proficient was 27 percent. This was significantly different from the nation ( 32 percent).
- The 2009 Strategic Plan target for fourth graders performing at or above Basic was sixty-seven (67) percent. This target was not met.

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## Key Findings in Science

## Grade 8

- The average scale score for students in Georgia was 147. This was not significantly different from the nation's public schools (149).
- The gap between the average score for Blacks students and White students was 32 points, which was significantly lower than the nation ( 36 points). The gap between the average score for Hispanic students and White students was 24 points, which was significantly lower than the nation (30 points).
- The average scale score for students who were eligible for the National School Lunch Program (i.e., free/reduced-price lunch) in Georgia was 133. This was the same as the average scale score for the nation.
- In 2009, students in Georgia who were eligible for free/reduced-price school lunch had an average scale score that was lower than that of students who were not eligible for free/reducedprice school lunch by 28 points. In the nation, this gap was also 28 points.
- The percentage of students in Georgia who performed at or above Basic was 58 percent, which was significantly different from the nation ( 62 percent).
- The percentage of students in Georgia who performed at or above Proficient was 27 percent and not significantly different from the nation ( 29 percent).
- The 2009 Strategic Plan target for eighth graders performing at or above Basic was fifty-seven (57) percent. This target was met.

Table 1: 2009 Grade 4 Science Average Scale Scores \& Percent by Performance Levels

|  | Georgia <br> Average <br> Scale Score | Nat'l Public <br> Average <br> Scale Score | Georgia <br> Percent At <br> or Above <br> Basic | Nat'l Public <br> Percent At <br> or Above <br> Basic | Georgia <br> Percent At <br> or Above <br> Proficient | Nat'l <br> Public <br> Percent At <br> or Above <br> Proficient |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
| All Students | 144 | 149 | 66 | 71 | 27 | 32 |
| White | 159 | 162 | 84 | 86 | 42 | 46 |
| Black | 126 | 127 | 45 | 46 | 10 | 10 |
| Hispanic | 133 | 130 | 53 | 52 | 15 | 13 |
| Asian | 167 | 160 | 89 | 80 | 50 | 45 |
| Male | 143 | 148 | 65 | 71 | 29 | 25 |
| Female | 132 | 134 | 52 | 56 | 13 | 34 |
| FRL (NSL) | 124 | 129 | 44 | 50 | 13 | 16 |
| Students with <br> Disabilities (SD) | 114 | 114 | 28 | 33 | 2 | 54 |
| English Language <br> Learner |  |  |  | 71 |  |  |

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Chart 1: 2009 Grade 4 Science Average Scale Score by Student Group

*The value for the national public students is significantly different from the value for the same group in Georgia.

Chart 2: 2009 Grade 4 Science Percent At or Above Basic by Student Group

*The value for the national public students is significantly different from the value for the same group in Georgia.

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Chart 3: 2009 Grade 4 Science Percent At or Above Proficient by Student Group

*The value for the national public students is significantly different from the value for the same group in Georgia.

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Chart 4: NAEP Science Grade 4-White - Black
Gap - Average Scale Score: 2009


NOTE:The NAEP Science scale ranges from 0 to $\mathbf{3 0 0}$. Observed differences are not necessarily statistically significant.
SOURCE:U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics, National Assessment of Educational Progress (NAEP).

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## Chart 5: NAEP Science Grade 4 - White - Hispanic

Gap - Average Scale Score: 2009


NOTE:The NAEP Science scale ranges from 0 to $\mathbf{3 0 0}$. Observed differences are not necessarily statistically significant.
SOURCE:U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics, National Assessment of Educational Progress (NAEP).

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Chart 6: NAEP Science Grade 4-National School Lunch Program Gap - Average Scale Score: 2009


NOTE: The NAEP Science scale ranges from 0 to 300. Observed differences are not necessarily statistically significant.
SOURCE:U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics, National Assessment of Educational Progress (NAEP).

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Chart 7: NAEP Science Grade 4 - Students with Disabilities
Gap - Average Scale Score: 2009


NOTE:The NAEP Science scale ranges from 0 to $\mathbf{3 0 0}$. Observed differences are not necessarily statistically significant.
SOURCE:U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics, National Assessment of Educational Progress (NAEP).

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Chart 8: NAEP Science Grade 4-English Language Learners
Gap - Average Scale Score: 2009


NOTE:The NAEP Science scale ranges from 0 to $\mathbf{3 0 0}$. Observed differences are not necessarily statistically significant.
SOURCE:U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics, National Assessment of Educational Progress (NAEP).

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Table 2: 2009 Grade 8 Science Average Scale Scores \& Percent by Performance Levels

|  | Georgia <br> Average <br> Scale <br> Score | Nat'l Public Average Scale Score | Georgia Percent At or Above Basic | Nat'l Public <br> Percent At or Above $\qquad$ Basic | Georgia Percent At or Above Proficient | Nat'l Public <br> Percent At or Above Proficient |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| All Students | 147 | 149 | 58 | 62 | 27 | 29 |
| White | 161 | 161 | 75 | 77 | 41 | 41 |
| Black | 129 | 125 | 36 | 32 | 10 | 8 |
| Hispanic | 137 | 131 | 51 | 41 | 15 | 12 |
| Asian | 172 | 159 | 85 | 72 | 58 | 40 |
| Male | 150 | 151 | 61 | 64 | 30 | 32 |
| Female | 144 | 147 | 55 | 60 | 24 | 26 |
| FRL (NSL) | 133 | 133 | 40 | 43 | 13 | 14 |
| Students with Disabilities (SD) | 119 | 122 | 29 | 33 | 7 | 11 |
| English Language <br> Learner | 107 | 103 | 18 | 14 | 4 | 2 |

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Chart 9: 2009 Grade 8 Science Average Scale Score by Student Group

*The value for the national public students is significantly different from the value for the same group in Georgia.

Chart 10: 2009 Grade 8 Science Percent At or Above Basic by Student Group

*The value for the national public students is significantly different from the value for the same group in Georgia.

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Chart 11: 2009 Grade 8 Science Percent At or Above Proficient by Student Group

*The value for the national public students is significantly different from the value for the same group in Georgia.

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## Chart 12: NAEP Science Grade 8 - White - Black

Gap - Average Scale Score: 2009


NOTE:The NAEP Science scale ranges from 0 to $\mathbf{3 0 0}$. Observed differences are not necessarily statistically significant. SOURCE:U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics, National Assessment of Educational Progress (NAEP).

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## Chart 13: NAEP Science Grade 8 - White - Hispanic

Gap - Average Scale Score: 2009


NOTE:The NAEP Science scale ranges from 0 to $\mathbf{3 0 0}$. Observed differences are not necessarily statistically significant. SOURCE:U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics, National Assessment of Educational Progress (NAEP).

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Chart 14: NAEP Science Grade 8 - National School Lunch Program
Gap - Average Scale Score: 2009


NOTE:The NAEP Science scale ranges from 0 to $\mathbf{3 0 0}$. Observed differences are not necessarily statistically significant.
SOURCE:U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics, National Assessment of Educational Progress (NAEP).

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Chart 15: NAEP Science Grade 8-Students with Disabilities Gap - Average Scale Score: 2009


NOTE:The NAEP Science scale ranges from 0 to $\mathbf{3 0 0}$. Observed differences are not necessarily statistically significant.
SOURCE:U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics, National Assessment of Educational Progress (NAEP).

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Chart 16: NAEP Science Grade 8 - English Language Learners Gap - Average Scale Score: 2009


NOTE:The NAEP Science scale ranges from 0 to $\mathbf{3 0 0}$. Observed differences are not necessarily statistically significant.
SOURCE:U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics, National Assessment of Educational Progress (NAEP).

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