

This report provides selected results for Miami-Dade's public school students at grades 4 and 8 from the National Assessment of Educational Progress (NAEP) assessment in science. Results are reported by average scale scores and by achievement levels (*Basic, Proficient*, and *Advanced*).

In the 2009 assessment, Miami-Dade was one of 17 urban school districts that participated and met the criteria for reporting public school results.

For more information about the assessment, see the NAEP website <a href="http://nces.ed.gov/nationsreportcard/">http://nces.ed.gov/nationsreportcard/</a> which contains

- The Nation's Report Card: Trial Urban District Assessment Science 2009
- The full set of national, state, and district results in an interactive database
- Released test questions, scoring guides, and question-level performance data

NAEP is a project of the National Center for Education Statistics (NCES), reporting on the academic achievement of elementary and secondary students in the United States.

#### **KEY FINDINGS FOR 2009**

#### Grade 4:

- In 2009, the average science score for fourth-grade students in Miami-Dade was 144. This was lower than that of the nation's public schools (149) and was higher than that in public schools in large cities (135).
- In 2009, the percentage of students in Miami-Dade who performed at or above *Proficient* was 25 percent. This was smaller than that for the nation's public schools (32 percent) and was greater than that in public schools in large cities (20 percent).
- In 2009, the percentage of students in Miami-Dade who performed at or above *Basic* was 66 percent. This was smaller than that for the nation's public schools (71 percent) and was greater than that in public schools in large cities (56 percent).

#### Grade 8:

- In 2009, the average science score for eighth-grade students in Miami-Dade was 137. This was lower than that of the nation's public schools (149) and was higher than that in public schools in large cities (134).
- In 2009, the percentage of students in Miami-Dade who performed at or above *Proficient* was 18 percent. This was smaller than that for the nation's public schools (29 percent) and was not significantly different from that in public schools in large cities (17 percent).
- In 2009, the percentage of students in Miami-Dade who performed at or above Basic was 49 percent. This
  was smaller than that for the nation's public schools (62 percent) and was greater than that in public schools
  in large cities (44 percent).

The U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics, and National Assessment of Educational Progress (NAEP) has provided software that generated user-selectable data, statistical significance test result statements, and technical descriptions of the NAEP assessments for this report. Content may be added or edited by states or other jurisdictions. This document, therefore, is not an official publication of the National Center for Education Statistics.

## Introduction

#### What Was Assessed?

The content for each NAEP assessment is determined by the National Assessment Governing Board. The framework for each assessment documents the content and process areas to be measured and sets guidelines for the types of questions to be used. The development process for the science framework required the active participation of teachers, curriculum specialists, subject-matter specialists, local school administrators, parents, and other members of the general public. The current framework is available at the Governing Board's website <a href="http://nagb.org/publications/frameworks/science-09.pdf">http://nagb.org/publications/frameworks/science-09.pdf</a>.

The 2009 NAEP science framework approved by the Governing Board replaces the framework used for the 1996, 2000, and 2005 science assessments. A variety of factors made it necessary to create a new framework to guide the assessment of science in 2009 and beyond: the publication of *National Standards* for science literacy, advances in both science and cognitive research, the growth in national and international science assessments, advances in innovative assessment approaches, and the need to fairly assess the widest possible range of students.

#### **Assessment Criteria**

Each question in the 2009 science assessment was classified based on two criteria: science content and science practices. By considering these two criteria for each question, the framework ensures that NAEP assesses an appropriate balance of content along with a variety of ways of knowing and doing science.

#### SCIENCE CONTENT

The science content for the 2009 NAEP is defined by a series of statements that describe key facts, concepts, principles, laws, and theories in three broad areas:

- Physical Science
- Life Science
- Earth and Space Sciences

Physical Science deals with matter, energy, and motion; Life Science with structures and functions of living systems and changes in living systems; and Earth and Space Sciences with Earth in space and time, Earth structures, and Earth systems.

#### SCIENCE PRACTICES

The second aspect of the framework is defined by four science practices, which focus on what students should know and be able to do in science:

- Identifying Science Principles
- Using Science Principles
- Using Scientific Inquiry
- Using Technological Design

#### **Assessment Design**

The assessment design allowed for broad coverage at each grade of the three science content areas and four science practices, while minimizing the time burden for any one student. Each student in the assessment was asked to complete two 25-minute sections. Each section contained between 14 and 18 questions depending on the balance between multiple-choice and constructed-response questions. Released NAEP science questions, along with student performance data by state and trial urban district, are available on the NAEP website at <a href="http://nces.ed.gov/nationsreportcard/itmrls/">http://nces.ed.gov/nationsreportcard/itmrls/</a>.

#### Who Was Assessed?

Seventeen districts participated and met the criteria for reporting public school results in the NAEP Trial Urban District Assessment (TUDA) in science in 2009. The school district names, as used in the National Center for Education Statistics (NCES) Common Core of Data (CCD) are:

- · Atlanta Public Schools,
- Austin Independent School District,
- · Baltimore City Public Schools,
- Boston Public Schools,
- Charlotte-Mecklenburg Schools,
- Chicago Public Schools,
- Cleveland Metropolitan School District,
- Detroit Public Schools.
- Fresno Unified School District.
- Houston Independent School District,
- Jefferson County Public Schools (Louisville, KY),
- Los Angeles Unified School District,
- Miami-Dade County Public Schools,
- Milwaukee Public Schools,
- New York City Department of Education,
- · School District of Philadelphia, and
- San Diego Unified School District.

The overall participation rates for schools and students must meet guidelines established by NCES and the National Assessment Governing Board for assessment results to be reported publicly. A participation rate of at least 85 percent for schools in each subject and grade was required. Participation rates for the 2009 science assessment are available on the NAEP website at <a href="http://nationsreportcard.gov/science-2009/participation.asp">http://nationsreportcard.gov/science-2009/participation.asp</a>.

The District of Columbia (DCPS), which participated in the reading and mathematics TUDAs, was unable to participate in the 2009 science assessment because the samples for the mandatory reading and mathematics assessments took up most of their student population. Only a few schools in the District of Columbia participated in the science assessment at each grade in order to provide data for the national sample in science.

The sample of students in the participating TUDA school districts represents an augmentation of the sample of students who would usually be selected by NAEP as part of the state samples. These augmented samples allow reliable reporting of student groups within these districts. Students in the TUDA samples are also included in "higher-level" samples. For example, data from students tested in the Los Angeles sample were used to report results for Los Angeles, and also contributed to the California and the national samples.

Some charter schools that operate within the geographic boundaries of a school district are independent of the district and are not included in the district's Adequate Yearly Progress (AYP) report to the U.S. Department of Education under the Elementary and Secondary Education Act. Charter schools of this type are not included in the science results for TUDA districts. Charter schools are included in TUDA district results if they contribute to the district's AYP results as part of the Elementary and Secondary Education Act.

Referred to as "large central cities" in previous district reports, results for large cities include public schools located in cities with populations of 250,000 or more. The comparisons between national, district, and large city results present the performance of public school students only. In NAEP reports, the category "nation (public)" does not include Department of Defense or Bureau of Indian Education schools.

#### **How Is Student Science Performance Reported?**

The 2009 district results are compared to results from the nation and large cities at each grade.

**Scale Scores**: Student performance is reported as an average score based on the NAEP science scale, which ranges from 0 to 300. Because NAEP scales are developed independently for each subject and for each content area within a subject, the scores cannot be compared across subjects or across content areas within the same subject. In addition, because the NAEP science scales are developed independently for each grade, the scores cannot be compared across the grades. Results are also reported at five percentiles (10th, 25th, 50th, 75th, and 90th) to show trends in performance for lower-, middle-, and higher-performing students.

Achievement Levels: Based on recommendations from policymakers, educators, and members of the general public, the Governing Board sets specific achievement levels for each subject area and grade. Achievement levels are performance standards indicating what students should know and be able to do. They provide another perspective with which to interpret student performance. NAEP results are reported in terms of three achievement levels—*Basic, Proficient*, and *Advanced*—and are expressed in terms of the percentage of students who attained each level. The achievement levels cannot be compared across grades. The three achievement levels are defined as follows:

- Basic denotes partial mastery of prerequisite knowledge and skills that are fundamental for proficient work at each grade.
- Proficient represents solid academic performance for each grade assessed. Students reaching this level
  have demonstrated competency over challenging subject matter, including subject-matter knowledge,
  application of such knowledge to real-world situations, and appropriate analytical skills.
- Advanced represents superior performance.

The achievement levels are cumulative; therefore, students performing at the *Proficient* level also display the competencies associated with the *Basic* level, and students at the *Advanced* level also demonstrate the competencies associated with both the *Basic* and the *Proficient* levels.

As provided by law, NCES, upon review of congressionally mandated evaluations of NAEP, has determined that achievement levels are to be used on a trial basis and should be interpreted with caution. The NAEP achievement levels have been widely used by national and state officials. The science achievement-level descriptions are summarized in figures 1-A and 1-B.

Figure 1-A

#### The Nation's Report Card 2009 Trial Urban District Assessment

Descriptions of fourth-grade achievement levels for 2009 NAEP science assessment

Basic Level (131) Students performing at the *Basic* level should be able to describe, measure, and classify familiar objects in the world around them, as well as explain and make predictions about familiar processes. These processes include changes of states of matter, movements of objects, basic needs and life cycles of plants and animals, changes in shadows during the day, and changes in weather. They should be able to critique simple observational studies, communicating observations and basic measurements of familiar systems and processes, and look for patterns in their observations. With regard to scientific constraints, they should also be able to propose and critique alternative solutions to problems involving familiar systems and processes.

**Science Practices**: Students performing at the *Basic* level should be able to describe, measure, and classify familiar objects in the world around them, as well as explain and make predictions about familiar processes, using evidence to support their observations and conclusions. They should be able to critique simple observational studies, communicate observations and basic measurements of familiar systems and processes, and look for patterns in their observations. They should also be able to propose and recognize alternative solutions to problems involving familiar systems and processes.

In the physical sciences, students performing at the *Basic* level should be able to describe the properties of the states of matter, describe how to change matter from one state to another, describe different forms of energy, predict the electrical energy transfers that will take place in a simple circuit, critique alternative explanations for changes in a moving object's position, and design an investigation to show how exerting a force on an object changes the object's motion.

**In the life sciences**, students performing at the *Basic* level should be able to identify the stages in the life cycles of familiar organisms; describe how familiar animals meet their basic needs for food, air, water, and shelter; observe and describe the changes in plants and animals during their life cycles; and describe how environments meet the survival needs of familiar plants and animals.

**In the Earth and space sciences**, students performing at the *Basic* level should be able to predict changes in the length and position of shadows cast by the sun, describe how slow Earth processes (e.g., erosion) and fast Earth processes (e.g., volcanic eruption) can change Earth's surface, distinguish between natural and manmade materials, choose and use a tool to monitor how weather conditions change, and identify Earth resources that are limited.

Proficient Level (167) Students performing at the *Proficient* level should be able to demonstrate relationships among closely related science concepts, as well as analyze alternative explanations or predictions. They should be able to explain how changes in temperature cause changes of state, how forces can change motion, how adaptations help plants and animals meet their basic needs, how environmental changes can affect their growth and survival, how land formations can result from Earth processes, and how recycling can help conserve limited resources. They should be able to identify patterns in data and/or explain these patterns. They should also be able to identify and critique alternative responses to design problems.

**Science Practices**: Students performing at the *Proficient* level should be able to demonstrate relationships among closely related science concepts and familiar phenomena around them, as well as analyze alternative explanations or predictions, using evidence to support their explanations and predictions; critique observational studies and simple investigations; identify patterns in data and/or explain those patterns in data; and apply scientific ideas to identify and critique alternative designs to problems that personally affect them.

In the physical sciences, students performing at the *Proficient* level should be able to demonstrate the relationship between temperature change and changes in the physical properties of matter, explain how energy in one form can be changed into another form, design an investigation that measures how temperature changes when energy is added to a substance, propose a design for a container that will maintain the temperature of an object that is above or below room temperature, and measure changes in position of an object in motion as different forces are applied.

**In the life sciences**, students performing at the *Proficient* level should be able to describe needs of familiar plants and animals at different stages of their life cycles, explain adaptations of familiar plants and animals to their environments, predict effects of environmental changes on plant or animal growth and survival, and apply information about an animal's basic needs to propose a supportive environment.

**In the Earth and space sciences**, students performing at the *Proficient* level should be able to explain how the Sun's changing position in the sky during the day affects shadows; interpret land formations as resulting from either slow (e.g., erosion) or rapid (e.g., volcanic eruption) Earth processes; explain how natural materials can

help sustain the lives of familiar plants and animals; identify how patterns of weather conditions change from season to season; and explain how the practices of recycling, reusing, and reducing help to conserve limited resources.

## Advanced Level (224)

of matter.

Students performing at the *Advanced* level should be able to demonstrate relationships among different representations of science principles, as well as propose alternative explanations or predictions of phenomena. They should be able to use numbers, drawings, and graphs to describe and explain motions of objects; analyze how environmental conditions affect growth and survival of plants and animals; describe changes in the Sun's path through the sky at different times of year; and describe how human uses of Earth materials affect the environment. They should be able to design studies that use sampling strategies to obtain evidence. They should also be able to propose and critique alternative individual and local community responses to design problems.

**Science Practices**: Students performing at the *Advanced* level should be able to demonstrate relationships among different representations of principles, as well as propose alternative explanations or predictions of familiar phenomena, using evidence to support their explanations and predictions; design observational studies or simple investigations to validate or criticize explanations or predictions and use sampling strategies to obtain evidence; and propose and critique alternative individual and local community responses to design problems. **In the physical sciences**, students at the *Advanced* level should be able to demonstrate the relationship between the quantity of energy needed to change the state of a sample of a substance and the weight of the sample, demonstrate how different representations (i.e., verbal, numerical, graphical) can be used to show the motion of an object, suggest an example of how the motion of an object can be changed without touching it, and design an investigation that demonstrates how long it takes different forms of energy to change the temperature

**In the life sciences**, students at the *Advanced* level should be able to evaluate relationships between changing environmental conditions and organisms' growth, survival, and reproduction; analyze environments for how they may have different effects on the growth and survival of plants or animals of the same kind; and investigate the relationship between light and plant growth.

In the Earth and space sciences, students at the *Advanced* level should be able to relate changes in the Sun's daily path through the sky to different times of year, suggest examples of Earth materials that can be modified to meet human needs, explain how erosion is caused by daily/seasonal weather events, propose methods of reducing the amount of erosion, describe how humans can change environments that can be either detrimental or beneficial for themselves and other organisms, and describe how the use of Earth materials by humans impacts the environment.

NOTE: The scores in parentheses indicate the lowest point on the scale at which the achievement-level range begins. The NAEP grade 4 science scale ranges from 0 to 300.

SOURCE: National Assessment Governing Board. (2008). Science Framework for the 2009 National Assessment of Educational Progress. Washington, DC: Author.

Figure 1-B

## The Nation's Report Card 2009 Trial Urban District Assessment

Descriptions of eighth-grade achievement levels for 2009 NAEP science assessment

Basic Level (141) Students performing at the *Basic* level should be able to state or recognize correct science principles. They should be able to explain and predict observations of natural phenomena at multiple scales, from microscopic to global. They should be able to describe properties and common physical and chemical changes in materials; describe changes in potential and kinetic energy of moving objects; describe levels of organization of living systems—cells, multicellular organisms, and ecosystems; identify related organisms based on hereditary traits; describe a model of the solar system; and describe the processes of the water cycle. They should be able to design observational and experimental investigations employing appropriate tools for measuring variables. They should be able to propose and critique the scientific validity of alternative individual and local community responses to design problems.

**Science Practices**: Students performing at the *Basic* level should be able to state or recognize correct science principles; explain and predict observations of natural phenomena at multiple scales, from microscopic to global, using evidence to support their explanations and predictions; design investigations employing appropriate tools for measuring variables; and propose and critique the scientific validity of alternative individual and local community responses to design problems.

In the physical sciences, students at the *Basic* level should be able to recognize a class of chemical compounds by its properties; design an investigation to show changes in properties of reactants and products in a chemical process such as burning or rusting; describe the changes in kinetic and potential energy of an object such as a swinging pendulum; describe and compare the motions of two objects moving at different speeds from a table of their position and time data; describe the direction of all forces acting on an object; and suggest an example of a system in which forces are acting on an object but the motion of the object does not change. In the life sciences, students at the *Basic* level should be able to identify levels of organization within cells, multicellular organisms, and ecosystems; describe how changes in an environment relate to an organism's survival; describe types of interdependence in ecosystems; identify related organisms based on hereditary traits; discuss the needs of animals and plants to support growth and metabolism; and analyze and display data showing simple patterns in population growth.

In the Earth and space sciences, students at the *Basic* level should be able to describe a Sun-centered model of the solar system that illustrates how gravity keeps the objects in regular motion; describe how fossils and rock formations can be used as evidence to infer events in Earth's history; relate major geologic events, such as earthquakes, volcanoes, and mountain building to the movement of lithospheric plates; use weather data to identify major weather events; and describe the processes of the water cycle including changes in the physical state of water.

Proficient Level (170) Students performing at the *Proficient* level should be able to demonstrate relationships among closely related science principles. They should be able to identify evidence of chemical changes; explain and predict motions of objects using position-time graphs; explain metabolism, growth, and reproduction in cells, organisms, and ecosystems; use observations of the Sun, Earth, and Moon to explain visible motions in the sky; and predict surface and groundwater movements in different regions of the world. They should be able to explain and predict observations of phenomena at multiple scales, from microscopic to macroscopic and local to global, and to suggest examples of observations that illustrate a science principle. They should be able to use evidence from investigations in arguments that accept, revise, or reject scientific models. They should be able to use scientific criteria to propose and critique alternative individual and local community responses to design problems.

**Science Practices**: Students performing at the *Proficient* level should be able to demonstrate relationships among closely related science principles; explain and predict observations of phenomena at multiple scales, from microscopic to macroscopic and local to global, and to suggest examples of observations that illustrate a science principle; design investigations requiring control of variables to test a simple model, employing appropriate sampling techniques and data quality review processes, and use the evidence to communicate an argument that accepts, revises, or rejects the model; and propose and critique solutions and predict the scientific validity of alternative individual and local community responses to design problems.

**In the physical sciences**, students at the *Proficient* level should be able to demonstrate the relationship between the properties of chemical elements and their position on the periodic table; use empirical evidence to demonstrate that a chemical change has occurred; demonstrate the relationship of the motion of an object that experiences multiple forces with the representation of the motion on a position-time graph; predict the position of a moving object based on the position-time data presented in a table; and suggest examples of systems in which potential energy is converted into other forms of energy.

In the life sciences, students at the Proficient level should be able to explain metabolism, growth, and

reproduction at multiple levels of living systems: cells, multicellular organisms, and ecosystems; predict the effects of heredity and environment on an organism's characteristics and survival; use sampling strategies to estimate population sizes in ecosystems; and suggest examples of sustainable systems for multiple organisms. In the Earth and space sciences, students at the *Proficient* level should be able to explain how gravity accounts for the visible patterns of motion of the Earth, Sun, and Moon; explain how fossils and rock formations are used for relative dating; use models of Earth's interior to explain lithospheric plate movement; explain the formation of Earth materials using the properties of rocks and soils; identify recurring patterns of weather phenomena; and predict surface and groundwater movement in different regions of the world.

## Advanced Level (215)

Students performing at the *Advanced* level should be able to develop alternative representations of science principles and explanations of observations. They should be able to use information from the periodic table to compare families of elements; explain changes of state in terms of energy flow; trace matter and energy through living systems at multiple scales; predict changes in populations through natural selection and reproduction; use lithospheric plate movement to explain geological phenomena; and identify relationships among regional weather and atmospheric and ocean circulation patterns. They should be able to design and critique investigations involving sampling processes, data quality review processes, and control of variables. They should be able to propose and critique alternative solutions that reflect science-based trade-offs for addressing local and regional problems.

**Science Practices**: Students performing at the *Advanced* level should be able to demonstrate relationships among different representations of science principles. They should be able to explain and predict observations of phenomena at multiple scales, from microscopic to macroscopic and local to global, and develop alternative explanations of observations, using evidence to support their thinking. They should be able to design control of variable investigations employing appropriate sampling techniques and data quality review processes that strengthen the evidence used to argue for one alternate model over another. They should be able to propose and critique alternative solutions that reflect science-based trade-offs for addressing local and regional problems. **In the physical sciences**, students at the *Advanced* level should be able to interpret diagrams, graphs, and data to demonstrate the relationship between the particulate nature of matter and state changes (for instance, melting and freezing); demonstrate relationships between position on the periodic table and the characteristics of families of the chemical elements; explain changes of state in terms of energy flow in and out of a system; identify possible scientific trade-offs in making decisions on the design of an electrical energy power plant; suggest examples of systems in which objects are undergoing transitional, vibrational, and rotational motion; and suggest examples of systems in which forces are acting both through contact and at a distance.

**In the life sciences**, students at the *Advanced* level should be able to explain movement and transformations of matter and energy in living systems at cellular, organismal, and ecosystem levels; predict changes in populations through natural selection and reproduction; and describe an ecosystem's populations and propose an analysis for changes based on energy flow through the system.

**In the Earth and space sciences**, students at the *Advanced* level should be able to explain the seasons, Moon phases, and lunar and solar eclipses; illustrate how fossils and rock formations can provide evidence of changes in environmental conditions over time; use lithospheric plate movement to explain geological phenomena; identify relationships among regional weather and atmospheric and ocean circulation patterns; and use the water cycle to propose and critique ways for obtaining drinkable water.

NOTE: The scores in parentheses indicate the lowest point on the scale at which the achievement-level range begins. The NAEP grade 8 science scale ranges from 0 to 300.

SOURCE: National Assessment Governing Board. (2008). Science Framework for the 2009 National Assessment of Educational Progress. Washington, DC: Author.

#### Assessing Students With Disabilities and/or English Language Learners

Testing accommodations, such as extra testing time or individual (rather than group) administration, are provided for students with disabilities (SD) and English language learners (ELL) who could not fairly and accurately demonstrate their abilities without modified test administration procedures. Even with the availability of accommodations, however, some students may still be excluded from the NAEP assessment. Due to differences in policies and practices regarding the identification and inclusion of SD and ELL students, variations in exclusion and accommodation rates should be considered when comparing students' performance across districts. The types of accommodations used in the 2009 NAEP science assessment are available on the NAEP website at <a href="http://nationsreportcard.gov/science-2009/type-accomm.asp">http://nationsreportcard.gov/science-2009/type-accomm.asp</a>.

#### **Interpreting Results**

The scores and percentages in this report are estimates based on samples of students rather than on entire populations. In addition, the collection of questions used at each grade level is only a sample of the many questions that could have been asked to assess the skills and abilities described in the NAEP framework. Comparisons between groups are based on statistical tests that consider both the size of the differences and the standard errors of the two statistics being compared. Standard errors are margins of error, and estimates based on smaller groups are likely to have larger margins of error. The size of the standard errors may also be influenced by other factors such as how representative the assessed students are of the entire population. Statistical tests that factor in these standard errors are used to determine whether the differences between average scores or percentages are significant. All differences were tested for statistical significance at the .05 level using unrounded numbers.

Differences between scores or between percentages are discussed in this report only when they are significant from a statistical perspective. Significant differences are marked with a notation (\*) in the tables. Any differences in scores that are mentioned in the text as "higher," "lower," "greater," or "smaller" are statistically significant.

Score or percentage differences or gaps cited in this report are calculated based on differences between unrounded numbers. Therefore, the reader may find that the score or percentage difference cited in the text or tables may not be identical to the difference obtained from subtracting the rounded values shown in the accompanying tables or figures.

The reader is cautioned against making simple causal inferences between student performance and the other variables (e.g., race/ethnicity, gender, and type of school location) discussed in this report. A statistically significant relationship between a variable and measures of student performance does not imply that the variable causes differences in how well students perform. The relationship may be influenced by a number of other variables not accounted for in this report, such as family income, parental involvement, or student attitudes.

# NAEP 2009 Science Overall Average Score and Achievement-Level Results for Public School Students

Overall science results are reported in this section for public school students from Miami-Dade along with large city and national (public) results.

#### **Overall Average Score Results**

Student performance is reported as an average score based on the NAEP science scale, which ranges from 0 to 300.

Tables 1-A and 1-B show the overall performance results of grades 4 and 8 public school students in Miami-Dade, the nation (public), and large cities (public). The first column of results presents the average score on the NAEP science scale. The remaining columns show the scores at selected percentiles. A percentile is a score point at or below which a certain percentage of students fall. For example, the 25th percentile demarks the cut point for the lowest 25 percent of students within the distribution of scale scores.

#### Grade 4 Scale Score Results

 In 2009, the average scale score for students in Miami-Dade was 144. This was lower than the score for students across the nation (149) and was higher than the score for students attending public schools in large cities (135).

#### Grade 8 Scale Score Results

 In 2009, the average scale score for students in Miami-Dade was 137. This was lower than the score for students across the nation (149) and was higher than the score for students attending public schools in large cities (134).



## The Nation's Report Card 2009 Trial Urban District Assessment

Average scale scores and selected percentile scores in NAEP science for fourth-grade public school students, by year and jurisdiction: 2009

Year and	jurisdiction	Average scale score	10th percentile	25th percentile	50th percentile	75th percentile	90th percentile
2009	Nation (public)	149*	102	126	152*	174*	192*
	Large city (public)	135*	88*	111*	136*	161*	182
	Miami-Dade	144	101	123	145	167	185

<sup>\*</sup> Value is significantly different (p < .05) from the value in Miami-Dade.

NOTE: The NAEP grade 4 science scale ranges from 0 to 300. All differences were calculated and tested using unrounded numbers. SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 2009 Science Assessment.

Table 1-B

## The Nation's Report Card 2009 Trial Urban District Assessment

Average scale scores and selected percentile scores in NAEP science for eighth-grade public school students, by year and jurisdiction: 2009

Year and	l jurisdiction	Average scale score	10th percentile	25th percentile	50th percentile	75th percentile	90th percentile
2009	Nation (public)	149*	102*	127*	152*	174*	191*
	Large city (public)	134*	85 *	109*	135*	160	180
	Miami-Dade	137	91	115	140	162	181

<sup>\*</sup> Value is significantly different (p < .05) from the value in Miami-Dade.

NOTE: The NAEP grade 8 science scale ranges from 0 to 300. All differences were calculated and tested using unrounded numbers. SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 2009 Science Assessment.

#### **Overall Achievement-Level Results**

Student results are reported as the percentages of students performing relative to performance standards set by the National Assessment Governing Board. These performance standards for what students should know and be able to do were based on the recommendations of broadly representative panels of educators and members of the general public.

Tables 2-A and 2-B show the percentage of students at grades 4 and 8 who performed below *Basic*, at or above *Basic*, at or above *Proficient*, and at *Advanced*. Because the percentages are cumulative from *Basic* to *Proficient* to *Advanced*, they will sum to more than 100 percent. Only the percentage of students performing at or above *Basic* (which includes the students at *Proficient* and *Advanced*) plus the students below *Basic* will sum to 100 percent.

#### Grade 4 Achievement-Level Results

- In 2009, the percentage of Miami-Dade's students who performed at or above *Proficient* was 25 percent. This was smaller than the percentage of the nation's public school students who performed at or above *Proficient* (32 percent) and was greater than the percentage of the students attending public schools in large cities who performed at or above *Proficient* (20 percent).
- In 2009, the percentage of Miami-Dade's students who performed at or above *Basic* was 66 percent. This was smaller than the percentage of the nation's public school students who performed at or above *Basic* (71 percent) and was greater than the percentage of the students attending public schools in large cities who performed at or above *Basic* (56 percent).

#### Grade 8 Achievement-Level Results

- In 2009, the percentage of Miami-Dade's students who performed at or above *Proficient* was 18 percent. This was smaller than the percentage of the nation's public school students who performed at or above *Proficient* (29 percent) and was not significantly different from the percentage of the students attending public schools in large cities who performed at or above *Proficient* (17 percent).
- In 2009, the percentage of Miami-Dade's students who performed at or above Basic was 49 percent. This was smaller than the percentage of the nation's public school students who performed at or above Basic (62 percent) and was greater than the percentage of the students attending public schools in large cities who performed at or above Basic (44 percent).

Table 2-A

## The Nation's Report Card 2009 Trial Urban District Assessment

Percentage of fourth-grade public school students at or above NAEP science achievement levels, by year and jurisdiction: 2009

Year and	jurisdiction	Below <i>Basic</i>	At or above <i>Basic</i>	At or above Proficient	At Advanced
2009	Nation (public)	29*	71*	32*	1
	Large city (public)	44*	56*	20*	#
	Miami-Dade	34	66	25	#

<sup>#</sup> Rounds to zero.

NOTE: The NAEP grade 4 science scale ranges from 0 to 300. Achievement levels correspond to the following points on the NAEP science scales: below *Basic*, 130 or lower; *Basic*, 131–166; *Proficient*, 167–223; and *Advanced*, 224 and above. At or above *Basic* includes *Basic*, *Proficient*, and *Advanced*. At or above *Proficient* includes *Proficient* and *Advanced*. Detail may not sum to totals because of rounding. All differences were calculated and tested using unrounded numbers.

 $<sup>^{\</sup>star}$  Value is significantly different (p < .05) from the value in Miami-Dade.

Table 2-B

#### The Nation's Report Card 2009 Trial Urban District Assessment

Percentage of eighth-grade public school students at or above NAEP science achievement levels, by year and jurisdiction: 2009

Year and j	urisdiction	Below <i>Basic</i>	At or above Basic	At or above Proficient	At Advanced
2009	Nation (public)	38*	62*	29*	1*
	Large city (public)	56*	44*	17	1
	Miami-Dade	51	49	18	1

<sup>\*</sup> Value is significantly different (p < .05) from the value in Miami-Dade.

NOTE: The NAEP grade 8 science scale ranges from 0 to 300. Achievement levels correspond to the following points on the NAEP science scales: below *Basic*, 140 or lower; *Basic*, 141–169; *Proficient*, 170–214; and *Advanced*, 215 and above. At or above *Basic* includes *Basic*, *Proficient*, and *Advanced*. At or above *Proficient* includes *Proficient* and *Advanced*. Detail may not sum to totals because of rounding. All differences were calculated and tested using unrounded numbers.

# Comparisons Between Miami-Dade, the Nation, Large Cities, and Other Participating Districts

Seventeen districts participated in and met the reporting criteria for the 2009 science assessment. These were Atlanta, Austin, Baltimore City, Boston, Charlotte, Chicago, Cleveland, Detroit, Fresno, Houston, Jefferson County (KY), Los Angeles, Miami-Dade, Milwaukee, New York City, Philadelphia, and San Diego.

## **Comparisons by Average Scores**

Figures 2-A and 2-B compare Miami-Dade's 2009 overall science average scores at grades 4 and 8 with those in all other participating districts. The participating districts are grouped into categories reflecting whether the average scores of their students were found to be higher than, not significantly different from, or lower than the scores in Miami-Dade.

#### Grade 4 Scale Score Comparison Results

• Students' average score in Miami-Dade was higher than the scores in 12 districts, not significantly different from those in 2 districts, and lower than those in 2 districts.

#### Grade 8 Scale Score Comparison Results

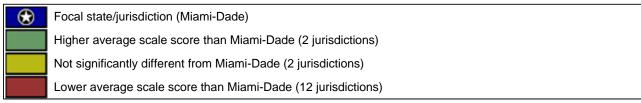
 Students' average score in Miami-Dade was higher than the scores in 11 districts, not significantly different from those in 2 districts, and lower than those in 3 districts.

Figure 2-A

## The Nation's Report Card 2009 Trial Urban District Assessment

Miami-Dade's average scale score in NAEP science for fourth-grade public school students compared with scores for other participating districts: 2009





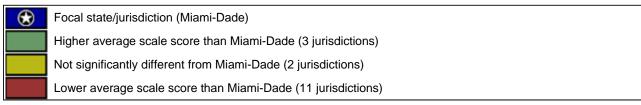
NOTE: Significance tests used a multiple-comparison procedure based on all jurisdictions that participated. SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 2009 Science Assessment.

Figure 2-B

## The Nation's Report Card 2009 Trial Urban District Assessment

Miami-Dade's average scale score in NAEP science for eighth-grade public school students compared with scores for other participating districts: 2009





NOTE: Significance tests used a multiple-comparison procedure based on all jurisdictions that participated. SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 2009 Science Assessment.

#### **Comparisons by Achievement Levels**

Figures 3-A and 3-B permit comparisons of all districts participating in the NAEP 2009 science assessment in terms of percentages of grades 4 and 8 students performing at or above *Basic*. The participating districts are grouped into categories reflecting whether the percentage of their students performing at or above *Basic* (including *Basic*, *Proficient* and *Advanced*) was found to be higher than, not significantly different from, or lower than the percentage in Miami-Dade. Note that the selected district is listed first in its category and the other districts within each category are listed in rank order. Statistical comparisons among districts by achievement level can be calculated online by using the NAEP Data Explorer at <a href="http://nces.ed.gov/nationsreportcard/naepdata/">http://nces.ed.gov/nationsreportcard/naepdata/</a>.

#### Grade 4 Achievement-Level Comparison Results

- The percentage of students performing at or above the *Proficient* level in Miami-Dade was higher than the percentage in 12 districts, not significantly different from those in 1 district, and lower than those in 3 districts (data not shown).
- The percentage of students performing at or above the *Basic* level in Miami-Dade was higher than the percentage in 11 districts, and not significantly different from those in 5 districts.

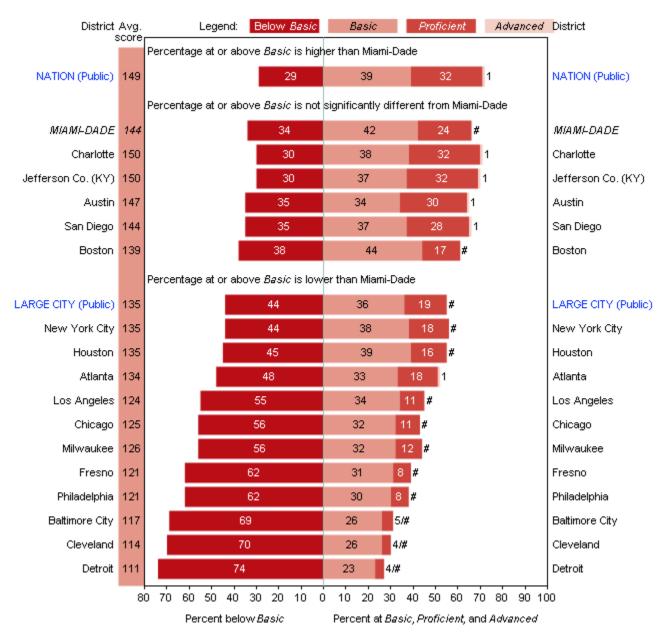
#### Grade 8 Achievement-Level Comparison Results

- The percentage of students performing at or above the *Proficient* level in Miami-Dade was higher than the percentage in 10 districts, not significantly different from those in 4 districts, and lower than those in 2 districts (data not shown).
- The percentage of students performing at or above the *Basic* level in Miami-Dade was higher than the percentage in 11 districts, not significantly different from those in 3 districts, and lower than those in 2 districts.

Figure 3-A

#### The Nation's Report Card 2009 Trial Urban District Assessment

Average scale scores in NAEP science for fourth-grade public school students, percentage within each achievement level, and Miami-Dade's percentage at or above *Basic* compared with the nation, large city, and other participating districts: 2009



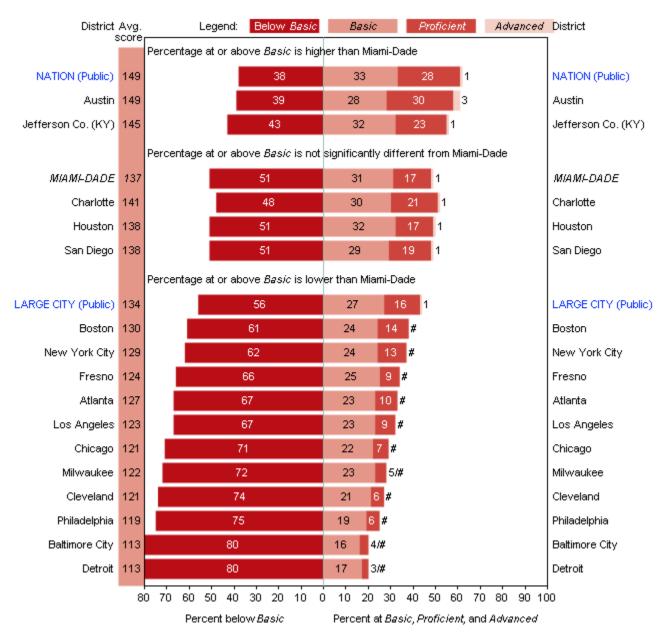
#### # Rounds to zero.

NOTE: The NAEP grade 4 science scale ranges from 0 to 300. Achievement levels correspond to the following points on the NAEP science scales: below *Basic*, 130 or lower; *Basic*, 131–166; *Proficient*, 167–223; and *Advanced*, 224 and above. The following jurisdictions did not participate in the assessment: District of Columbia. The bars above contain percentages of students in each NAEP science achievement level. Achievement levels corresponding to each population of students are aligned at the point where the *Basic* category begins, so that they may be compared at *Basic* and above. Detail may not sum to totals because of rounding. All differences were calculated and tested using unrounded numbers. The shaded bars are graphed using unrounded numbers. Significance tests used a multiple-comparison procedure based on all jurisdictions that participated.

Figure 3-B

## The Nation's Report Card 2009 Trial Urban District Assessment

Average scale scores in NAEP science for eighth-grade public school students, percentage within each achievement level, and Miami-Dade's percentage at or above *Basic* compared with the nation, large city, and other participating districts: 2009



#### # Rounds to zero.

NOTE: The NAEP grade 8 science scale ranges from 0 to 300. Achievement levels correspond to the following points on the NAEP science scales: below *Basic*, 140 or lower; *Basic*, 141–169; *Proficient*, 170–214; and *Advanced*, 215 and above. The following jurisdictions did not participate in the assessment: District of Columbia. The bars above contain percentages of students in each NAEP science achievement level. Achievement levels corresponding to each population of students are aligned at the point where the *Basic* category begins, so that they may be compared at *Basic* and above. Detail may not sum to totals because of rounding. All differences were calculated and tested using unrounded numbers. The shaded bars are graphed using unrounded numbers. Significance tests used a multiple-comparison procedure based on all jurisdictions that participated.

# **Science Performance of Selected Student Groups**

This section of the report presents results for public school students in Miami-Dade, in the nation, and in large city public schools by demographic characteristics.

Student performance data are reported for:

- race/ethnicity
- gender
- student eligibility for the National School Lunch Program
- parents' highest level of education (grade 8 only)

Results for each of the variables are reported in tables that include the percentage of students in each group in the first column and the average score in the second column. The columns to the right show the percentage of students below *Basic* and at or above each achievement level.

Results by students' race/ethnicity and gender include statements about score point differences between student groups (e.g., between White and Black or White and Hispanic students, or between male and female students) in 2009. Because these differences are calculated using unrounded values, they may differ slightly from what would be obtained by subtracting the rounded values that appear in the tables.

The reader is cautioned against making causal inferences about group differences, as a complex mix of educational and socioeconomic factors may affect student performance. NAEP collects information on many additional variables, including school and home factors related to achievement. This information is in an interactive database available on the NAEP website <a href="http://nces.ed.gov/nationsreportcard/naepdata/">http://nces.ed.gov/nationsreportcard/naepdata/</a>.

#### Race/Ethnicity

The race/ethnicity of each student was reported by the schools. The six mutually exclusive categories are White, Black, Hispanic, Asian/Pacific Islander, American Indian/Alaska Native, and Unclassified. Black includes African American, Hispanic includes Latino, and Pacific Islander includes Native Hawaiian. Race categories exclude Hispanic origin. Tables 3-A and 3-B show the percentage of students, average scores, and achievement-level data for public school students at grades 4 and 8 in Miami-Dade, in the nation, and in public schools in large cities, by race/ethnicity.

#### Grade 4 Scale Score Results by Race/Ethnicity

- In 2009, White students in Miami-Dade had an average scale score that was higher than the average scores
  of Black and Hispanic students.
- In 2009 in Miami-Dade, Black students had an average score that was lower than that of White students by 44 points. In large cities, the average score for Black students was lower than that of White students by 40 points.
- In 2009 in Miami-Dade, Hispanic students had an average score that was lower than that of White students by 23 points. This performance gap was narrower than that of large cities (36 points).

#### Grade 4 Achievement-Level Results by Race/Ethnicity

• In 2009 in Miami-Dade, the percentage of White students performing at or above *Proficient* was greater than the corresponding percentages of Black and Hispanic students.

Table 3-A

## The Nation's Report Card 2009 Trial Urban District Assessment

Percentage of fourth-grade public school students, average scale score, and percentage at or above achievement levels in NAEP science, by race/ethnicity, year, and jurisdiction: 2009

Race/ethnicity jurisdiction	, year, and	Percentage of students	Average scale score	Below Basic	At or above <i>Basic</i>	At or above <i>Proficient</i>	At Advanced
White							
2009	Nation (public)	54*	162*	14*	86*	46*	1
	Large city (public)	20*	163*	15*	85*	48*	1
	Miami-Dade	10	169	8	92	57	#
Black							
2009	Nation (public)	16*	127	54	46	10	#
	Large city (public)	29	122	59	41	8	#
	Miami-Dade	25	125	56	44	7	#
Hispanic							
2009	Nation (public)	22*	130*	48*	52*	13*	#
	Large city (public)	42*	127*	52*	48*	12*	#
	Miami-Dade	62	146	30	70	25	#
Asian/Pacific I	slander						
2009	Nation (public)	5*	160	20	80	45	2
	Large city (public)	8*	152	24	76	35	1
	Miami-Dade	1	‡	‡	‡	‡	‡
American India	an/Alaska Native						
2009	Nation (public)	1	137	40	60	19	#
	Large city (public)	1	131	47	53	12	#
	Miami-Dade	#	‡	‡	‡	‡	‡

<sup>#</sup> Rounds to zero.

NOTE: The NAEP grade 4 science scale ranges from 0 to 300. Achievement levels correspond to the following points on the NAEP science scales: below *Basic*, 130 or lower; *Basic*, 131–166; *Proficient*, 167–223; and *Advanced*, 224 and above. At or above *Basic* includes *Basic*, *Proficient*, and *Advanced*. At or above *Proficient* includes *Proficient* and *Advanced*. Black includes African American, Hispanic includes Latino, and Pacific Islander includes Native Hawaiian. Race categories exclude Hispanic origin. Detail may not sum to totals because of rounding. All differences were calculated and tested using unrounded numbers.

<sup>‡</sup> Reporting standards not met.

 $<sup>^{\</sup>star}$  Value is significantly different (p < .05) from the value for the same group in Miami-Dade.

#### Grade 8 Scale Score Results by Race/Ethnicity

- In 2009, White students in Miami-Dade had an average scale score that was higher than the average scores
  of Black and Hispanic students.
- In 2009 in Miami-Dade, Black students had an average score that was lower than that of White students by 36 points. In large cities, the average score for Black students was lower than that of White students by 39 points.
- In 2009 in Miami-Dade, Hispanic students had an average score that was lower than that of White students by 21 points. This performance gap was narrower than that of large cities (33 points).

#### Grade 8 Achievement-Level Results by Race/Ethnicity

• In 2009 in Miami-Dade, the percentage of White students performing at or above *Proficient* was greater than the corresponding percentages of Black and Hispanic students.

Table 3-B

## The Nation's Report Card 2009 Trial Urban District Assessment

Percentage of eighth-grade public school students, average scale score, and percentage at or above achievement levels in NAEP science, by race/ethnicity, year, and jurisdiction: 2009

Race/ethnicity jurisdiction	, year, and	Percentage of students	Average scale score	Below Basic	At or above <i>Basic</i>	At or above Proficient	At Advanced
White							
2009	Nation (public)	56*	161	23	77	41	2
	Large city (public)	21*	159	27	73	40	2
	Miami-Dade	10	159	27	73	38	1
Black							
2009	Nation (public)	16*	125	68	32	8	#
	Large city (public)	28*	120	73	27	6	#
	Miami-Dade	23	123	70	30	6	#
Hispanic							
2009	Nation (public)	21*	131 *	59*	41*	12*	#
	Large city (public)	42*	127*	63*	37*	10*	#
	Miami-Dade	65	138	50	50	18	1
Asian/Pacific	Islander						
2009	Nation (public)	5*	159	28	72	40	3
	Large city (public)	7*	152	34	66	32	2
	Miami-Dade	1	‡	‡	‡	‡	‡
American Indi	an/Alaska Native		-	-	-	-	-
2009	Nation (public)	1	138	51	49	18	#
	Large city (public)	1	131	58	42	14	#
	Miami-Dade	#	‡	‡	‡	‡	‡

<sup>#</sup> Rounds to zero.

NOTE: The NAEP grade 8 science scale ranges from 0 to 300. Achievement levels correspond to the following points on the NAEP science scales: below *Basic*, 140 or lower; *Basic*, 141–169; *Proficient*, 170–214; and *Advanced*, 215 and above. At or above *Basic* includes *Basic*, *Proficient*, and *Advanced*. At or above *Proficient* includes *Proficient* and *Advanced*. Black includes African American, Hispanic includes Latino, and Pacific Islander includes Native Hawaiian. Race categories exclude Hispanic origin. Detail may not sum to totals because of rounding. All differences were calculated and tested using unrounded numbers.

<sup>‡</sup> Reporting standards not met.

 $<sup>^{\</sup>star}$  Value is significantly different (p < .05) from the value for the same group in Miami-Dade.

#### Gender

Information on student gender is reported by the student's school when rosters of the students eligible to be assessed are submitted to NAEP.

Tables 4-A and 4-B show average scores and achievement-level data for public school students at grades 4 and 8 in Miami-Dade, in the nation, and in large city public schools, by gender.

#### Grade 4 Scale Score Results by Gender

- In 2009 in Miami-Dade, male students had an average score in science (144) that was not significantly different from that of female students (143). In large cities, male students had an average score in science (135) that was not significantly different from that of female students (135).
- In 2009, male students in Miami-Dade had an average scale score in science (144) that was lower than that of male students in public schools across the nation (149). Similarly, female students in Miami-Dade had an average scale score (143) that was lower than that of female students across the nation (148).
- In 2009, male students in Miami-Dade had an average scale score in science (144) that was higher than that of male students in public schools in large cities (135). Similarly, female students in Miami-Dade had an average scale score (143) that was higher than that of female students in public schools in large cities (135).

#### Grade 4 Achievement-Level Results by Gender

- The percentage of male students in Miami-Dade's public schools who were at or above *Proficient* in 2009 (27 percent) was smaller than that of male students in the nation (34 percent) and greater than that of male students in public schools in large cities (20 percent).
- The percentage of female students in Miami-Dade's public schools who were at or above *Proficient* in 2009 (23 percent) was smaller than that of female students in the nation (31 percent) and not significantly different from that of female students in public schools in large cities (20 percent).

# Table 4-A

## The Nation's Report Card 2009 Trial Urban District Assessment

Percentage of fourth-grade public school students, average scale score, and percentage at or above achievement levels in NAEP science, by gender, year, and jurisdiction: 2009

Gender, year	r, and jurisdiction	Percentage of students	Average scale score	Below Basic	At or above <i>Basic</i>	At or above Proficient	At Advanced
Male							
2009	Nation (public)	51	149*	29*	71*	34*	1
	Large city (public)	50	135*	44*	56*	20*	#
	Miami-Dade	50	144	33	67	27	#
Female							
2009	Nation (public)	49	148*	29*	71*	31*	#
	Large city (public)	50	135*	44*	56*	20	#
	Miami-Dade	50	143	34	66	23	#

<sup>#</sup> Rounds to zero.

NOTE: The NAEP grade 4 science scale ranges from 0 to 300. Achievement levels correspond to the following points on the NAEP science scales: below *Basic*, 130 or lower; *Basic*, 131–166; *Proficient*, 167–223; and *Advanced*, 224 and above. At or above *Basic* includes *Basic*, *Proficient*, and *Advanced*. At or above *Proficient* includes *Proficient* and *Advanced*. Detail may not sum to totals because of rounding. All differences were calculated and tested using unrounded numbers.

<sup>\*</sup> Value is significantly different (p < .05) from the value for the same group in Miami-Dade.

#### Grade 8 Scale Score Results by Gender

- In 2009 in Miami-Dade, male students had an average score in science (140) that was higher than that of female students (135). In large cities, male students had an average score in science (135) that was higher than that of female students (132).
- In 2009, male students in Miami-Dade had an average scale score in science (140) that was lower than that of male students in public schools across the nation (151). Similarly, female students in Miami-Dade had an average scale score (135) that was lower than that of female students across the nation (147).
- In 2009, male students in Miami-Dade had an average scale score in science (140) that was higher than that of male students in public schools in large cities (135). However, female students in Miami-Dade had an average scale score (135) that was not significantly different from that of female students in public schools in large cities (132).

#### Grade 8 Achievement-Level Results by Gender

- The percentage of male students in Miami-Dade's public schools who were at or above *Proficient* in 2009 (19 percent) was smaller than that of male students in the nation (32 percent) and not significantly different from that of male students in public schools in large cities (19 percent).
- The percentage of female students in Miami-Dade's public schools who were at or above *Proficient* in 2009 (16 percent) was smaller than that of female students in the nation (26 percent) and not significantly different from that of female students in public schools in large cities (14 percent).

Table 4-B

## The Nation's Report Card 2009 Trial Urban District Assessment

Percentage of eighth-grade public school students, average scale score, and percentage at or above achievement levels in NAEP science, by gender, year, and jurisdiction: 2009

Gender, year	, and jurisdiction	Percentage of students	Average scale score	Below Basic	At or above <i>Basic</i>	At or above Proficient	At Advanced
Male							
2009	Nation (public)	51	151*	36*	64*	32*	2*
	Large city (public)	51	135*	54*	46*	19	1
	Miami-Dade	50	140	47	53	19	1
Female							
2009	Nation (public)	49	147*	40*	60*	26*	1*
	Large city (public)	49	132	58	42	14	#
	Miami-Dade	50	135	55	45	16	#

<sup>#</sup> Rounds to zero.

NOTE: The NAEP grade 8 science scale ranges from 0 to 300. Achievement levels correspond to the following points on the NAEP science scales: below *Basic*, 140 or lower; *Basic*, 141–169; *Proficient*, 170–214; and *Advanced*, 215 and above. At or above *Basic* includes *Basic*, *Proficient*, and *Advanced*. At or above *Proficient* includes *Proficient* and *Advanced*. Detail may not sum to totals because of rounding. All differences were calculated and tested using unrounded numbers.

<sup>\*</sup> Value is significantly different (p < .05) from the value for the same group in Miami-Dade.

#### Student Eligibility for the National School Lunch Program

NAEP collects data on eligibility for the federal program providing free or reduced-price school lunches. The free/reduced-price lunch component of the National School Lunch Program (NSLP) offered through the U.S. Department of Agriculture (USDA) is designed to ensure that children near or below the poverty line receive nourishing meals. Eligibility is determined through the USDA's Income Eligibility Guidelines, and is used as an indicator of lower family income. Additional information regarding this topic can be found in the Technical Appendix or at the U.S. Department of Agriculture website at <a href="http://www.fns.usda.gov/cnd/lunch/">http://www.fns.usda.gov/cnd/lunch/</a>.

Tables 5-A and 5-B show average scores and achievement-level data for public school students at grades 4 and 8 in Miami-Dade, in the nation, and in large city public schools, by student eligibility for the NSLP.

#### Grade 4 Scale Score Results by Free/Reduced-Price School Lunch Eligibility

- In 2009, students in Miami-Dade eligible for free/reduced-price lunch had an average science scale score of 135. This was lower than that of students in Miami-Dade not eligible for this program (161).
- In 2009, students in Miami-Dade who were eligible for free/reduced-price school lunch had an average score
  that was lower than that of students who were not eligible for free/reduced-price school lunch by 26 points. In
  large cities, the average score for students in 2009 who were eligible for free/reduced-price school lunch was
  lower than the score of those not eligible by 30 points.
- Students in Miami-Dade eligible for free/reduced-price lunch had an average scale score (135) in 2009 that was not significantly different from that of students in the nation who were eligible (134) and higher than that of students in public schools in large cities who were eligible (126).

#### Grade 4 Achievement-Level Results by Free/Reduced-Price School Lunch Eligibility

- In Miami-Dade, 14 percent of students who were eligible for free/reduced-price lunch and 46 percent of those
  who were not eligible for this program performed at or above *Proficient* in 2009. These percentages were
  significantly different from one another.
- For students in Miami-Dade in 2009 who were eligible for free/reduced-price lunch, the percentage at or above *Proficient* (14 percent) was not significantly different from the corresponding percentage for their counterparts around the nation (16 percent) and greater than the corresponding percentage for their counterparts in large cities (11 percent).

# Table 5-A

## The Nation's Report Card 2009 Trial Urban District Assessment

Percentage of fourth-grade public school students, average scale score, and percentage at or above achievement levels in NAEP science, by National School Lunch Program eligibility status, year, and jurisdiction: 2009

Eligibility statu	s, year, and	Percentage of students	Average scale score	Below Basic	At or above <i>Basic</i>	At or above Proficient	At Advanced
Eligible							
2009	Nation (public)	48*	134	44	56	16	#
	Large city (public)	71	126*	53*	47*	11*	#
	Miami-Dade	68	135	42	58	14	#
Not eligible							
2009	Nation (public)	51 *	163	14	86	48	1
	Large city (public)	28	157*	22*	78*	42	1
	Miami-Dade	32	161	16	84	46	#
Information not	t available						
2009	Nation (public)	1	143	36	64	27	#
	Large city (public)	1	140	40	60	26	1
	Miami-Dade	#	‡	‡	‡	‡	‡

<sup>#</sup> Rounds to zero.

NOTE: The NAEP grade 4 science scale ranges from 0 to 300. Achievement levels correspond to the following points on the NAEP science scales: below *Basic*, 130 or lower; *Basic*, 131–166; *Proficient*, 167–223; and *Advanced*, 224 and above. At or above *Basic* includes *Basic*, *Proficient*, and *Advanced*. At or above *Proficient* includes *Proficient* and *Advanced*. Detail may not sum to totals because of rounding. All differences were calculated and tested using unrounded numbers.

<sup>‡</sup> Reporting standards not met.

<sup>\*</sup> Value is significantly different (p < .05) from the value for the same group in Miami-Dade.

#### Grade 8 Scale Score Results by Free/Reduced-Price School Lunch Eligibility

- In 2009, students in Miami-Dade eligible for free/reduced-price lunch had an average science scale score of 130. This was lower than that of students in Miami-Dade not eligible for this program (150).
- In 2009, students in Miami-Dade who were eligible for free/reduced-price school lunch had an average score
  that was lower than that of students who were not eligible for free/reduced-price school lunch by 20 points.
  This performance gap was narrower than that of large cities (27 points).
- Students in Miami-Dade eligible for free/reduced-price lunch had an average scale score (130) in 2009 that was not significantly different from that of students in the nation who were eligible (133) and higher than that of students in public schools in large cities who were eligible (125).

#### Grade 8 Achievement-Level Results by Free/Reduced-Price School Lunch Eligibility

- In Miami-Dade, 11 percent of students who were eligible for free/reduced-price lunch and 29 percent of those
  who were not eligible for this program performed at or above *Proficient* in 2009. These percentages were
  significantly different from one another.
- For students in Miami-Dade in 2009 who were eligible for free/reduced-price lunch, the percentage at or above *Proficient* (11 percent) was not significantly different from the corresponding percentage for their counterparts around the nation (14 percent) and not significantly different from the corresponding percentage for their counterparts in large cities (9 percent).

# Table 5-B

## The Nation's Report Card 2009 Trial Urban District Assessment

Percentage of eighth-grade public school students, average scale score, and percentage at or above achievement levels in NAEP science, by National School Lunch Program eligibility status, year, and jurisdiction: 2009

Eligibility statu jurisdiction	s, year, and	Percentage of students	Average scale score	Below Basic	At or above <i>Basic</i>	At or above <i>Proficient</i>	At Advanced
Eligible							
2009	Nation (public)	43*	133	57	43	14	#
	Large city (public)	66	125*	66*	34*	9	#
	Miami-Dade	63	130	60	40	11	#
Not eligible							
2009	Nation (public)	56*	161*	24*	76*	41*	2
	Large city (public)	33*	152	35	65	33	2
	Miami-Dade	37	150	37	63	29	1
Information not	t available						
2009	Nation (public)	1*	150	36	64	32	1
	Large city (public)	1*	138	51	49	23	1
	Miami-Dade	#	‡	‡	‡	‡	‡

<sup>#</sup> Rounds to zero.

NOTE: The NAEP grade 8 science scale ranges from 0 to 300. Achievement levels correspond to the following points on the NAEP science scales: below *Basic*, 140 or lower; *Basic*, 141–169; *Proficient*, 170–214; and *Advanced*, 215 and above. At or above *Basic* includes *Basic*, *Proficient*, and *Advanced*. At or above *Proficient* includes *Proficient* and *Advanced*. Detail may not sum to totals because of rounding. All differences were calculated and tested using unrounded numbers.

<sup>‡</sup> Reporting standards not met.

 $<sup>^{\</sup>star}$  Value is significantly different (p < .05) from the value for the same group in Miami-Dade.

#### Parents' Highest Level of Education

Eighth-grade students who participated in the NAEP 2009 assessment were asked to indicate the highest level of education they thought their father and their mother had completed. The highest level of education reported for either parent was used in the analysis. Responses were categorized as follows: did not finish high school, graduated from high school, some education after high school, graduated from college, and unknown. Fourth-graders were not asked about their parents' education level because their responses in previous NAEP assessments were not reliable, and a large percentage of them chose the unknown option.

Table 6 shows average scores and achievement-level data for public school students at grade 8 in Miami-Dade, in the nation, and in large city public schools, by student reported parents' highest level of education.

#### Grade 8 Scale Score Results by Parents' Highest Level of Education

- In 2009, students in Miami-Dade who reported that a parent had graduated from college had an average scale
  score that was higher than the average scores of students with a parent in any of the following education
  categories: graduated from high school and did not finish high school, but was not significantly different from
  the average score of students with a parent in any of the following education categories: some education after
  high school.
- In 2009, the average scale scores for students in Miami-Dade who reported that a parent had graduated from college, had some education after high school, or had graduated from high school were lower than the corresponding scores of students in the nation.
- In 2009, the average scale score for students in Miami-Dade who reported that a parent had not finished high school was not significantly different from the score of students in the nation.
- In 2009, the average scale score for students in Miami-Dade who reported that a parent had some education
  after high school was higher than the score of students in public schools in large cities.
- In 2009, the average scale scores for students in Miami-Dade who reported that a parent had graduated from college, had graduated from high school, or had not finished high school were not significantly different from the corresponding scores of students in public schools in large cities.

#### Grade 8 Achievement-Level Results by Parents' Highest Level of Education

- In 2009, the percentage of students performing at or above *Proficient* in Miami-Dade who reported that a
  parent had graduated from college was greater than the percentage for students whose parents' highest level
  of education was in any of the following education categories: graduated from high school and did not finish
  high school, but was not significantly different from the percentage for students whose parents' highest level of
  education was in any of the following education categories: some education after high school.
- In 2009 in Miami-Dade, the percentages of students reporting that a parent had graduated from college, had some education after high school, or had graduated from high school and who performed at or above *Proficient* were smaller than the corresponding percentages of students in the nation.
- In 2009 in Miami-Dade, the percentage of students reporting that a parent had not finished high school and who performed at or above *Proficient* was not significantly different from the percentage of students in the nation.
- In 2009 in Miami-Dade, the percentage of students reporting that a parent had graduated from college and
  who performed at or above *Proficient* was smaller than the percentage of students in public schools in large
  cities
- In 2009 in Miami-Dade, the percentages of students reporting that a parent had some education after high school, had graduated from high school, or had not finished high school and who performed at or above Proficient were not significantly different from the corresponding percentages of students in public schools in large cities.

# Table 6

#### The Nation's Report Card 2009 Trial Urban District Assessment

Percentage of eighth-grade public school students, average scale score, and percentage at or above achievement levels in NAEP science, by highest parental education level, year, and jurisdiction: 2009

	al education level,	Percentage	Average scale	Below	At or above	At or above	At
year, and jurise		of students	score	Basic	Basic	Proficient	Advanced
Did not finish h	nigh school						
2009	Nation (public)	8	131	59	41	11	#
	Large city (public)	13*	123	68	32	8	#
	Miami-Dade	7	129	59	41	12	#
<b>Graduated fron</b>	n high school						
2009	Nation (public)	17	139*	50*	50*	17*	#
	Large city (public)	17	126	66	34	10	#
	Miami-Dade	18	128	63	37	11	#
Some education	n after high school						
2009	Nation (public)	17	151*	34*	66*	29*	1
	Large city (public)	16	138*	50*	50*	16	#
	Miami-Dade	16	145	42	58	21	#
Graduated from	n college						
2009	Nation (public)	47	160*	26*	74*	41*	3*
	Large city (public)	36*	145	43	57	28*	2
	Miami-Dade	46	144	44	56	22	1
Unknown							
2009	Nation (public)	11*	129*	61	39	12	#
	Large city (public)	18*	121	70	30	8	#
	Miami-Dade	13	124	69	31	9	#

<sup>#</sup> Rounds to zero.

NOTE: The NAEP grade 8 science scale ranges from 0 to 300. Achievement levels correspond to the following points on the NAEP science scales: below *Basic*, 140 or lower; *Basic*, 141–169; *Proficient*, 170–214; and *Advanced*, 215 and above. At or above *Basic* includes *Basic*, *Proficient*, and *Advanced*. At or above *Proficient* includes *Proficient* and *Advanced*. Detail may not sum to totals because of rounding. All differences were calculated and tested using unrounded numbers.

 $<sup>^{\</sup>star}$  Value is significantly different (p < .05) from the value for the same group in Miami-Dade.

# A More Inclusive NAEP: Students With Disabilities and English Language Learners

To ensure that the samples are representative, NAEP has established policies and procedures to maximize the inclusion of all students in the assessment. Every effort is made to ensure that all selected students who are capable of participating meaningfully in the assessment are assessed. While some students with disabilities (SD) and/or English language learners (ELL) can be assessed without any special procedures, others require accommodations to participate in NAEP. Still other SD and/or ELL students selected by NAEP may not be able to participate. Local school staff who are familiar with these students are asked a series of questions to help them decide whether each student should participate in the assessment and whether the student needs accommodations.

Within any assessment year, exclusion and accommodation rates may vary across jurisdictions. Since SD and/or ELL students tend to score below average on assessments, the exclusion of students from these groups may result in a higher average score than if those students had taken the assessment. On the other hand, providing appropriate testing accommodations (e.g., providing extended time for some SD and/or ELL students to take the assessment) removes barriers that would otherwise prevent them from demonstrating their knowledge and skills.

Tables 7-A and 7-B display data for 4th and 8th grade students in Miami-Dade, the nation, and large cities who were identified as SD and/or ELL, by whether they were excluded, assessed with accommodations, or assessed without accommodations, as a percent of all 4th or 8th grade students in the district/jurisdiction.

Tables 8-A and 8-B show the percentages of students assessed in Miami-Dade, the nation, and large cities by disability status and their performance on the NAEP assessment in terms of average scores and percentages performing below *Basic*, at or above *Basic*, at or above *Proficient*, and at *Advanced* for grades 4 and 8.

Tables 9-A and 9-B present the percentages of students assessed in Miami-Dade, the nation, and large cities by ELL status, their average scores, and their performance in terms of the percentages below *Basic*, the percentages at or above *Basic*, at or above *Proficient*, and at *Advanced* for grades 4 and 8.

Tables 10-A and 10-B present the total number of grades 4 and 8 students assessed in each of the participating districts and the weighted percentage of students sampled who were excluded.

Table 7-A

#### The Nation's Report Card 2009 Trial Urban District Assessment

Percentage of fourth-grade public school students identified as students with disabilities (SD) and/or English language learners (ELL) excluded and assessed in NAEP science, by assessment year: 2009

		SD and/or ELL		SD			ELL			
Year and testing s	status	Miami- Dade	Nation (public)	Large city (public)	Miami-			Miami-	Nation (public)	Large city (public)
2009	Identified	21	23	31	13	13	13	9	10	21
	Excluded	3	2	3	2	2	2	2	1	1
Assessed wit	thout accommodations	2	9	14	1	3	2	1	6	12
Assessed	with accommodations	16	12	14	10	9	9	7	4	7

NOTE: Students identified as both SD and ELL were counted only once under the combined SD and/or ELL category, but were counted separately under the SD and ELL categories. Detail may not sum to totals because of rounding.

Table 7-B

#### The Nation's Report Card 2009 Trial Urban District Assessment

Percentage of eighth-grade public school students identified as students with disabilities (SD) and/or English language learners (ELL) excluded and assessed in NAEP science, by assessment year: 2009

		SD and/or ELL		SD			ELL			
Year and testing sta	itus	Miami- Dade		Large city (public)	Miami-	Nation (public)		Miami-	Nation (public)	Large city (public)
2009	Identified	20	18	23	12	13	13	8	6	12
	Excluded	3	2	3	2	2	2	1	1	1
Assessed witho	ut accommodations	1	5	9	#	2	2	#	3	7
Assessed wi	th accommodations	16	10	11	10	9	9	7	2	4

<sup>#</sup> Rounds to zero.

NOTE: Students identified as both SD and ELL were counted only once under the combined SD and/or ELL category, but were counted separately under the SD and ELL categories. Detail may not sum to totals because of rounding.

# Table 8-A

#### The Nation's Report Card 2009 Trial Urban District Assessment

Percentage of fourth-grade public school students, average scale score, and percentage at or above achievement levels in NAEP science, by students with disabilities (SD) status, year, and jurisdiction: 2009

		Percentage	Average scale	Below	At or above	At or above	At
SD status, ye	ear, and jurisdiction	of students	score	Basic	Basic	Proficient	Advanced
SD							
2009	Nation (public)	12	129*	50*	50*	16*	#
	Large city (public)	12	112	67	33	9	#
	Miami-Dade	12	118	64	36	6	#
Not SD							
2009	Nation (public)	88	151 *	26	74	35*	1
	Large city (public)	88	138*	41 *	59*	21 *	#
	Miami-Dade	88	147	30	70	27	#

<sup>#</sup> Rounds to zero.

NOTE: The NAEP grade 4 science scale ranges from 0 to 300. Achievement levels correspond to the following points on the NAEP science scales: below *Basic*, 130 or lower; *Basic*, 131–166; *Proficient*, 167–223; and *Advanced*, 224 and above. At or above *Basic* includes *Basic*, *Proficient*, and *Advanced*. At or above *Proficient* includes *Proficient* and *Advanced*. Performance comparisons may be affected by differences in exclusion rates for students with disabilities in the NAEP samples and by differences in sample sizes. Detail may not sum to totals because of rounding. All differences were calculated and tested using unrounded numbers.

<sup>\*</sup> Value is significantly different (p < .05) from the value for the same group in Miami-Dade.

Table 8-B

#### The Nation's Report Card 2009 Trial Urban District Assessment

Percentage of eighth-grade public school students, average scale score, and percentage at or above achievement levels in NAEP science, by students with disabilities (SD) status, year, and jurisdiction: 2009

SD status, yea	ar, and jurisdiction	Percentage of students	Average scale score	Below Basic	At or above <i>Basic</i>	At or above Proficient	At Advanced
SD							
2009	Nation (public)	11	122*	67*	33*	11*	#
	Large city (public)	11	103*	83	17	4	#
	Miami-Dade	11	112	83	17	3	#
Not SD							
2009	Nation (public)	89	152*	34*	66*	31*	2*
	Large city (public)	89	138*	52*	48*	18	1
	Miami-Dade	89	141	47	53	19	1

<sup>#</sup> Rounds to zero.

NOTE: The NAEP grade 8 science scale ranges from 0 to 300. Achievement levels correspond to the following points on the NAEP science scales: below *Basic*, 140 or lower; *Basic*, 141–169; *Proficient*, 170–214; and *Advanced*, 215 and above. At or above *Basic* includes *Basic*, *Proficient*, and *Advanced*. At or above *Proficient* includes *Proficient* and *Advanced*. Performance comparisons may be affected by differences in exclusion rates for students with disabilities in the NAEP samples and by differences in sample sizes. Detail may not sum to totals because of rounding. All differences were calculated and tested using unrounded numbers.

<sup>\*</sup> Value is significantly different (p < .05) from the value for the same group in Miami-Dade.

# Table 9-A

#### The Nation's Report Card 2009 Trial Urban District Assessment

Percentage of fourth-grade public school students, average scale score, and percentage at or above achievement levels in NAEP science, by English language learner (ELL) status, year, and jurisdiction: 2009

FII status v	ear, and jurisdiction	Percentage of students	Average scale score	Below Basic	At or above <i>Basic</i>	At or above Proficient	At Advanced
ELL	car, and juriculous	Or ottadorito	300.0	Duoio	Daoio	Tronoione	Havanoca
2009	Nation (public)	10*	114	67	33	5	#
	Large city (public)	20*	111	71	29	4	#
	Miami-Dade	8	113	68	32	4	#
Not ELL							
2009	Nation (public)	90*	153*	25*	75 <i>*</i>	35 *	1
	Large city (public)	80*	141*	38*	62*	24	#
	Miami-Dade	92	146	31	69	26	#

<sup>#</sup> Rounds to zero.

NOTE: The NAEP grade 4 science scale ranges from 0 to 300. Achievement levels correspond to the following points on the NAEP science scales: below *Basic*, 130 or lower; *Basic*, 131–166; *Proficient*, 167–223; and *Advanced*, 224 and above. At or above *Basic* includes *Basic*, *Proficient*, and *Advanced*. At or above *Proficient* includes *Proficient* and *Advanced*. Performance comparisons may be affected by differences in exclusion rates for English language learners in the NAEP samples and by differences in sample sizes. Detail may not sum to totals because of rounding. All differences were calculated and tested using unrounded numbers.

<sup>\*</sup> Value is significantly different (p < .05) from the value for the same group in Miami-Dade.

Table 9-B

#### The Nation's Report Card 2009 Trial Urban District Assessment

Percentage of eighth-grade public school students, average scale score, and percentage at or above achievement levels in NAEP science, by English language learner (ELL) status, year, and jurisdiction: 2009

ELL status, ye	ear, and jurisdiction	Percentage of students	Average scale score	Below Basic	At or above <i>Basic</i>	At or above Proficient	At Advanced
ELL							
2009	Nation (public)	5*	103*	86	14	2	#
	Large city (public)	11*	97	90	10	1	#
	Miami-Dade	7	92	92	8	1	#
Not ELL							
2009	Nation (public)	95*	151*	35 *	65 *	31*	1*
	Large city (public)	89*	138	52	48	19	1
	Miami-Dade	93	141	48	52	19	1

<sup>#</sup> Rounds to zero.

NOTE: The NAEP grade 8 science scale ranges from 0 to 300. Achievement levels correspond to the following points on the NAEP science scales: below *Basic*, 140 or lower; *Basic*, 141–169; *Proficient*, 170–214; and *Advanced*, 215 and above. At or above *Basic* includes *Basic*, *Proficient*, and *Advanced*. At or above *Proficient* includes *Proficient* and *Advanced*. Performance comparisons may be affected by differences in exclusion rates for English language learners in the NAEP samples and by differences in sample sizes. Detail may not sum to totals because of rounding. All differences were calculated and tested using unrounded numbers.

<sup>\*</sup> Value is significantly different (p < .05) from the value for the same group in Miami-Dade.



#### The Nation's Report Card 2009 Trial Urban District Assessment

Number of fourth-grade public school students assessed in NAEP science and weighted percentage excluded, by jurisdiction: 2009

Jurisdiction	Number assessed	Weighted percentage excluded
Nation (public)	151,500	2
Large city (public)	34,500	3
Atlanta	1,200	1
Austin	1,500	5
Baltimore City	1,200	3
Boston	1,100	5
Charlotte	1,600	2
Chicago	1,900	3
Cleveland	900	9
Detroit	900	2
Fresno	1,400	3
Houston	2,200	3
Jefferson County (KY)	1,400	3
Los Angeles	2,100	2
Miami-Dade	2,200	3
Milwaukee	1,300	6
New York City	2,200	2
Philadelphia	1,300	3
San Diego	1,300	3

NOTE: The number of students assessed is rounded to the nearest hundred.

# Table 10-B

#### The Nation's Report Card 2009 Trial Urban District Assessment

Number of eighth-grade public school students assessed in NAEP science and weighted percentage excluded, by jurisdiction: 2009

Jurisdiction	Number assessed	Weighted percentage excluded
Nation (public)	146,300	2
Large city (public)	31,600	3
Atlanta	900	1
Austin	1,400	5
Baltimore City	900	3
Boston	1,100	7
Charlotte	1,400	3
Chicago	1,900	3
Cleveland	900	9
Detroit	1,000	4
Fresno	1,300	2
Houston	2,000	4
Jefferson County (KY)	1,400	3
Los Angeles	2,000	2
Miami-Dade	2,000	3
Milwaukee	1,000	5
New York City	2,100	2
Philadelphia	1,200	3
San Diego	1,000	3

NOTE: The number of students assessed is rounded to the nearest hundred.

## Where to Find More Information

#### The NAEP Science Assessment

The latest news about the NAEP 2009 science assessment and the results can be found on the NAEP website at <a href="http://nces.ed.gov/nationsreportcard/science/results/">http://nces.ed.gov/nationsreportcard/science/results/</a>. The individual snapshot reports for each participating district are also available on the website at <a href="http://nces.ed.gov/nationsreportcard/tuda">http://nces.ed.gov/nationsreportcard/tuda</a> science 2009/.

The Nation's Report Card: Trial Urban District Assessment Science 2009 may be ordered or downloaded at the NAEP website.

The Science Framework for the 2009 National Assessment of Educational Progress, on which this assessment is based, is available at the National Assessment Governing Board website at <a href="http://www.nagb.org/publications/frameworks/science-09.pdf">http://www.nagb.org/publications/frameworks/science-09.pdf</a>.

#### The NAEP Data Explorer (NDE)

The interactive database at <a href="http://nces.ed.gov/nationsreportcard/naepdata/">http://nces.ed.gov/nationsreportcard/naepdata/</a> includes student, teacher, and school variables for all participating districts, the nation, and public schools in large cities. Data tables are also available for districts, with all contextual questions cross-tabulated with the major demographic variables. Users can design and create tables and can perform tests of statistical significance at this website.

#### **Technical Documentation on the Web (TDW)**

Technical documentation section of the NAEP website <a href="http://nces.ed.gov/nationsreportcard/tdw/">http://nces.ed.gov/nationsreportcard/tdw/</a> contains information about the technical procedures and methods of NAEP. The TDW site is organized by topic (from Item Development through Analysis and Scaling) with subtopics, including information specific to a particular assessment. The content is written for researchers and assumes knowledge of educational measurement and testing.

#### Publications on the inclusion of students with disabilities and English language learners

References for a variety of research publications related to the assessment of students with special needs may be found at <a href="http://nces.ed.gov/nationsreportcard/about/inclusion.asp#research">http://nces.ed.gov/nationsreportcard/about/inclusion.asp#research</a>.

#### To order publications

Recent NAEP publications related to science are listed on the science page of the NAEP website and are available electronically. Publications can also be ordered from

Education Publications Center (ED Pubs) U.S. Department of Education P.O. Box 22207 Alexandria, VA 22304

Call toll free: 1-877-4ED-Pubs (1-877-433-7827)

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Order online at: http://www.edpubs.gov.

The NAEP District Report Generator was developed for the NAEP 2009 reports by Phillip Leung, Bobby Rampey, Rebecca Moran, Shu-Kang Chen, Rick Hasney, and Ming Kuang.

## What is the Nation's Report Card™?

The Nation's Report Card™ informs the public about the academic achievement of elementary and secondary students in the United States. Report cards communicate the findings of the National Assessment of Educational Progress (NAEP), a continuing and nationally representative measure of achievement in various subjects over

Since 1969, NAEP assessments have been conducted periodically in reading, mathematics, science, writing, U.S. history, civics, geography, and other subjects. NAEP collects and reports information on student performance at the national, state, and local levels, making the assessment an integral part of our nation's evaluation of the condition and progress of education. Only academic achievement data and related background information are collected. The privacy of individual students and their families is protected.

NAEP is a congressionally authorized project of the National Center for Education Statistics (NCES) within the Institute of Education Sciences of the U.S. Department of Education. The Commissioner of Education Statistics is responsible for carrying out the NAEP project. The National Assessment Governing Board oversees and sets policy for NAEP.

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