National Assessment of Educational Progress 2007 Grade 8 Mathematics Report for Florida

This report provides selected results from Florida's National Assessment of Educational Progress for public school students at Grade 8 in mathematics. Beginning in 1990, mathematics has been assessed in six different years at the state level: 1990, 1992, 1996, 2003, 2005, and 2007. Mathematics results are reported by average scale scores (on a 0–500 point scale) and, using that point scale, by achievement levels (*Basic*, *Proficient*, and *Advanced*).

In 2007, 52 jurisdictions participated in the assessment: the 50 states, the District of Columbia, and the Department of Defense Schools.

NAEP is a project of the National Center for Education Statistics (NCES). For additional information about the assessment, see The Nation's Report Card, an interactive database at http://nces.ed.gov/nationsreportcard/. Released test questions, scoring guides, and question-level performance data, as well as national and state results, are available on the Web site.

HIGHLIGHTS OF GRADE 8 MATHEMATICS

- Florida's Grade 8 students had a significant increase of 6 points in mathematics between 2003 and 2007—from 271 to 277.
- Florida's Grade 8 students improved by 22 points in mathematics between 1990 and 2007—from 255 to 277. This was also a significant improvement.
- Between 1990 and 2007, the average scale score of White students increased by 24 points, African American students increased by 28 points, and Hispanic students 24 points. All of these gains are significant.
- Florida's Grade 8 African American students significantly improved their average scale scores by 10 points between 2003 and 2007.
- Florida is one of only seven states to narrow the White/African American achievement gap between 2003 and 2007.
- Since 2003, the mathematics scores of Florida's Grade 8 students with disabilities have risen significantly. In 2007, the average scale score rose to 246, up from 235 in 2003.
- Since 2003, low-income Grade 8 students' mathematics average scale scores have risen significantly. In 2007, the average score rose to 265, up from 256 in 2003.

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NAEP GENERAL INFORMATION

What is NAEP?

- The National Assessment of Educational Progress (NAEP) was authorized by Congress and implemented in 1969.
- NAEP (or the Nation's Report Card) is the only ongoing nationally representative measure of what students in the United States know and can do in various subject areas.
- NAEP is administered by the National Center for Education Statistics (NCES) within the U.S. Department of Education's Institute of Education Sciences (IES).
- In 1988, Congress established the 26-member National Assessment Governing Board (NAGB) to oversee and set policy for NAEP.
- NAGB establishes the frameworks on which NAEP is based.
- NAEP at the state level began in 1990. In 2003, NAEP participation became mandatory for all states and territories under the federal No Child Left Behind Act of 2001 (NCLB).
- Each student in a selected sample takes only a portion of the assessment (approximately 10 percent). Results are then assembled to form projected state and national scores.
- Reports are produced on the performance of groups of students at a given time and across time.
- NAEP reports scores in two different ways: by average scale scores and by achievement levels.
- Results are used to compile national and state data. No results are generated for schools or individual students.
- NAEP serves as an assessment of overall national and state achievement, not as a diagnostic test for individual students.

What are the benefits of NAEP?

- NAEP provides an opportunity for Florida to compare the achievement of its students to that of students across the nation.
- NAEP provides student performance data broken down by subgroups, such as the racial/ethnic groups of White, African American, and Hispanic. This allows policy makers to examine grade-level student achievement across states at the subgroup level.
- NAEP data provides states with an external "check" on state assessment data.

Who participates in NAEP?

- A stratified random sample of Grade 4 and 8 students is assessed at the state and national levels. A stratified random sample of Grade 12 students is assessed at the national level.
- Samples are drawn and weighted to represent public schools in states and 10 urban districts.* Charter schools are included in the public school results.
- Both public school and nonpublic school students are assessed at the national level.
- Fifty-two jurisdictions participate in NAEP—the 50 states, the District of Columbia, and the Department of Defense Schools.
- Accommodations are offered to English language learners (ELLs), students with 504 plans, and students with disabilities (SD) who have Individual Education Plans (IEPs). The most typical accommodations include:
    - extended testing time,
    - individual or small-group administrations, and
    - large-print booklets.

What does NAEP measure?

- The NAEP subject assessments are based on frameworks that provide the theoretical basis for the assessment and specific direction for what kinds of knowledge and skills should be assessed, how the exercises should be designed and administered, and how student responses should be scored. Frameworks are available at the NAGB Web site (www.nagb.org/) under "Frameworks."
- State NAEP measures and reports the knowledge of Grade 4 and 8 students in four subject areas:
    - mathematics,
    - reading,
    - science, and
    - writing.

*Results are presently available for 10 districts classified as Trial Urban Districts. The districts are: Atlanta, Austin, Boston, Charlotte-Mecklenburg, Chicago, Cleveland, Houston, Los Angeles, New York City, and San Diego.

NAEP MATHEMATICS ASSESSMENT INFORMATION

Who is assessed?

- The NAEP 2007 mathematics assessment was administered to a stratified random sample of students from Grades 4, 8, and 12 at the national level and Grades 4 and 8 at the state level.
- Both public school and nonpublic school students were assessed at the national level.
- At the state level, only the results of public school students are reported.
- Fifty-two jurisdictions participated—the 50 states, the District of Columbia, and the Department of Defense Schools.

What years have mathematics assessments been administered?

- National and State samples:
  - Grade 4 in 1992, 1996, 2003, 2005, and 2007; and
  - Grade 8 in 1990, 1992, 1996, 2003, 2005, and 2007.

What is assessed?

- The NAEP mathematics framework specifies what is to be assessed and how it is to be assessed. The framework can be accessed at www.nagb.org/frameworks/math_07.doc
- The NAEP mathematics framework
  - specifies five broad areas of content:
    1. Number Properties and Operations,
    2. Measurement,
    3. Geometry,
    4. Data Analysis and Probability, and
    5. Algebra.
  - specifies three levels of mathematical complexity (attempts to focus on the cognitive demands of the assessment question):
    1. Low complexity – questions typically specify what a student is to do, which is often to carry out a routine mathematical procedure.
    2. Moderate complexity – questions involve more flexibility of thinking and often require a response with multiple steps.
    3. High complexity – questions make heavier demands and often require abstract reasoning or analysis in a novel situation.

How is NAEP mathematics assessed?

- Students are given assessment booklets containing three types of items: multiple-choice, short constructed-response, and extended constructed-response.
- Approximately half of a student's testing time will be allotted to multiple-choice items, with the remaining half devoted to constructed-response items of both types.
- The assessment uses manipulative materials, where possible, in measuring a student's ability to represent his or her understandings and to use tools to solve problems (e.g., rulers, protractors).
- Calculators:
  - Students are allowed to use calculators on approximately one-third of the assessment.
  - The assessment contains blocks of questions for which calculators are not allowed and blocks of questions that require calculators.
    - Grade 4 students use a four-function calculator supplied by NAEP.
    - Grade 8 students use a scientific calculator supplied by NAEP.

How is NAEP mathematics administered?

- Each student responded to two separately timed blocks of items, each 25-minutes in length.
- Accommodations are offered to English language learners (ELLs), students with 504 plans, and students with disabilities (SD) who have Individual Education Plans (IEPs). The most typical accommodations include:
  - extra testing time,
  - individual or small-group administration, and
  - large-print booklet.

What is the distribution of items on the mathematics assessment?

The distribution of items among each content area differs by grade level to reflect the knowledge and skills appropriate for each grade level.

Item Distribution

Content Area	Grade 4	Grade 8
Number properties and operations	40%	20%
Measurement	20%	15%
Geometry	15%	20%
Data analysis and probability	10%	15%
Algebra	15%	30%
	100%	100%

How are NAEP mathematics scores reported?

- Results are used to compile national and state data. No results are generated for schools or individual students.
- National results reflect the performance of all Grade 4 and 8 students in public schools, private schools, Bureau of Indian Education (BIE) schools, and Department of Defense schools.
- State results reflect the performance of students in public schools only.
- NAEP reports scores in two different ways: average scale scores and achievement levels. Both scores are based on the performance of samples of students, not the entire population.
- Average scale scores indicate how much a student *knows and can do* based on a 0–500 scale. The scores are reported as:
    - Average scale scores (range from 0–500), and
    - Percentiles (10^{th}, 25^{th}, 50^{th}, 75^{th}, and 90^{th}).
- Achievement levels offer a means of identifying percentages of students who have demonstrated certain proficiencies.
    - Achievement levels are performance standards based on scale scores and show what students *should know and be able to do*.
    - The achievement levels set by the National Assessment Governing Board (NAGB) are
        - *Advanced*,
        - *Proficient*, and
        - *Basic*.
    - Below *Basic* is reported, but is not considered to be an achievement level.
    - Achievement levels identify percentages of students who have demonstrated certain mathematics proficiencies.
    - Achievement level descriptors for Grade 8 mathematics can be found at http://nces.ed.gov/nationsreportcard/mathematics/achieveall.asp#grade8.

How are NAEP mathematics scores interpreted?

- Differences between average scale scores or between achievement level percentages are discussed in this report only when they are statistically significant. Statistically significant means we are assured that the differences in scores could not have occurred by chance variations. These differences are referred to as “significant differences” or as being “significantly different.”
- NAEP assesses a representative sample of students in each state. The number of students tested in a state determines the standard error for that particular state. Because of sample design, performance standard error must be considered in reporting NAEP results. Statistical tests that

factor in the standard errors are used to determine whether the differences are significant at the 0.05 level.

- Estimates based on smaller groups are likely to have relatively large standard errors. In these cases, some seemingly large differences may not be statistically significant. However, NAEP sample sizes have continually increased since 2002, resulting in a smaller standard error. Consequently, smaller differences can be detected as statistically significant.

- Data for results discussed in this report and other results can be found at the NAEP Data Explorer Web site at http://nces.ed.gov/nationsreportcard/nde.

GRADE 8 MATHEMATICS INTRODUCTION

This report provides selected results from the National Assessment of Educational Progress (NAEP) for Florida's and the nation's public school students at Grade 4 in mathematics. Beginning in 1992, mathematics has been assessed five times at the state level: in 1992, 1996, 2003, 2005, and 2007.

The results of student performance on the NAEP 2007 assessment are reported for various groups of students: race/ethnicity, free/reduced-price lunch, students with disabilities (SD), English language learners (ELLs), and gender. Mathematics performance results for groups of students are reported in two ways: as average scale scores and as percentages of students performing at various achievement levels.

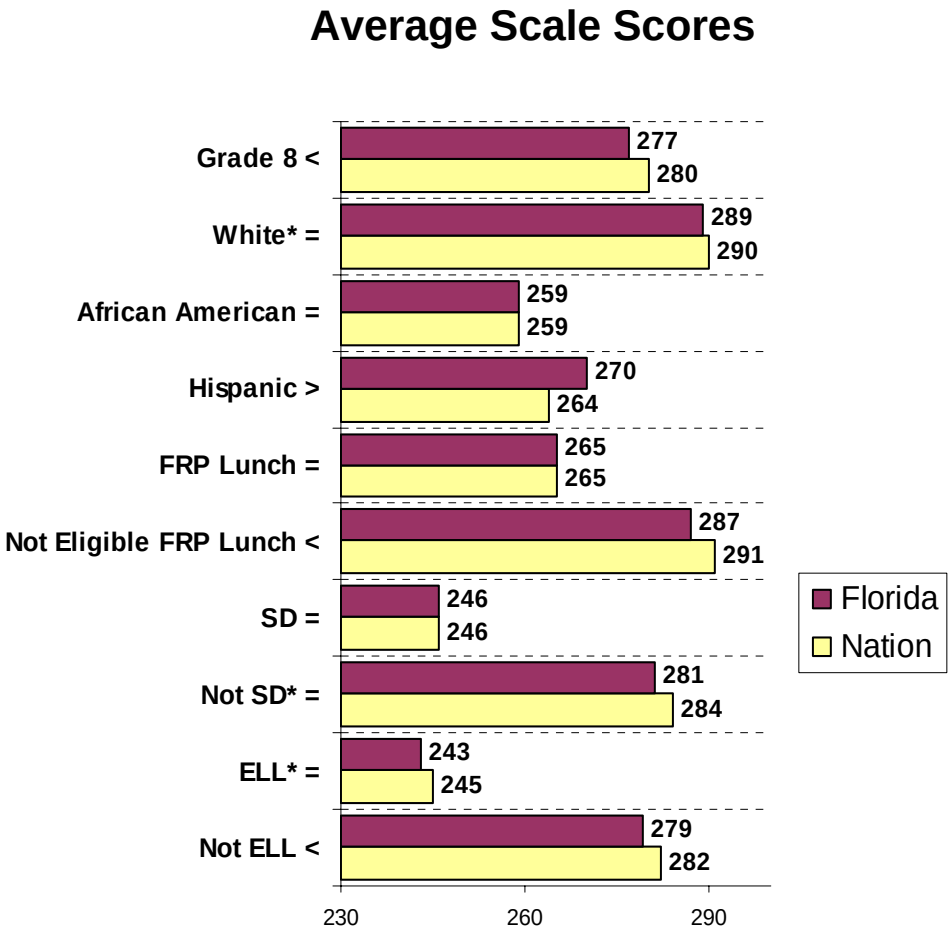
Scale Scores
NAEP mathematics results are reported on a 0–500 scale. Because NAEP scales are developed independently for each subject, average scores cannot be compared across subjects even when the scale has the same range. In addition to reporting an overall mathematics score for each grade, scores are reported at five percentiles (10^{th}, 25^{th}, 50^{th}, 75^{th}, and 90^{th}) to show trends in performance for lower-, middle-, and higher-performing students.

Achievement Levels
Achievement levels are performance standards defining what students should know and be able to do. NAEP results are reported as percentages of students performing at or above the *Basic* and *Proficient* levels and at the *Advanced* level. Below *Basic* is reported, but is not considered to be an achievement level.

- *Basic* denotes partial mastery of prerequisite knowledge and skills that are fundamental for proficient work at a given grade.
- *Proficient* represents solid academic performance. Students reaching this level have demonstrated competency over challenging subject matter.
- *Advanced* represents superior performance.

The difference between *Proficient* and "proficiency" is that *Proficient* is a defined level of performance, such as *Advanced* or *Basic*, and proficiency is something we measure. *Proficient* is a description or label and proficiency is something we are trying to measure.

Figure 1
Florida and the Nation—Average Scale Scores
Grade 8 Mathematics
Demographic Groups



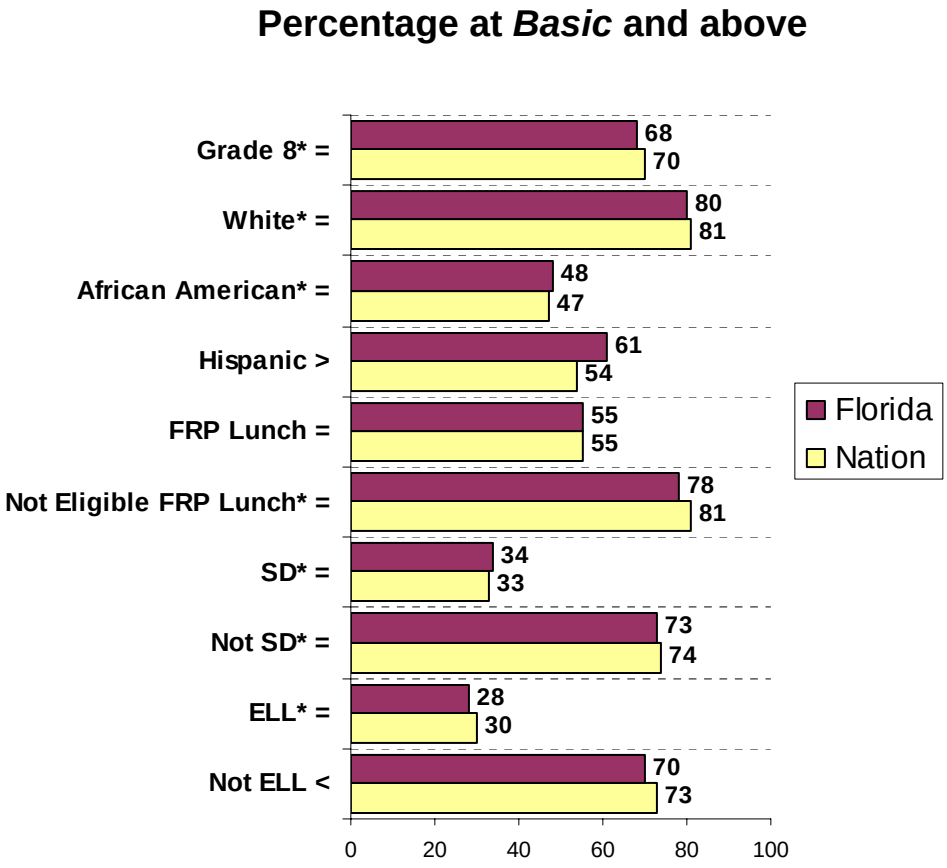
In 2007, Florida's Hispanic students' average scale scores in mathematics were higher than those of their national counterparts.

Average scale scores for Florida's racial/ethnic groups of White and African American students, students eligible for free/reduced-price lunch, students with disabilities (SD), students not SD, and English language learners (ELLs) were statistically equal to those of their national counterparts.

Florida's Grade 8 students, students not eligible for free/reduced-price lunch, and students not ELL had average scale scores that were significantly lower than those of their national counterparts.

*Comparisons are based on statistical tests (0.05 level) that consider sample size, magnitude of difference, and standard errors. Scores are not significantly different.

Figure 2
Florida and the Nation—Achievement-Level Scores
Grade 8 Mathematics
Demographic Groups



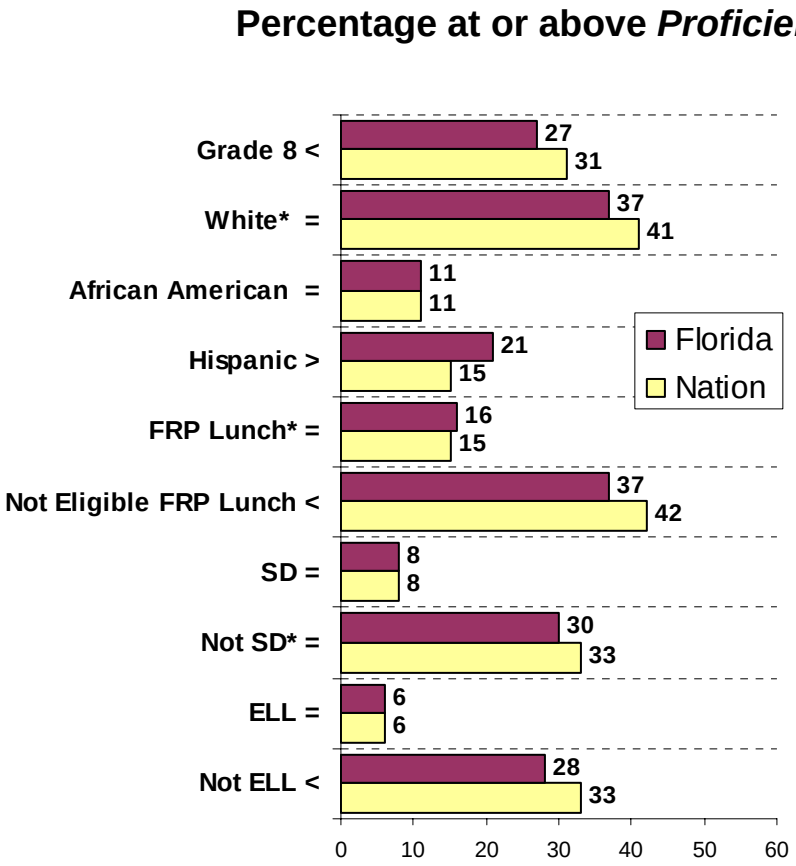
In 2007, Florida's Hispanic Grade 8 students scored higher than their national counterparts.

In 2007, the percentage of Florida's Grade 8 students scoring at or above *Basic* was statistically equal to that of their national counterparts. This was also true of the racial/ethnic groups of White and African American students, students eligible for free/reduced-price lunch, students not eligible for free/reduced-price lunch, students with disabilities (SD), students not SD, and English language learners (ELLs).

Students not ELL scored lower than their national counterparts.

*Scores are not significantly different based on statistical tests (0.05 level) that consider sample size, magnitude of difference, and standard errors.

Figure 3
Florida and the Nation—Achievement-Level Scores
Grade 8 Mathematics
Demographic Groups



In 2007, the percentage of Hispanic Grade 8 students scoring at or above *Proficient* was significantly higher than that of their national counterparts.

The percentage of the racial/ethnic groups of White and African American students, students eligible for free/reduced-price lunch, students with disabilities (SD), students without disabilities, and English language learners (ELLs) scoring at or above *Proficient* was statistically equal to the percentage of their national counterparts.

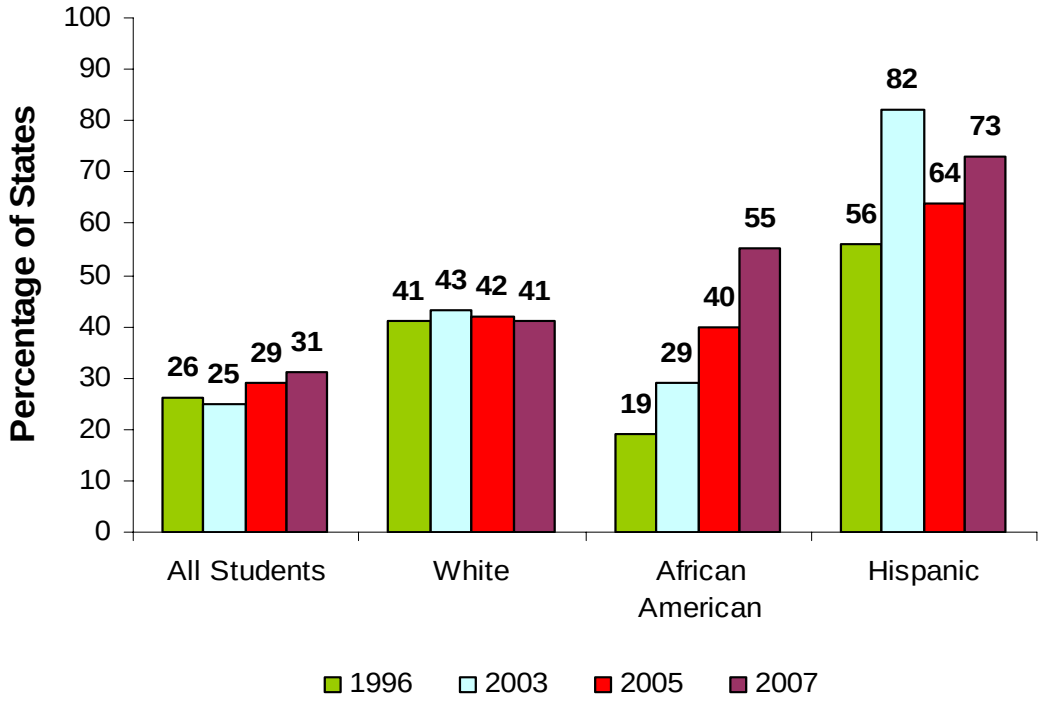
In 2007, the percentage of Florida's Grade 8 students scoring at *Proficient* and above was lower than that of their national counterparts. The same is true of students not eligible for free/reduced-price lunch and students not ELL.*

*Scores are not significantly different based on statistical tests (0.05 level) that consider sample size, magnitude of difference, and standard errors.

RACE/ETHNICITY
Grade 8 Mathematics

Schools report the racial/ethnic subgroups that best describe the students eligible to be assessed. The six mutually-exclusive categories are White, African American, Hispanic, Asian/Pacific Islander, American Indian/Alaskan Native, and Unclassified. Florida has reportable populations in the White, African American, and Hispanic racial/ethnic groups.

Average Scale Scores
Figure 4
Percentage of States and Jurisdictions Florida Outperformed By *Race/Ethnicity* Based on Average Scale Scores 1996–2007



In 2007, Florida's White students scored higher than 41 percent of the other 50 states and jurisdictions with reportable White student populations.

In 2007, Florida's African American students scored higher than 55 percent of the other 41 states and jurisdictions with reportable African American student populations.

In 2007, Florida's Hispanic students scored higher than 73 percent of the other 43 states and jurisdictions with reportable Hispanic student populations.

Figure 5
Number of States and Jurisdictions Florida Outperformed

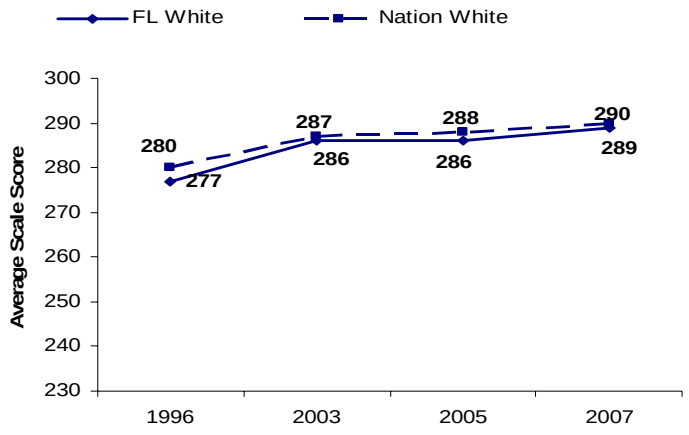
	1996	2003	2005	2007	Percentage Increase in Number of States Florida Outperformed Between 1996 and 2007
White	16	21	21	20	20%
African American	5	11	16	40	88%
Hispanic	9	30	24	31	71%
All	10	12	14	15	33%

Figure 6
Number of States and Jurisdictions with Reportable* Populations†

	1996	2007	Percentage Increase in Number of States and Jurisdictions with Reportable Populations Between 1996 and 2007
White	41	51	20%
African American	33	42	21%
Hispanic	18	44	59%
All	42	52	19%

*Sufficient size
†including Florida

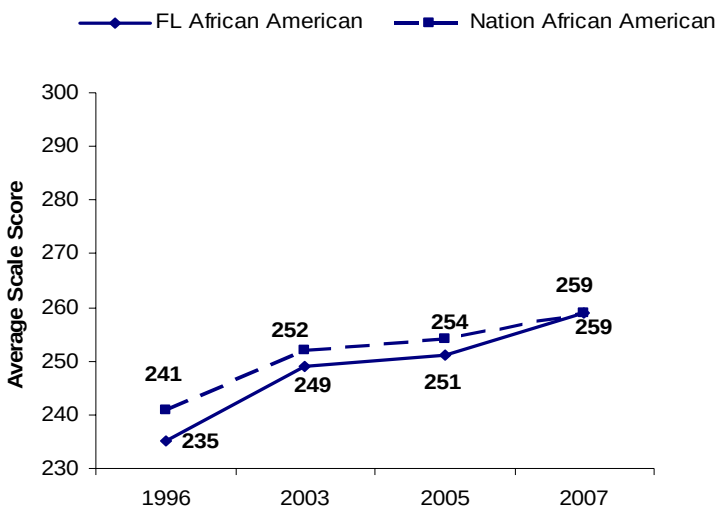
Figure 7
Florida and the Nation 1996–2007
White Students



● Florida's White students' average scale score improvement between 1996 and 2007 was equal to that of the nation's White students.

● Gains for Florida between 1996 and 2007 were 277 to 289 (12-point gain); gains for the nation were 280 to 290 (10-point gain).

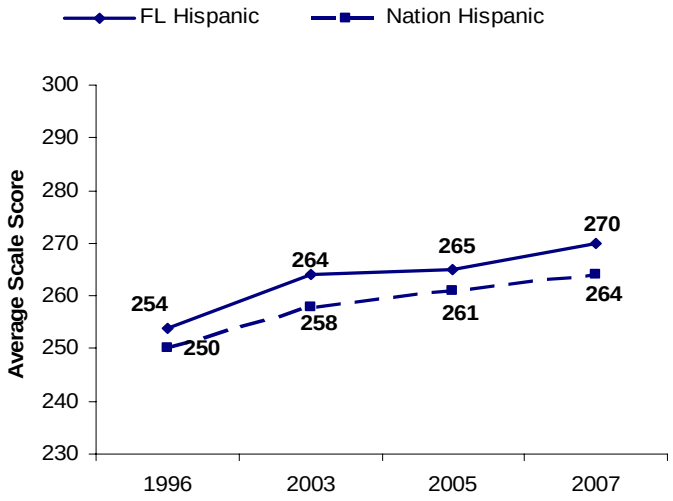
Figure 8
Florida and the Nation 1996–2007
African American Students



● Florida's African American students' average scale score improvement between 1996 and 2007 was greater than that of the nation's African American students.

● Gains for Florida between 1996 and 2007 were 235 to 259 (24-point gain); gains for the nation were 241 to 259 (18-point gain).

Figure 9
Florida and the Nation 1996–2007
Hispanic Students

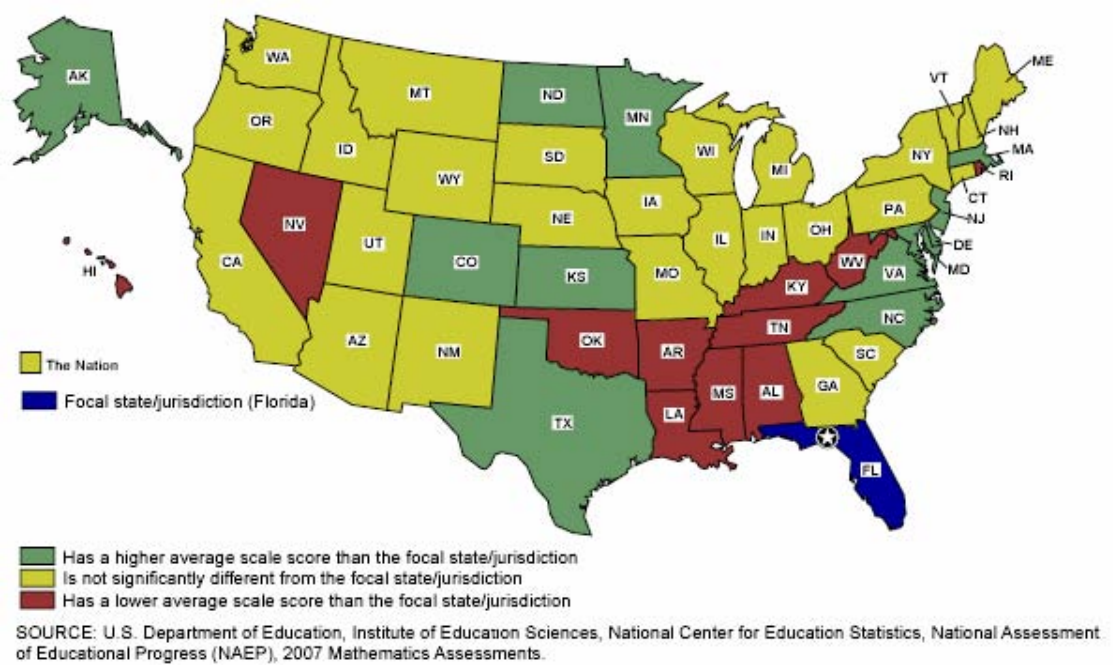


● Florida's average scale score improvement between 1996 and 2007 for Hispanic students was greater than that of the nation's Hispanic students.

● Gains for Florida between 1996 and 2007 were 254 to 270 (16-point gain); gains for the nation were 250 to 264 (14-point gain).

Summary of Figures 7, 8, and 9
In 2007, the average scale scores of Florida's Grade 8 Hispanic students were significantly greater than those of their national counterparts. The average scale scores of White and African American students were statistically equal to those of their national counterparts.

Figure 10
Florida's National Standing in 2007
Average Scale Scores
White Students



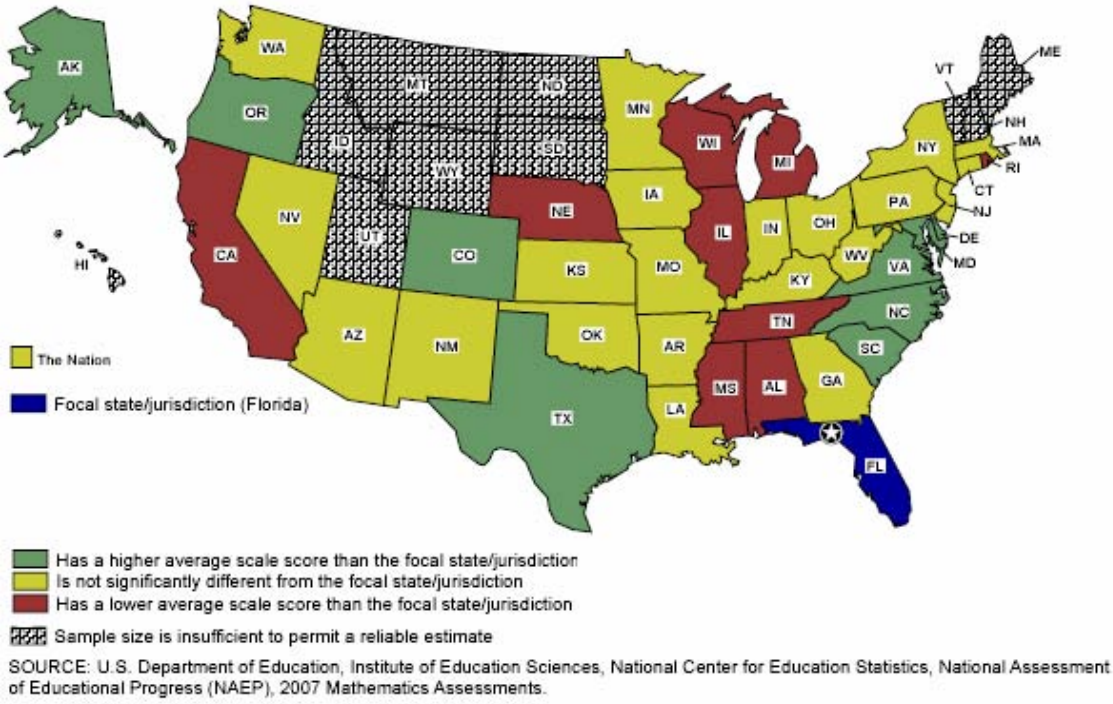
SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 2007 Mathematics Assessments.

In 2007, Florida's Grade 8 mathematics average scale score for White students (289) was

- **higher than the following 11 states:**
  Rhode Island, Louisiana, Kentucky, Tennessee, Arkansas, Nevada, Oklahoma, Mississippi, Alabama, Hawaii, and West Virginia.*
- **not significantly different from the nation and the following 26 states:**
  Pennsylvania, Connecticut, South Carolina, Vermont, South Dakota, Wisconsin, Montana, Washington, Nebraska, Ohio, Illinois, Wyoming, Indiana, New York, New Hampshire, Arizona, Oregon, *Florida,* Iowa, Missouri, Georgia, Maine, Idaho, California, Utah, Michigan, and New Mexico.*
- **lower than the following 12 states:**
  Massachusetts, Maryland, Texas, New Jersey, Minnesota, Colorado, Virginia, North Dakota, Kansas, North Carolina, Delaware, and Alaska.*

*Within each group, states are listed from highest to lowest performance.

Figure 11
Florida's National Standing in 2007
Average Scale Scores
African American Students



SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 2007 Mathematics Assessments.

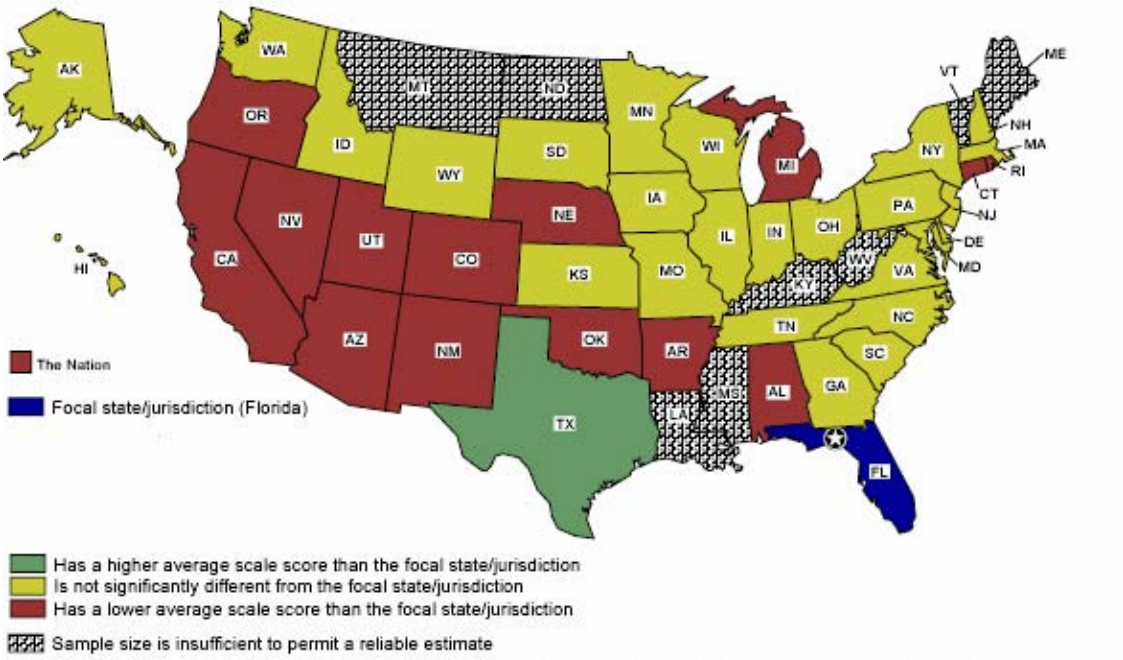
In 2007, Florida's Grade 8 mathematics average scale score for African American students (259) was

- **higher than the following 9 states:**
  Tennessee, Illinois, California, Mississippi, Rhode Island, Wisconsin, Alabama, Michigan, and Nebraska.*
- **not significantly different from the nation and the following 21 states:**
  Kansas, Arizona, New Jersey, Massachusetts, New Mexico, Washington, Georgia, Minnesota, *Florida,* Indiana, Louisiana, Ohio, New York, Oklahoma, Pennsylvania, Kentucky, Iowa, Connecticut, Nevada, Arkansas, Missouri, and West Virginia.*
- **lower than the following 9 states:**
  Colorado, Oregon, Texas, Alaska, Virginia, North Carolina, Delaware, Maryland, and South Carolina.*

The sample size in the following 10 states was not large enough to permit a reliable estimate: Hawaii, Idaho, Maine, Montana, New Hampshire, North Dakota, South Dakota, Utah, Vermont, and Wyoming.

*Within each group, states are listed from highest to lowest performance.

Figure 12
Florida's National Standing in 2007
Average Scale Scores
Hispanic Students



SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 2007 Mathematics Assessments.

In 2007, Florida's Grade 8 mathematics average scale score for Hispanic students (270) was

- **higher than the nation and the following 14 states:**
  Colorado, Arizona, Nebraska, Oregon, New Mexico, Oklahoma, Michigan, Nevada, California, Utah, Arkansas, Connecticut, Rhode Island, and Alabama.*
- **not significantly different from the following 26 states:**
  Ohio, Virginia, Wyoming, Alaska, North Carolina, Maryland, South Carolina, New Jersey, *Florida,* Missouri, Massachusetts, Kansas, Minnesota, South Dakota, Wisconsin, Delaware, Indiana, Georgia, Illinois, New York, Idaho, Tennessee, Pennsylvania, New Hampshire, Hawaii, Washington, and Iowa.*
- **lower than the following 1 state:**
  Texas.

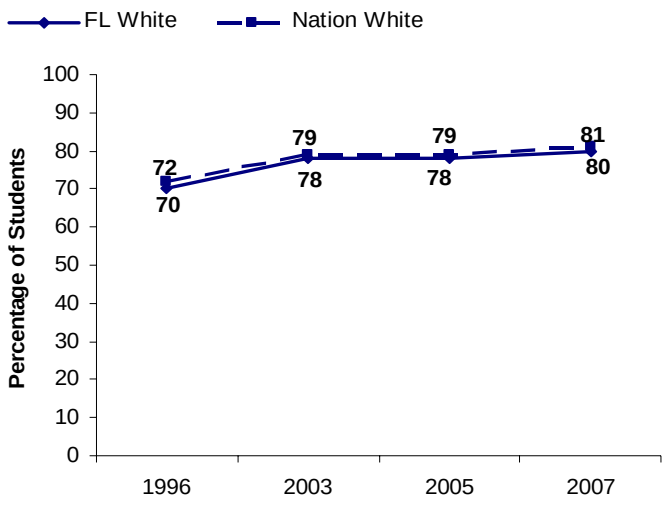
The sample size in the following 8 states was not large enough to permit a reliable estimate: Kentucky, Louisiana, Maine, Mississippi, Montana, North Dakota, Vermont, and West Virginia.

*Within each group, states are listed from highest to lowest performance.

Achievement Levels

Percentage at *Basic* and above

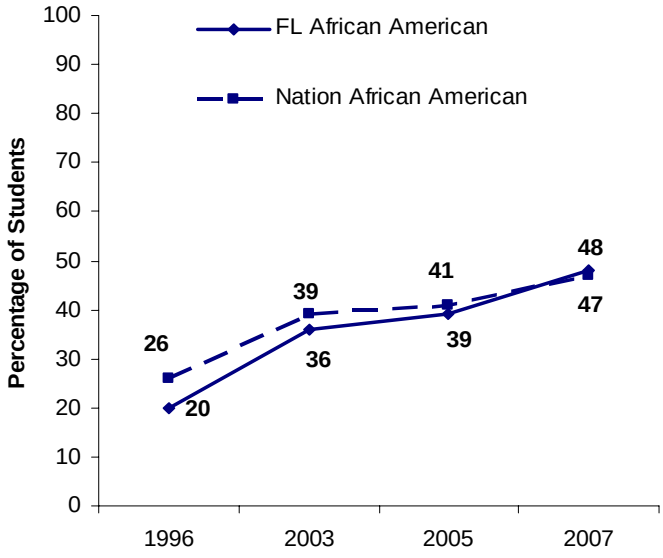
Figure 13
Florida and the Nation 1996–2007
White Students



● The percentage of White students in Florida and in the nation performing at or above *Basic* in Grade 8 mathematics improved significantly between 1996 and 2007.

● Between 1996 and 2007, Florida gained 10 percentage points (70% to 80%); the nation gained 9 percentage points (72% to 81%).

Figure 14
Florida and the Nation 1996–2007
African American Students



● The percentage of African American students in Florida and in the nation performing at or above *Basic* in Grade 8 mathematics improved significantly between 1996 and 2007.

● Between 1996 and 2007, Florida improved by 28 percentage points (20% to 48%); the nation improved by 21 percentage points (26% to 47%).

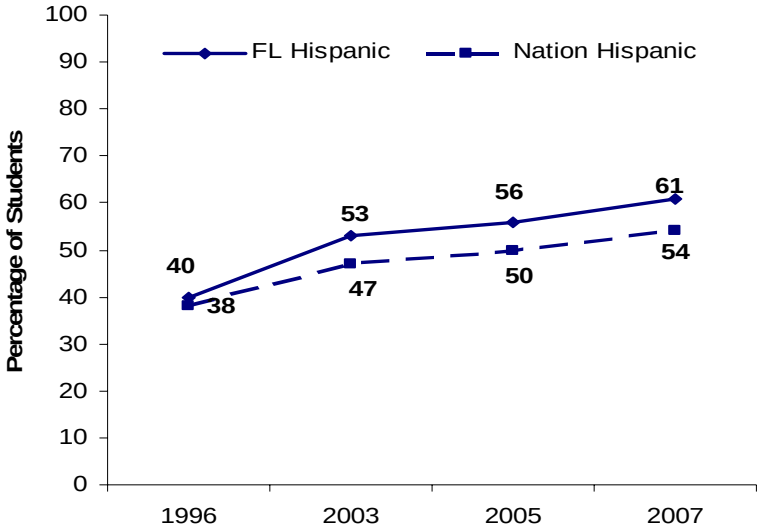
Achievement Levels

Percentage at *Basic* and above

Figure 15

Florida and the Nation 1996–2007

Hispanic Students



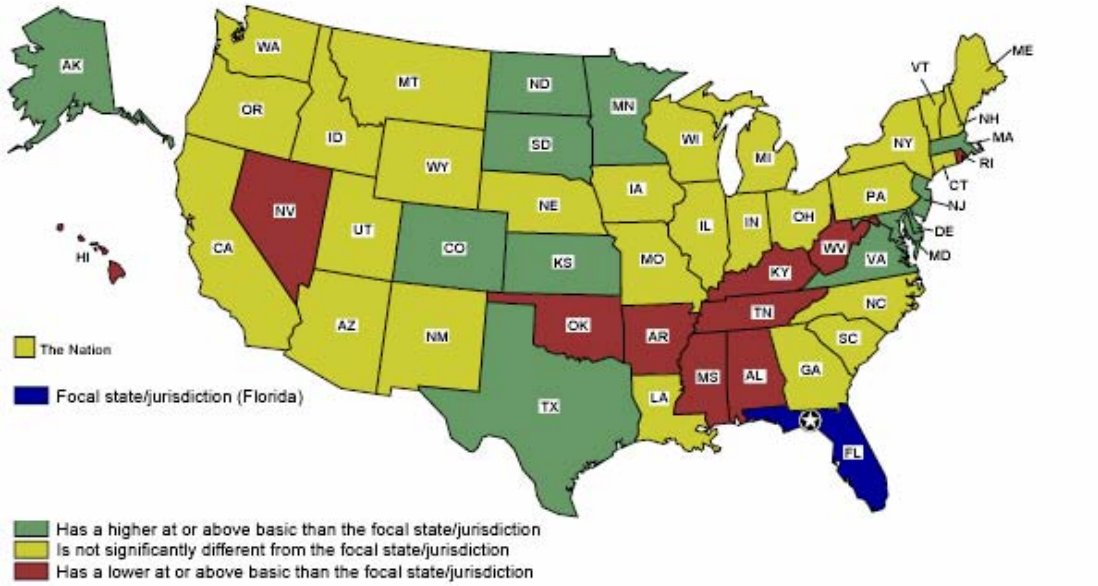
- The percentage of Hispanic students in Florida and in the nation performing at or above *Basic* in Grade 8 mathematics improved significantly between 1996 and 2007.

- Between 1996 and 2007, Florida improved by 21 percentage points (40% to 61%); the nation improved by 16 percentage points (38% to 54%).

Summary of Figures 13, 14, and 15

In 2007, the percentage of Florida's Hispanic students performing at or above *Basic* was significantly higher than the percentage of the nation's Hispanic students performing at or above *Basic*. White and African American students performed similarly to their national counterparts.

Figure 16
Florida's National Standing in 2007
Percentage at *Basic* and above
White Students



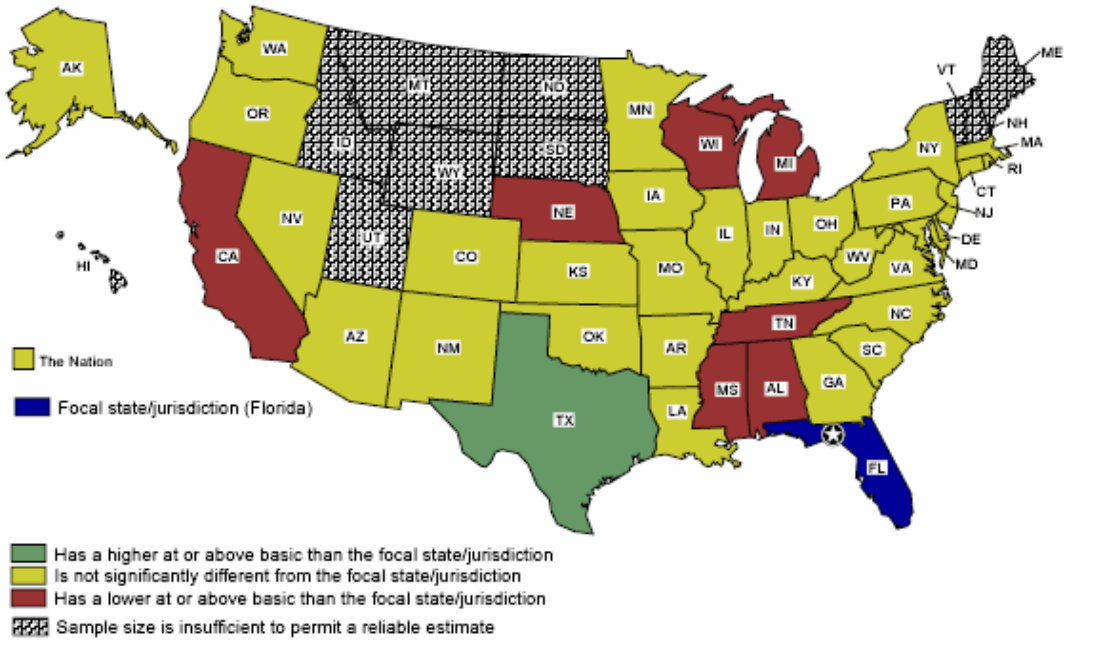
SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 2007 Mathematics Assessments.

In 2007, Florida's Grade 8 mathematics percentage of White students who performed at *Basic* and above (80 percent) was

- **higher than the following 10 states:**
  Rhode Island, Tennessee, Oklahoma, Mississippi, Arkansas, Kentucky, Nevada, Hawaii, Alabama, and West Virginia.*
- **not significantly different from the nation and the following 27 states:**
  North Carolina, Pennsylvania, Montana, Wyoming, South Carolina, Connecticut, Wisconsin, Ohio, Nebraska, Vermont, Indiana, New York, Iowa, Missouri, Washington, Arizona, Illinois, *Florida,* Georgia, New Hampshire, Idaho, Maine, Louisiana, Oregon, Utah, California, New Mexico, and Michigan.*
- **lower than the following 12 states:**
  Massachusetts, Texas, North Dakota, Maryland, Kansas, New Jersey, Minnesota, Alaska, Delaware, Virginia, South Dakota, and Colorado.*

*Within each group, states are listed from highest to lowest performance.

Figure 17
Florida's National Standing in 2007
Percentage at *Basic* and above
African American Students



SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 2007 Mathematics Assessments.

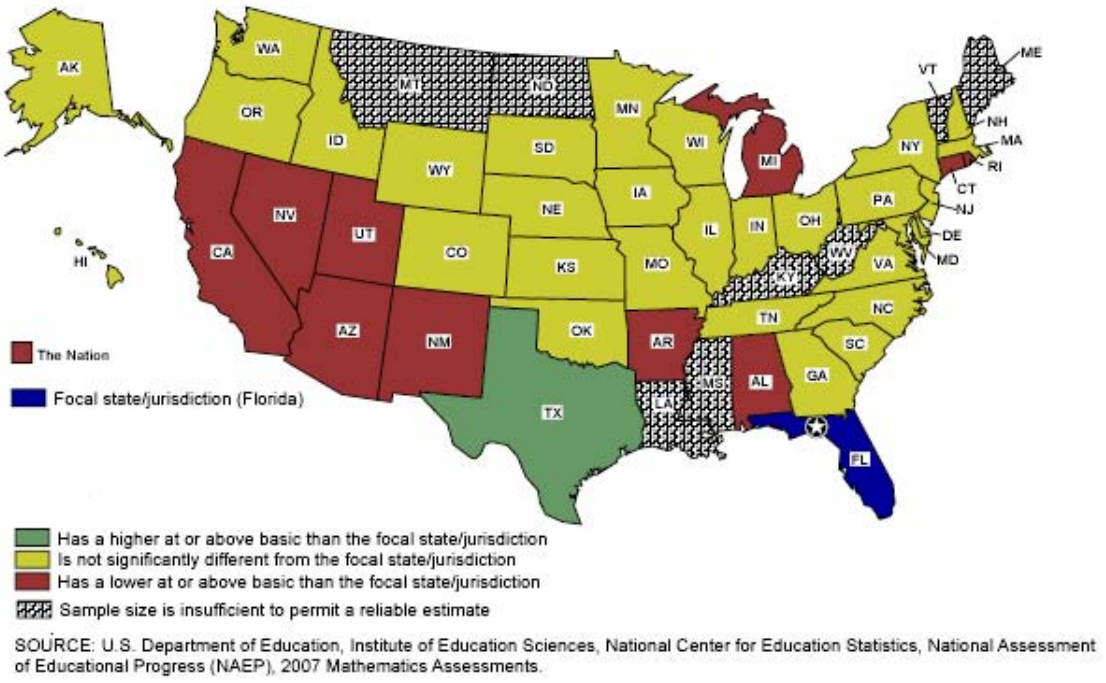
In 2007, Florida's Grade 8 mathematics percentage of African American students who performed at *Basic* and above (48 percent) was

- **higher than the following 7 states:**
  Tennessee, California, Mississippi, Alabama, Wisconsin, Michigan, and Nebraska.*
- **not significantly different from the nation and the following 31 states:**
  Alaska, Colorado, Oregon, Arizona, Kansas, Delaware, Virginia, Washington, South Carolina, New Jersey, Massachusetts, Maryland, North Carolina, New Mexico, Georgia, *Florida,* Minnesota, Indiana, Ohio, New York, Pennsylvania, Louisiana, Nevada, Connecticut, Oklahoma, Arkansas, Kentucky, Illinois, Iowa, Rhode Island, Missouri, and West Virginia.*
- **lower than the following 1 state:**
  Texas.

The sample size in the following 10 states was not large enough to permit a reliable estimate: Hawaii, Idaho, Maine, Montana, New Hampshire, North Dakota, South Dakota, Utah, Vermont, and Wyoming.

*Within each group, states are listed from highest to lowest performance.

Figure 18
Florida's National Standing in 2007
Percentage at *Basic* and above
Hispanic Students



SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 2007 Mathematics Assessments.

In 2007, Florida's Grade 8 mathematics percentage of Hispanic students who performed at *Basic* and above (61 percent) was

- **higher than the nation and the following 10 states:**
  Arizona, New Mexico, Arkansas, California, Nevada, Utah, Connecticut, Michigan, Rhode Island, and Alabama.*
- **not significantly different from the following 30 states:**
  Alaska, Wyoming, Virginia, Maryland, New Jersey, Ohio, Missouri, South Carolina, *Florida,* North Carolina, Massachusetts, Wisconsin, Delaware, Kansas, South Dakota, Minnesota, Illinois, Pennsylvania, Indiana, Georgia, New York, Washington, New Hampshire, Colorado, Idaho, Hawaii, Tennessee, Oregon, Nebraska, Iowa, and Oklahoma.*
- **lower than the following 1 state:**
  Texas.

The sample size in the following 8 states was not large enough to permit a reliable estimate: Kentucky, Louisiana, Maine, Mississippi, Montana, North Dakota, Vermont, and West Virginia.

*Within each group, states are listed from highest to lowest performance.

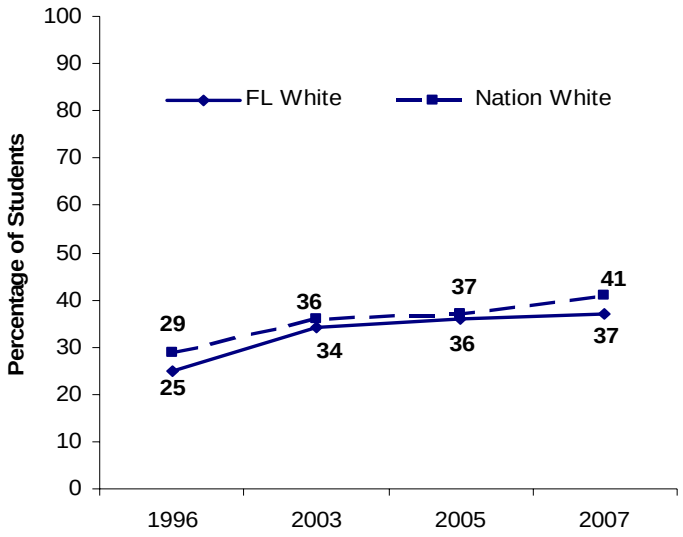
Achievement Levels

Percentage at *Proficient* and above

Figure 19

Florida and the Nation 1996–2007

White Students



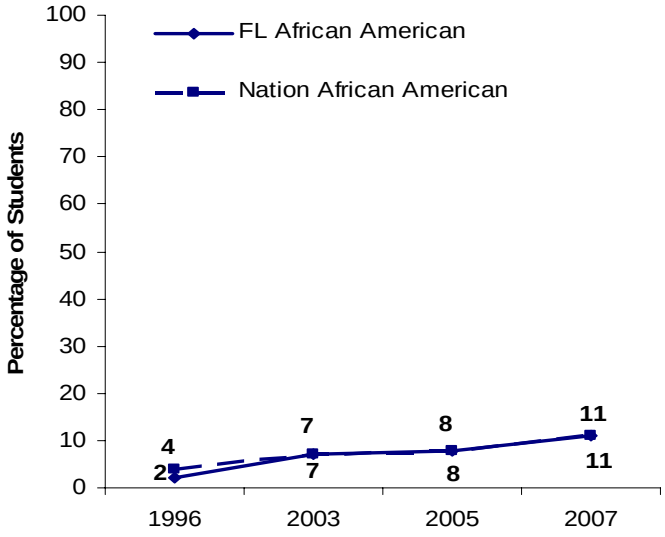
● The percentage of White students in Florida and the nation performing at or above *Proficient* in Grade 8 mathematics improved significantly between 1996 and 2007.

● Between 1996 and 2007, Florida improved by 12 percentage points (25% to 37%); the nation improved by 12 percentage points (29% to 41%).

Figure 20

Florida and the Nation 1996–2007

African American Students



● The percentage of African American students in Florida and the nation performing at or above *Proficient* in Grade 8 mathematics improved significantly between 1996 and 2007.

● Between 1996 and 2007, Florida improved 9 percentage points (2% to 11%); the nation improved 7 percentage points (4% to 11%).

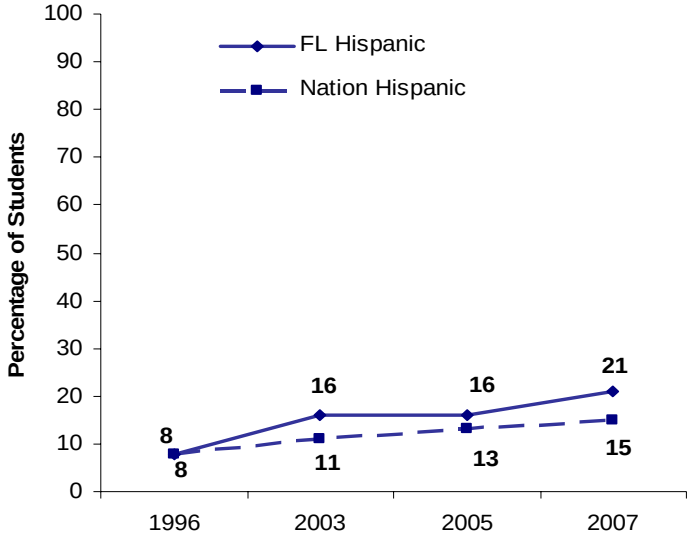
Achievement Levels

Percentage at *Proficient* and above

Figure 21

Florida and the Nation 1996–2007

Hispanic Students



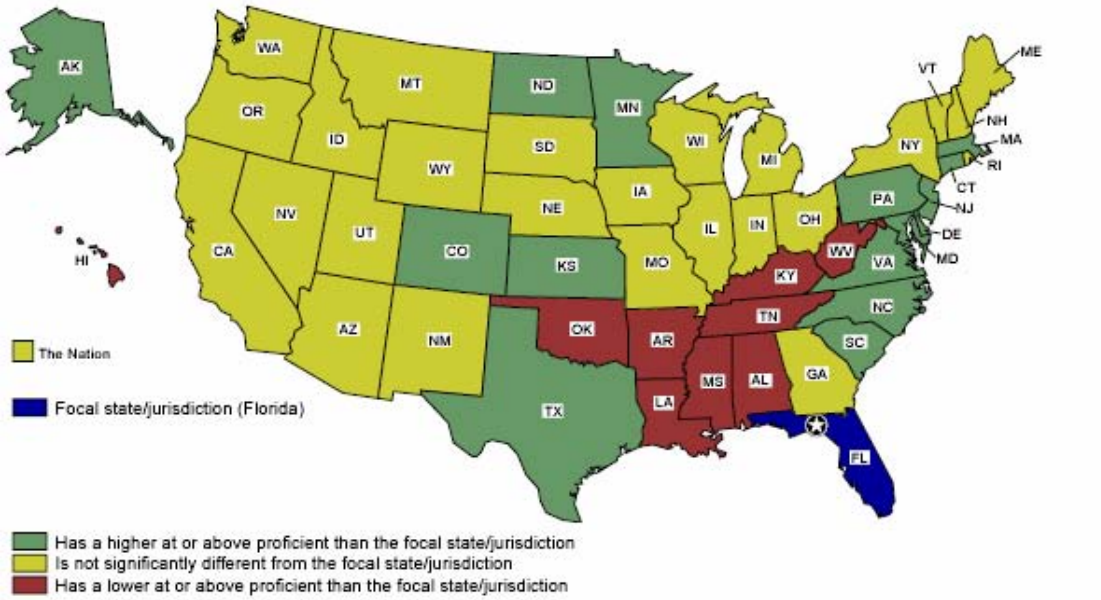
● The percentage of Hispanic students in Florida and the nation performing at or above *Proficient* in Grade 8 mathematics improved significantly between 1996 and 2007.

● Between 1996 and 2007, Florida improved by 13 percentage points (8% to 21%); the nation improved by 7 percentage points (8% to 15%).

Summary of Figures 19, 20, and 21

In 2007, the percentage of Florida's Hispanic students performing at or above *Proficient* was significantly greater than the percentage of the nation's Hispanic students (21 percent vs. 15 percent) performing at or above *Proficient.* There was no significant difference in the percentage of Florida's and the nation's White and African American students performing at or above *Proficient*.

Figure 22
Florida's National Standing in 2007
Percentage at *Proficient* and above
White Students



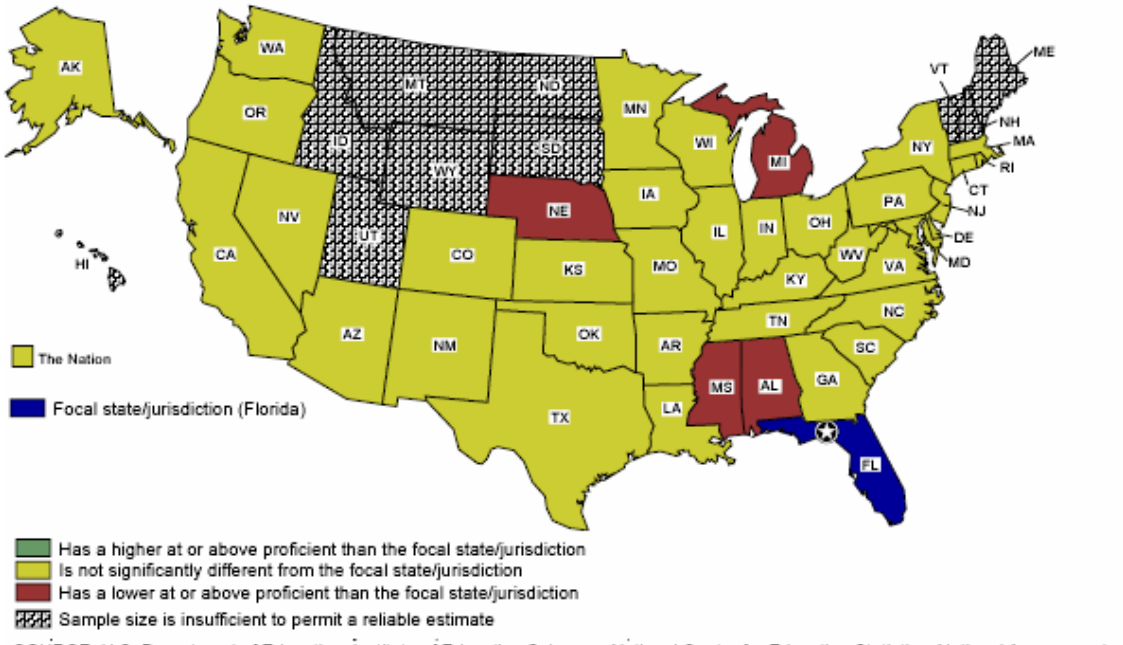
SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 2007 Mathematics Assessments.

In 2007, Florida's Grade 8 mathematics percentage of White students who performed at *Proficient* and above (37 percent) was

- **higher than the following 9 states:**
  Arkansas, Tennessee, Kentucky, Louisiana, Hawaii, Alabama, Oklahoma, Mississippi, and West Virginia.*
- **not significantly different from the nation and the following 25 states:**
  South Dakota, Vermont, Washington, Wisconsin, Ohio, Montana, Nebraska, Illinois, Indiana, Arizona, New Hampshire, Oregon, California, New York, Wyoming, Idaho, Iowa, Georgia, *Florida,* Utah, Missouri, Maine, Rhode Island, Michigan, New Mexico, and Nevada.*
- **lower than the following 15 states:**
  Massachusetts, Maryland, Texas, New Jersey, Colorado, Minnesota, Virginia, Kansas, North Carolina, North Dakota, Pennsylvania, Alaska, Connecticut, South Carolina, and Delaware.*

*Within each group, states are listed from highest to lowest performance.

Figure 23
Florida's National Standing in 2007
Percentage at *Proficient* and above
African American Students



SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 2007 Mathematics Assessments.

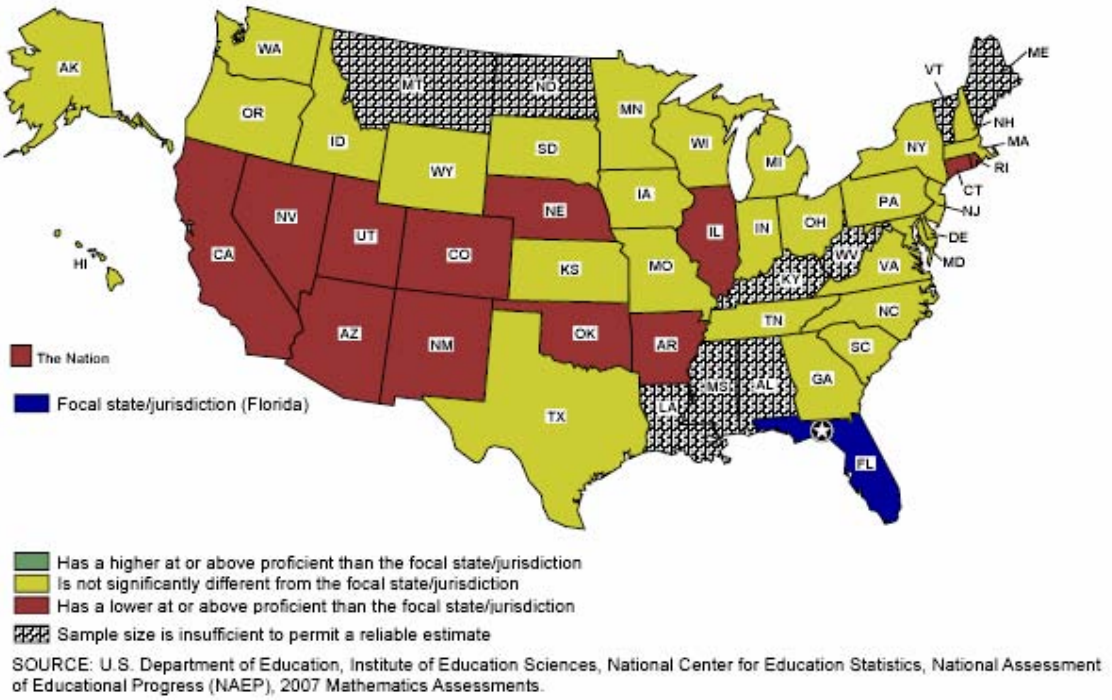
In 2007, Florida's Grade 8 mathematics percentage of African American students who performed at *Proficient and* above (11 percent) was

- **higher than the following 4 states:**
  Michigan, Nebraska, Mississippi, and Alabama.*
- **not significantly different from the nation and the following 35 states:**
  Oregon, Colorado, Texas, Kansas, Washington, South Carolina, Virginia, Alaska, Arizona, North Carolina, New Jersey, Minnesota, Maryland, Massachusetts, Pennsylvania, Nevada, New Mexico, Georgia, *Florida,* Kentucky, Iowa, Delaware, New York, California, Ohio, Arkansas, Rhode Island, Indiana, Oklahoma, Louisiana, Illinois, Tennessee, Connecticut, Missouri, Wisconsin, and West Virginia.*
- **lower than no states.**

The sample size in the following 10 states was not large enough to permit a reliable estimate: Hawaii, Idaho, Maine, Montana, New Hampshire, North Dakota, South Dakota, Utah, Vermont, and Wyoming.

*Within each group, states are listed from highest to lowest performance.

Figure 24
Florida's National Standing in 2007
Percentage at *Proficient* and above
Hispanic Students



SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 2007 Mathematics Assessments.

In 2007, Florida's Grade 8 mathematics percentage of Hispanic students who performed at *Proficient* and above (21 percent) was

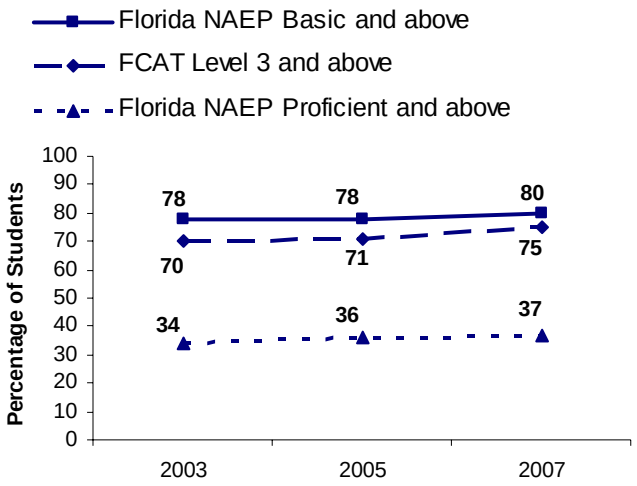
- **higher than the nation and the following 12 states:**
  Colorado, Illinois, Arizona, Utah, Nevada, Nebraska, California, New Mexico, Connecticut, Arkansas, Oklahoma, and Rhode Island.*
- **not significantly different from the following 28 states:**
  Ohio, Virginia, Texas, North Carolina, Alaska, South Carolina, Wyoming, *Florida,* Maryland, New Jersey, Indiana, Massachusetts, Wisconsin, Minnesota, South Dakota, Delaware, Pennsylvania, Missouri, Idaho, Kansas, Georgia, New York, Hawaii, Oregon, New Hampshire, Washington, Iowa, Tennessee, and Michigan.*
- **lower than no states.**

The sample size in the following 9 states was not large enough to permit a reliable estimate: Alabama, Kentucky, Louisiana, Maine, Mississippi, Montana, North Dakota, Vermont, and West Virginia.

*Within each group, states are listed from highest to lowest performance.

COMPARISON OF FCAT AND NAEP PROFICIENCY RESULTS 2003–2007

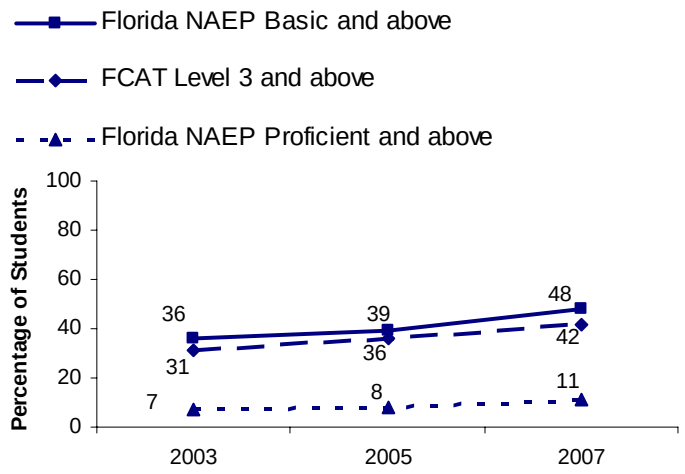
Figure 25
White Students



● In Florida, there was a significant increase of 5 percentage points between 2003 and 2007 of White students scoring at Level 3 and above on the FCAT (70% to 75%).

● Between 2003 and 2007, NAEP at *Basic* and above (78% to 80%) and NAEP at *Proficient* and above (34% to 37%) remained constant.

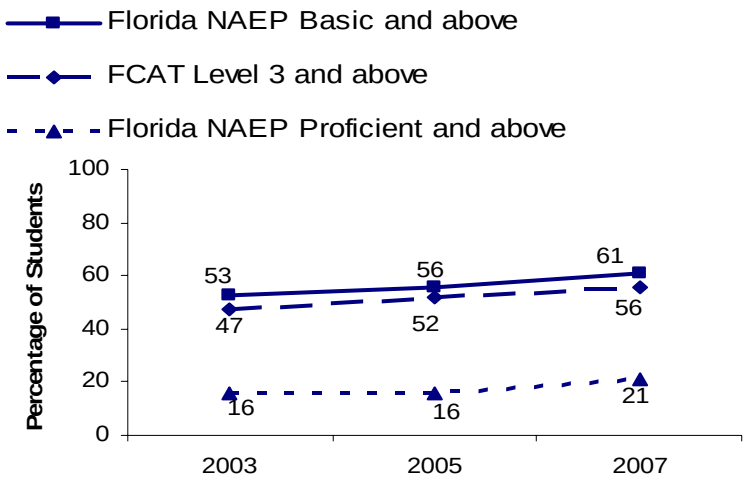
Figure 26
African American Students



● In Florida, there was a significant increase of 11 percentage points between 2003 and 2007 of African American students scoring at Level 3 and above on the FCAT (31% to 42%).

● Between 2003 and 2007, NAEP *Basic* and above improved by 12 percentage points (36% to 48%) for African American students. During that same time period, NAEP *Proficient* and above remained constant.

Figure 27
Hispanic Students



- In Florida, there was a significant increase between 2003 to 2007 of Hispanic students scoring at Level 3 and above on the FCAT (47% to 56%).

- Between 2003 and 2007, NAEP *Basic* and above (53% to 61%) and NAEP *Proficien*t and above (16% to 21%) remained constant.

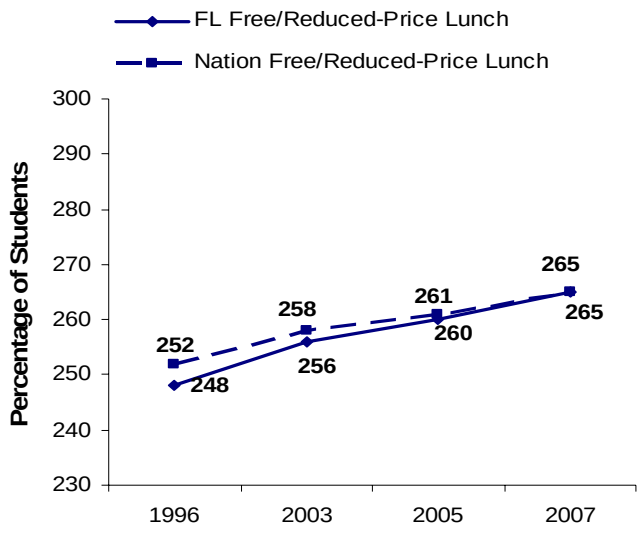
Summary of Figures 25, 26, and 27
Between 2003 and 2007, Hispanic students significantly increased their at *Basic* and above and at *Proficient* and above achievement level scores. White and African American at *Basic* and above and at *Proficient* and above achievement level scores remained constant during the same time period. The FCAT Level 3 and above achievement level scores increased for all three racial/ethnic groups.

STUDENTS ELIGIBLE FOR FREE/REDUCED-PRICE LUNCH
Grade 8 Mathematics

NAEP collects data on eligibility for the federal program providing free or reduced-price school lunches. Results for this subgroup of students are included as an indicator of socio-economic status (SES).

Average Scale Scores

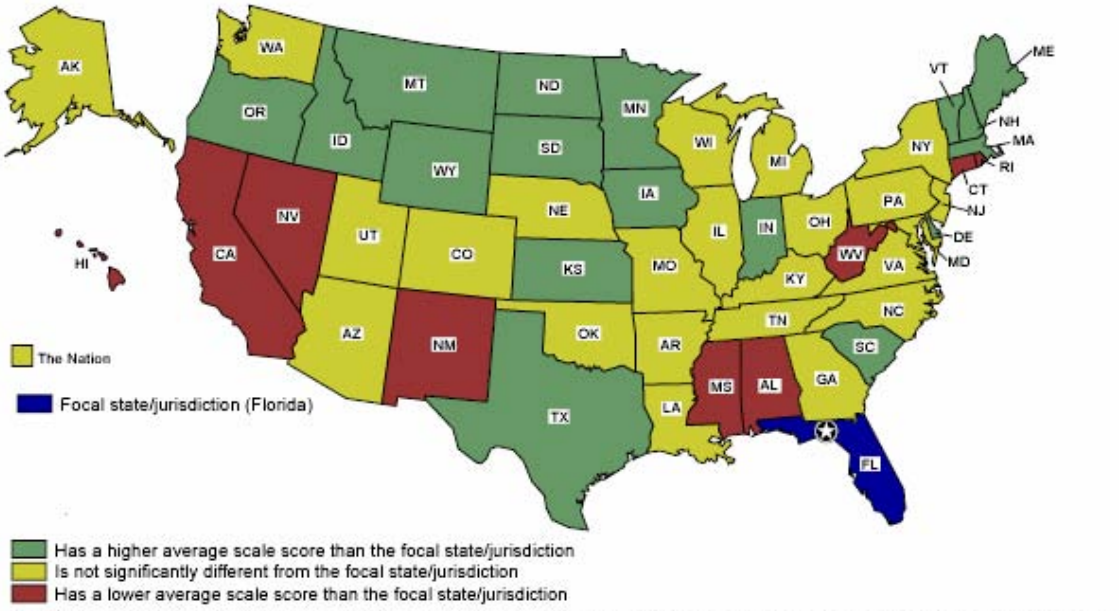
Figure 28
Florida and the Nation 2003–2007
Students Eligible for *Free/Reduced-Price Lunch*



- In Florida and the nation there was a significant increase in the average scale score of students eligible for free/reduced-price lunch between 2003 and 2007.

- Florida's improvement between 2003 and 2007 was similar to the nation's (9-point gain vs. 7-point gain).

Figure 29
Florida's National Standing in 2007
Average Scale Scores
Students Eligible for *Free/Reduced-Price Lunch*



SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 2007 Mathematics Assessments.

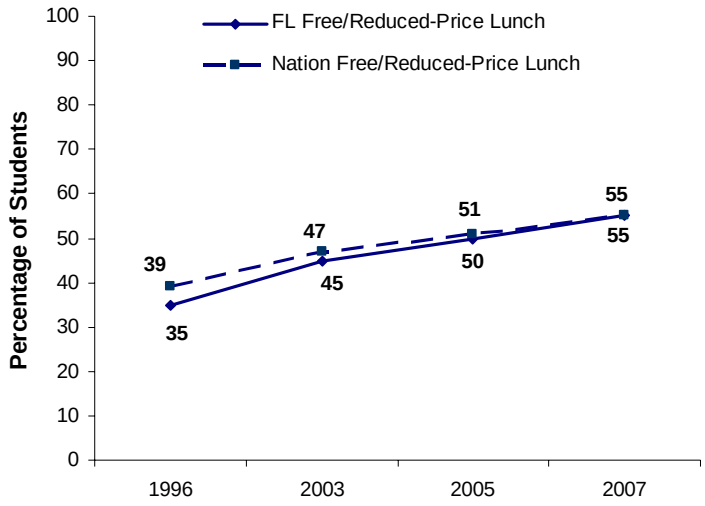
In 2007, Florida's Grade 8 mathematics average scale score for students eligible for free/reduced-price lunch (243) was

- **higher than the following 9 states:**
  West Virginia, Nevada, New Mexico, Hawaii, Mississippi, California, Rhode Island, Connecticut, and Alabama.*
- **not significantly different from the nation and the following 23 states:**
  North Carolina, New York, Virginia, Maryland, Ohio, Washington, Colorado, Kentucky, Utah, Pennsylvania, Missouri, Alaska, Wisconsin, New Jersey, *Florida,* Nebraska, Louisiana, Oklahoma, Arkansas, Georgia, Illinois, Tennessee, Arizona, and Michigan.*
- **lower than the following 17 states:**
  North Dakota, Vermont, Texas, Maine, South Dakota, Kansas, Wyoming, Massachusetts, Minnesota, Idaho, Montana, New Hampshire, Indiana, Delaware, Iowa, Oregon, and South Carolina.*

*Within each group, states are listed from highest to lowest performance.

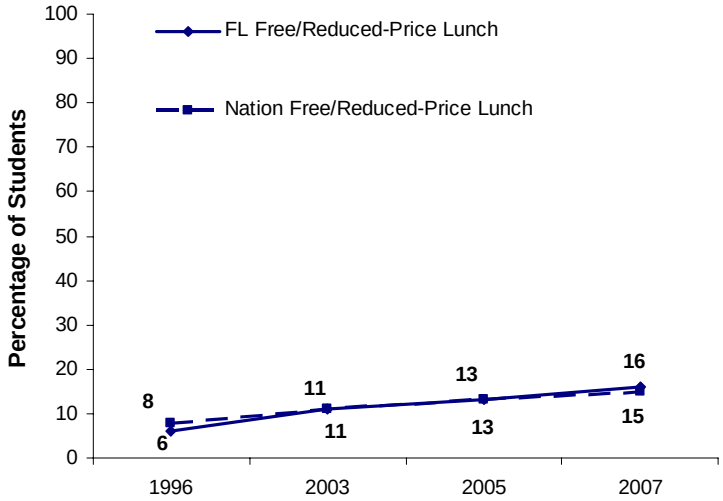
Achievement Levels

Figure 30
Percentage at *Basic* and above
Florida and the Nation 1996–2007
Students Eligible for *Free/Reduced-Price Lunch*



● In 2007, for the first time, the performance of Florida's students eligible for free/reduced-price lunch matched that of the nation's (55%) at the *Basic* and above achievement level.

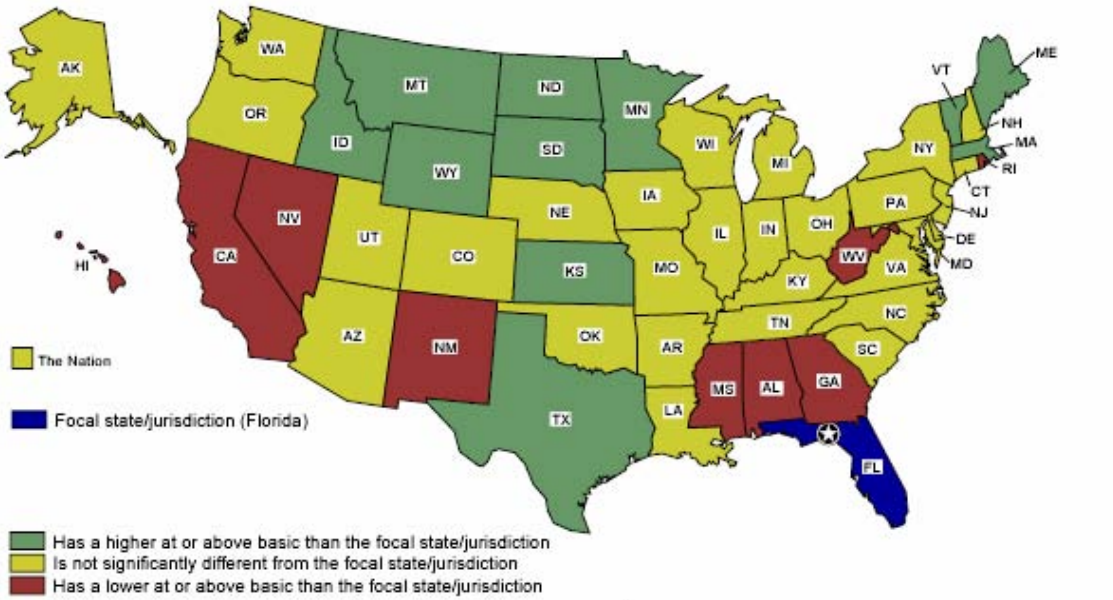
Figure 31
Percentage at *Proficient* and above
Florida and the Nation 1996–2007
Students Eligible for *Free/Reduced-Price Lunch*



● In 2007, the performance of Florida's students eligible for free/reduced-price lunch matched that of the nation's at the *Proficient* and above achievement level.

Summary of Figures 30 and 31
Florida's students eligible for free/reduced-price lunch increased their achievement level scores at *Basic* and above and at *Proficient* and above between 1996 and 2007.

Figure 32
Florida's National Standing in 2007
Percentage at *Basic* and above
Students Eligible for *Free/Reduced-Price Lunch*



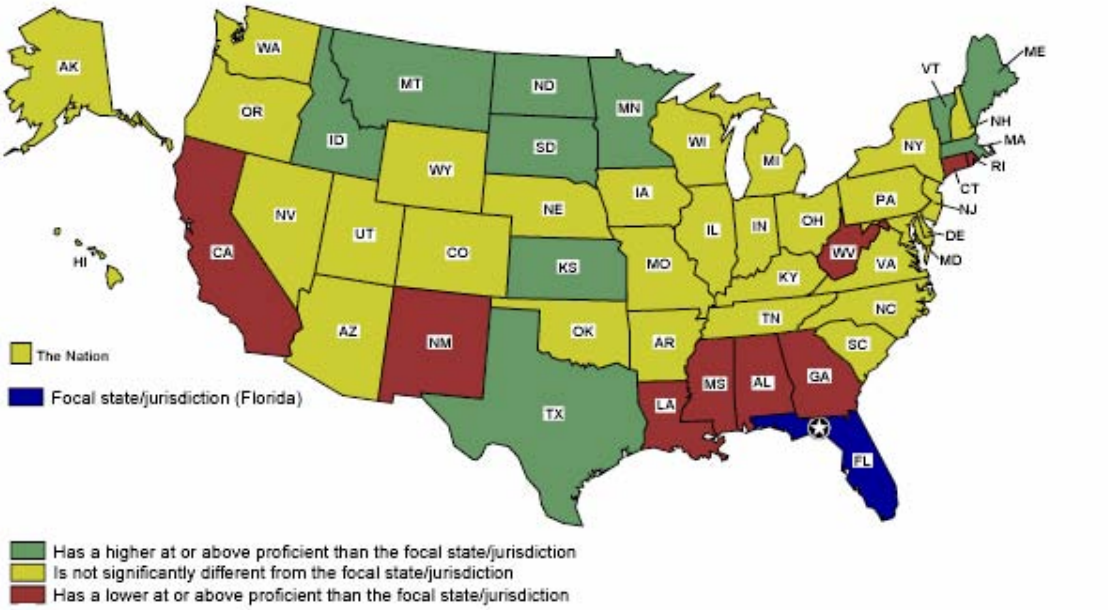
SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 2007 Mathematics Assessments.

In 2007, Florida's Grade 8 mathematics percentage of students eligible for free/reduced-price lunch who performed at *Basic* and above (55 percent) was

- **higher than the following 9 states:**
  West Virginia, Georgia, Hawaii, Nevada, California, Rhode island, New Mexico, Mississippi, and Alabama.*
- **not significantly different from the nation and the following 29 states:**
  Iowa, Delaware, Indiana, New Hampshire, Ohio, Oregon, South Carolina, Washington, Pennsylvania, North Carolina, Colorado, Utah, New York, Kentucky, Maryland, Virginia, New Jersey, Wisconsin, *Florida,* Missouri, Nebraska, Alaska, Arkansas, Oklahoma, Louisiana, Arizona, Illinois, Tennessee, Michigan, and Connecticut.*
- **lower than the following 11 states:**
  North Dakota, South Dakota, Vermont, Texas, Kansas, Maine, Wyoming, Massachusetts, Minnesota, Montana, and Idaho.*

*Within each group, states are listed from highest to lowest performance.

Figure 33
Florida's National Standing in 2007
Percentage at *Proficient* and above
Students Eligible for *Free/Reduced-Price Lunch*



SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 2007 Mathematics Assessments.

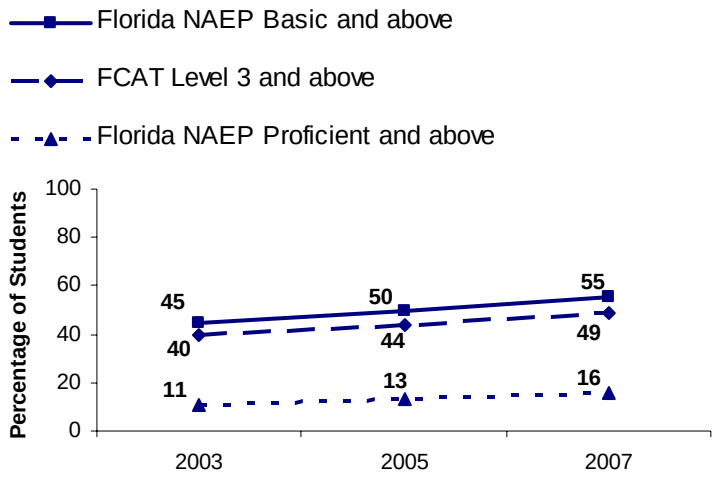
In 2007, Florida's Grade 8 mathematics percentage of students eligible for free/reduced-price lunch who performed at *Proficient* and above (16 percent) was

- **higher than the following 9 states:**
  California, Georgia, Louisiana, West Virginia, Rhode Island, Connecticut, New Mexico, Mississippi, and Alabama.*
- **not significantly different from the nation and the following 30 states:**
  Wyoming, Iowa, Indiana, Oregon, New York, Utah, Washington, Pennsylvania, South Carolina, Wisconsin, New Hampshire, North Carolina, Colorado, Nebraska, Alaska, New Jersey, *Florida,* Missouri, Ohio, Delaware, Kentucky, Maryland, Virginia, Arkansas, Michigan, Hawaii, Nevada, Oklahoma, Illinois, Arizona, and Tennessee.*
- **lower than the following 10 states:**
  North Dakota, Massachusetts, South Dakota, Vermont, Kansas, Idaho, Montana, Minnesota, Texas, and Maine.*

*Within each group, states are listed from highest to lowest performance.

COMPARISON OF FCAT AND NAEP PROFICIENCY RESULTS 2003–2007

Figure 34
Students Eligible for *Free/Reduced-Price Lunch*



● Between 2003 and 2007, the percentage of Florida's students eligible for free/ reduced-price lunch scoring *Basic* and above on NAEP increased by 10 percentage points (45% to 55%), the percentage scoring *Proficient* and above increased by 5 percentage points (11% to 16%), and the percentage scoring Level 3 and above on the FCAT increased by 9 percentage points (40% to 49%).

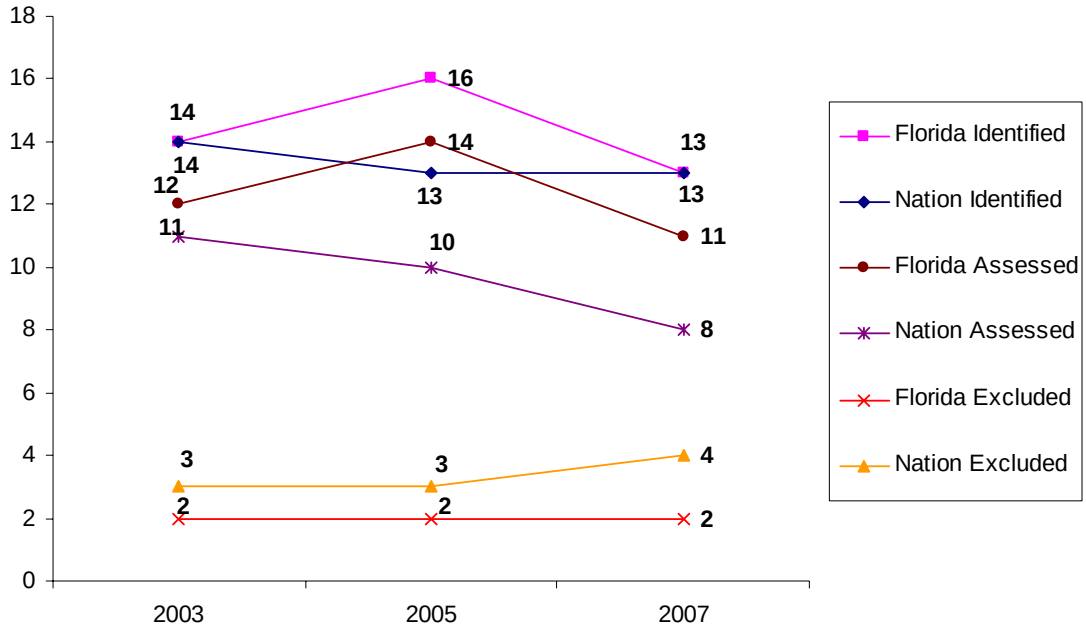
Summary of Figure 34
Students eligible for free/reduced-price lunch increased their NAEP at *Basic* and above, NAEP at *Proficient* and above, and FCAT Level 3 and above achievement level scores between 2003 and 2007.

STUDENTS WITH DISABILITIES
Identified, Assessed, and Excluded

School staff make the decision about whether to include a student with disabilities in a NAEP assessment and which accommodations, if any, the student should receive. The NAEP program furnishes tools to assist school personnel in making that decision. Inclusion in NAEP is encouraged if the student participates in the regular state assessment and if the student can participate in NAEP in a meaningful way with the accommodations NAEP allows. Because percentages of students excluded from NAEP may vary considerably across states and within a state across years, comparisons of results across and within states should be interpreted with caution.

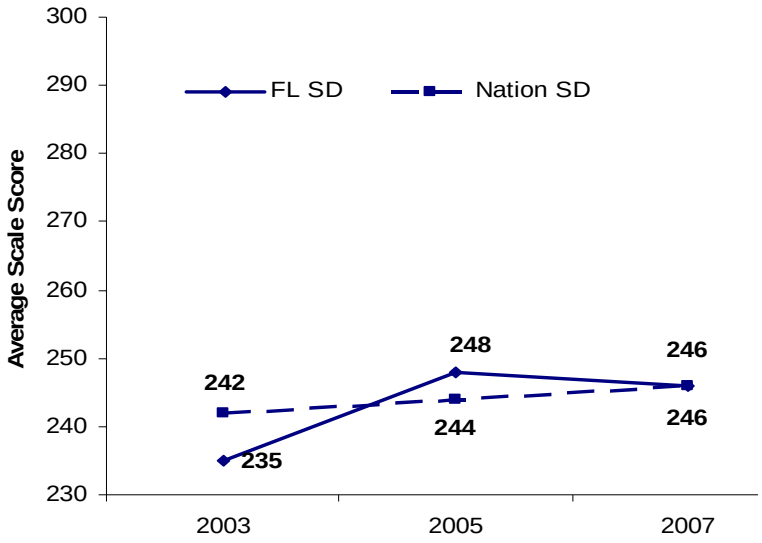
Exclusion rates can vary widely, rendering state comparisons suspect. In 2007, Florida and the nation identified the same percentage of SD students; however, Florida assessed a higher percentage of those identified and excluded a lower percentage than did the nation.

Graph 1
Percentages of Florida's and the Nation's SD Identified, Assessed, and Excluded Students for Grade 8 Mathematics 2003–2007



Average Scale Scores

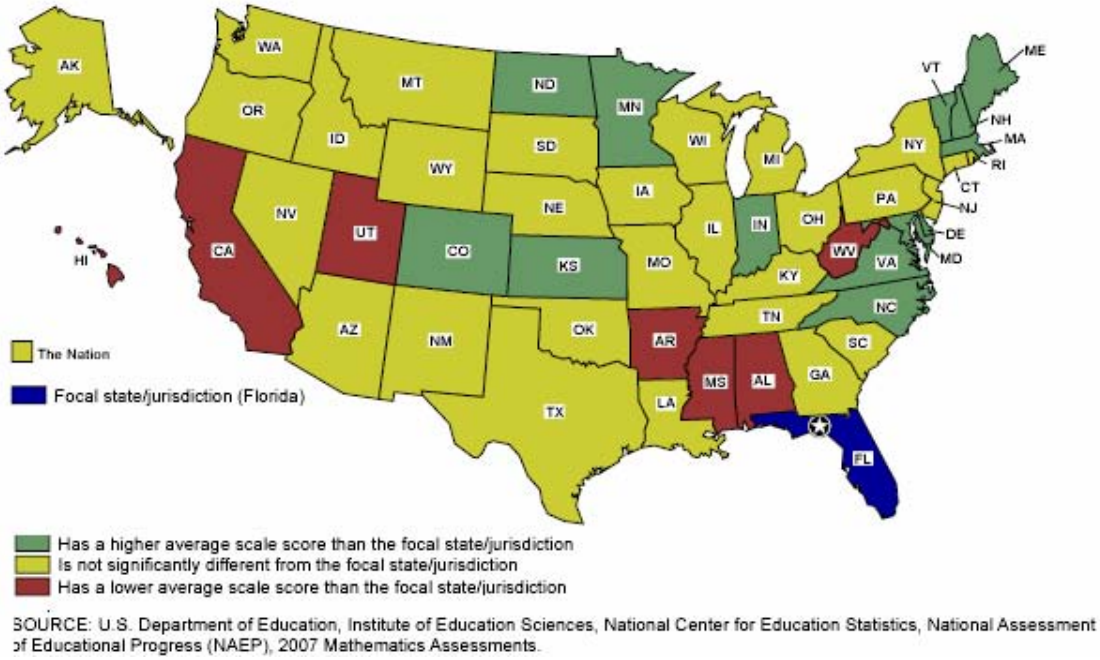
Figure 35
Florida and the Nation 2003–2007
Students with Disabilities



● In 2007, Florida's and the nation's students with disabilities had the same average scale scores (246).

● The improvement of Florida's students with disabilities since 2003 was greater than that of the nation's (11 vs. 4-point gain).

Figure 36
Florida's National Standing in 2007
Average Scale Scores
Students with Disabilities (SD)



SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 2007 Mathematics Assessments.

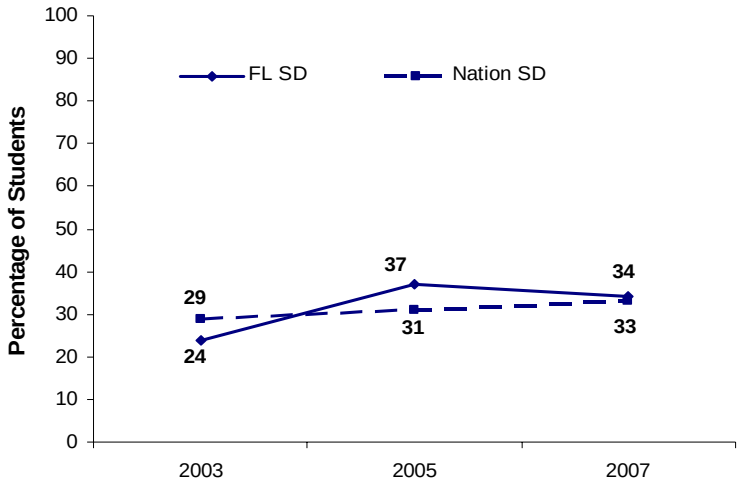
In 2007, Florida's Grade 8 mathematics average scale score for students with disabilities (246) was

- **higher than the following 7 states:**
  West Virginia, Utah, Arkansas, Mississippi, California, Hawaii, and Alabama.*
- **not significantly different from the nation and the following 29 states:**
  Pennsylvania, Wyoming, South Dakota, New Jersey, Oregon, Texas, Ohio, New York, Missouri, Wisconsin, Kentucky, Montana, Nebraska, Iowa, *Florida,* Illinois, Georgia, Tennessee, Idaho, South Carolina, Alaska, Connecticut, Rhode Island, Louisiana, Oklahoma, New Mexico, Washington, Nevada, Michigan, and Arizona.*
- **lower than the following 13 states:**
  Massachusetts, North Dakota, Maryland, Vermont, Virginia, Maine, New Hampshire, Delaware, Kansas, North Carolina, Minnesota, Colorado, and Indiana.*

*Within each group, states are listed from highest to lowest performance.

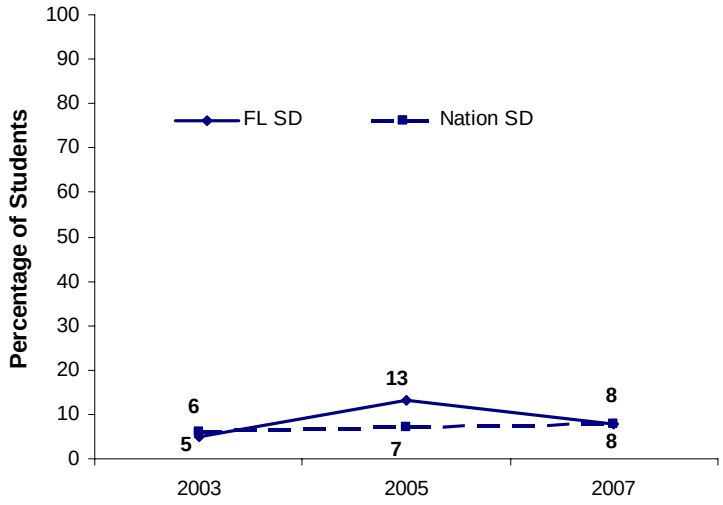
Achievement Levels

Figure 37
Percentage at *Basic* and above
Florida and the Nation 2003–2007
Students with Disabilities



● In 2007, Florida's SD performed similarly to the nation's (34% vs. 33%) at the *Basic* and above achievement level.

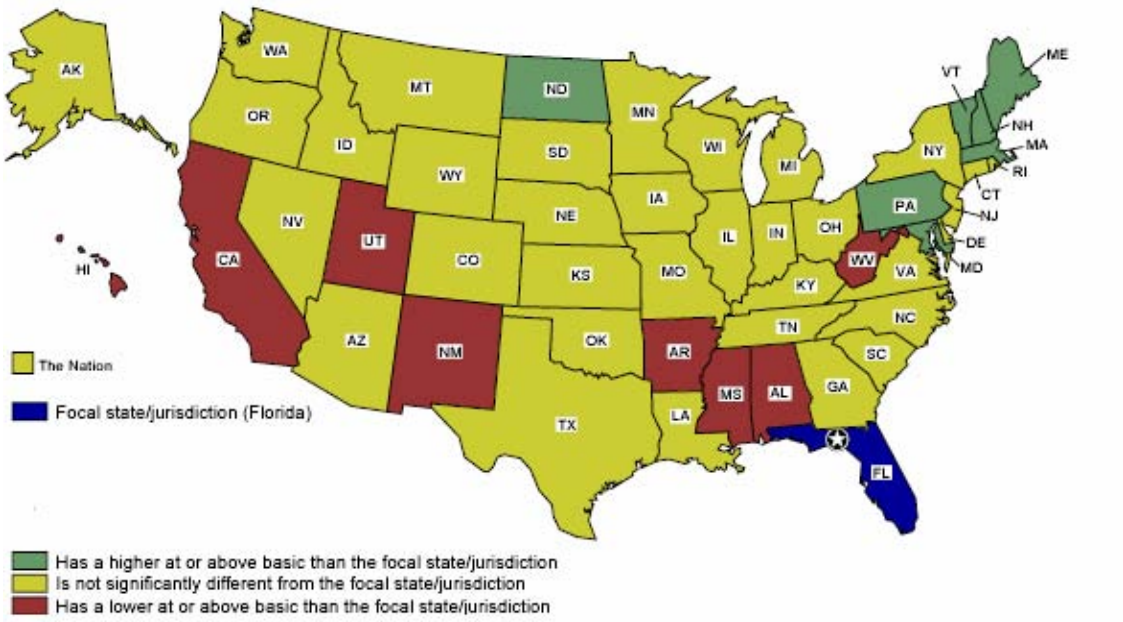
Figure 38
Percentage at *Proficient* and above
Florida and the Nation 2003–2007
Students with Disabilities



● In 2007, Florida's SD performed the same as the nation's (8%) at the *Proficient* and above achievement level.

Summary of Figures 37 and 38
The percentage of Florida's students with disabilities performing at or above *Basic* and at or above *Proficient* remained constant between 2003 and 2007. In 2007, both achievement level groups performed similarly to their national counterparts.

Figure 39
Florida's National Standing in 2007
Percentage at *Basic* and above
Students with Disabilities



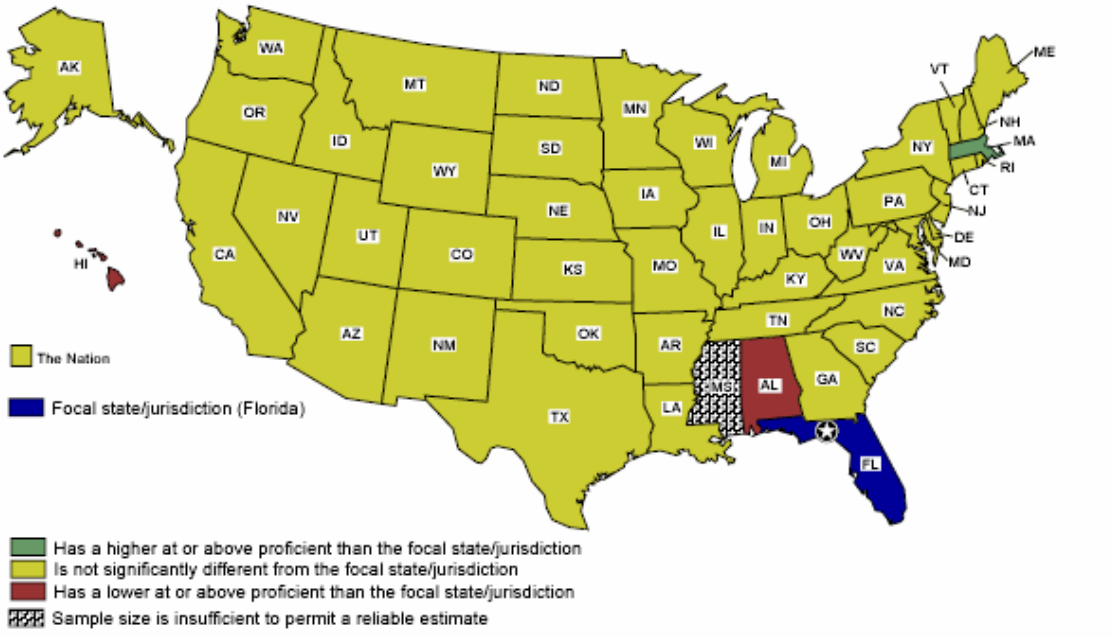
SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 2007 Mathematics Assessments.

In 2007, Florida's Grade 8 mathematics percentage of students with disabilities that performed at *Basic* and above (34 percent) was

- **higher than the following 8 states:**
  New Mexico, West Virginia, Utah, California, Arkansas, Hawaii, Mississippi, and Alabama.*
- **not significantly different from the nation and the following 34 states:**
  Virginia, Delaware, North Carolina, Kansas, Minnesota, Colorado, Indiana, New Jersey, South Dakota, Ohio, Connecticut, Oregon, Wisconsin, New York, Missouri, Nebraska, Texas, Wyoming, Kentucky, *Florida,* Georgia, Iowa, Montana, South Carolina, Illinois, Tennessee, Rhode Island, Alaska, Idaho, Washington, Nevada, Arizona, Louisiana, Oklahoma, and Michigan.*
- **lower than the following 7 states:**
  Massachusetts, North Dakota, Maryland, Vermont, Maine, New Hampshire, and Pennsylvania.*

*Within each group, states are listed from highest to lowest performance.

Figure 40
Florida's National Standing in 2007
Percentage at *Proficient* and above
Students with Disabilities



SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 2007 Mathematics Assessments.

In 2007, Florida's Grade 8 mathematics percentage of students with disabilities who performed at *Proficient* and above (8 percent) was

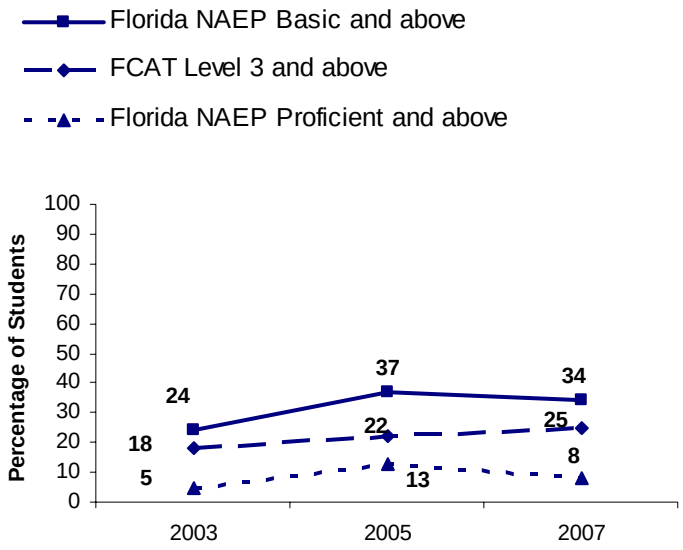
- **higher than the following 2 states:**
  Hawaii and Alabama.
- **not significantly different from the nation and the following 46 states:**
  Maryland, Tennessee, North Carolina, Pennsylvania, Virginia, Vermont, Delaware, Colorado, Maine, Minnesota, Indiana, New Hampshire, Nevada, North Dakota, New Jersey, Connecticut, Kansas, Oregon, *Florida,* Wisconsin, Nebraska, South Dakota, Texas, Missouri, Washington, Illinois, Alaska, Ohio, South Carolina, Kentucky, New Mexico, New York, Iowa, Wyoming, Georgia, California, Montana, Rhode Island, Idaho, West Virginia, Louisiana, Michigan, Arizona, Utah, Arkansas, and Oklahoma.*
- **Lower than the following 1 state:**
  Massachusetts.

The sample size in the following 1 state was not large enough to permit a reliable estimate: Mississippi.

*Within each group, states are listed from highest to lowest performance.

COMPARISON OF FCAT AND NAEP PROFICIENCY RESULTS 2003–2007

Figure 41
Students with Disabilities



● Between 2003 and 2007, Florida's students with disabilities improved their NAEP *Basic* and above and their FCAT Level 3 and above achievement level scores. Their NAEP *Proficient* and above achievement level scores remained constant.

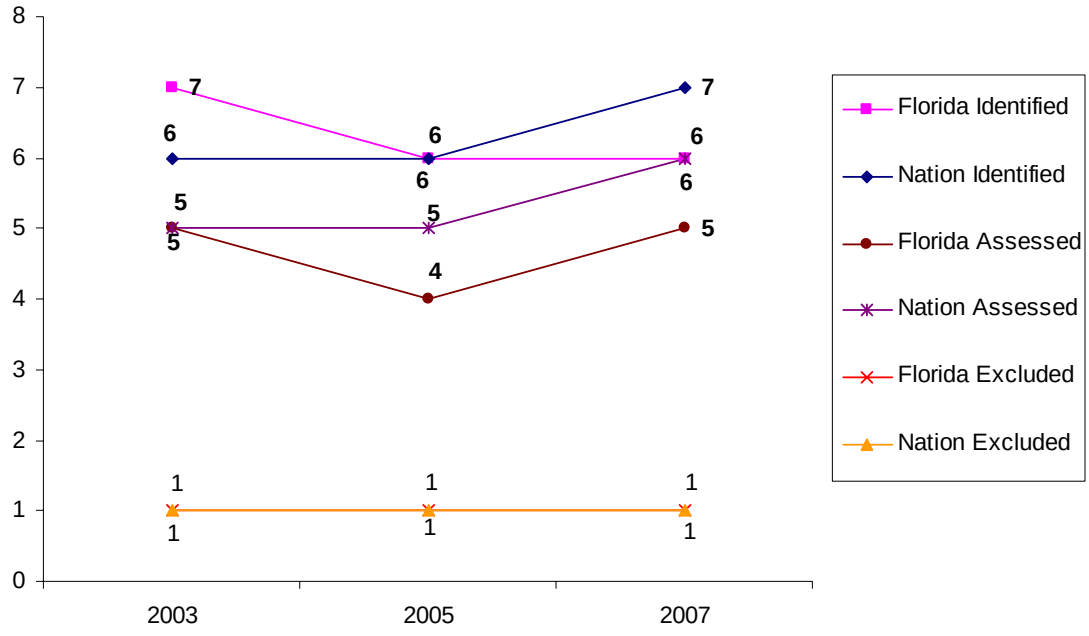
Summary Figure 41
Florida's students with disabilities increased their NAEP at *Basic* and above and FCAT Level 3 and above achievement level scores between 2003 and 2007. Their NAEP at *Proficient* and above achievement level scores remained the same.

ENGLISH LANGUAGE LEARNERS
Identified, Assessed, and Excluded

School staff make the decision about whether to include an English language learner (ELL) student in a NAEP assessment and which accommodations, if any, he or she should receive. The NAEP program furnishes tools to assist school personnel in making that decision. Inclusion in NAEP is encouraged if the student participated in the regular state assessment and if the student can participate in NAEP in a meaningful way with the accommodations NAEP allows. Because percentages of students excluded from NAEP may vary considerably across states and within a single state across years, comparisons of results across and within states over time should be interpreted with caution.

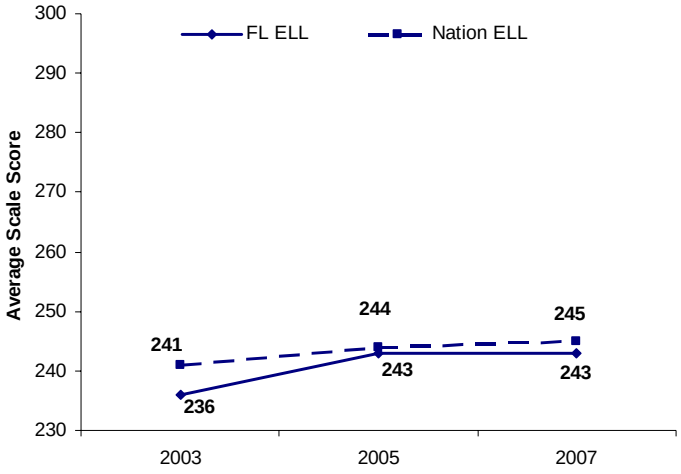
Exclusion rates can vary widely, rendering such comparisons suspect. Florida's and the nation's identified, assessed, and excluded percentages did not vary significantly between 2003 and 2007.

Graph 2
Comparing Percentages of Florida's and the Nation's ELL Identified, Assessed, and Excluded Students for Grade 8 Mathematics 2003–2007



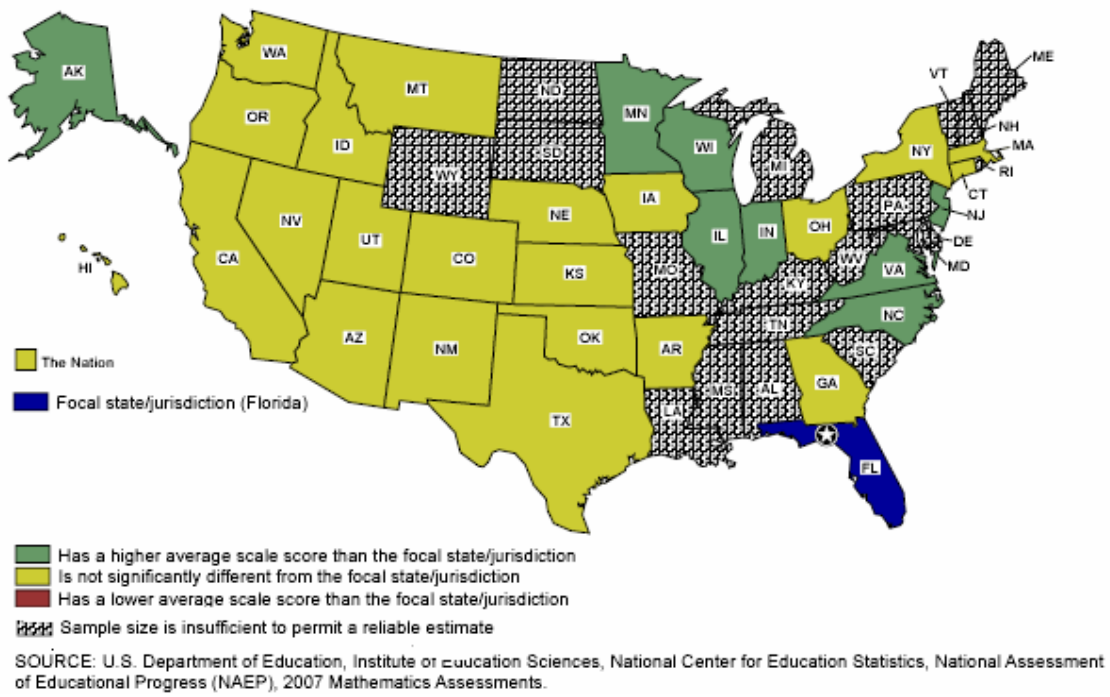
Average Scale Scores

Figure 42
Florida and the Nation 2003–2007
English Language Learners



● In 2007, Florida's English language learners performed similarly to their national counterparts (243 points vs. 245 points).

Figure 43
Florida's National Standing in 2007
Average Scale Scores
English Language Learners



SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 2007 Mathematics Assessments.

In 2007, Florida's Grade 8 mathematics average scale score for English language learners (243) was

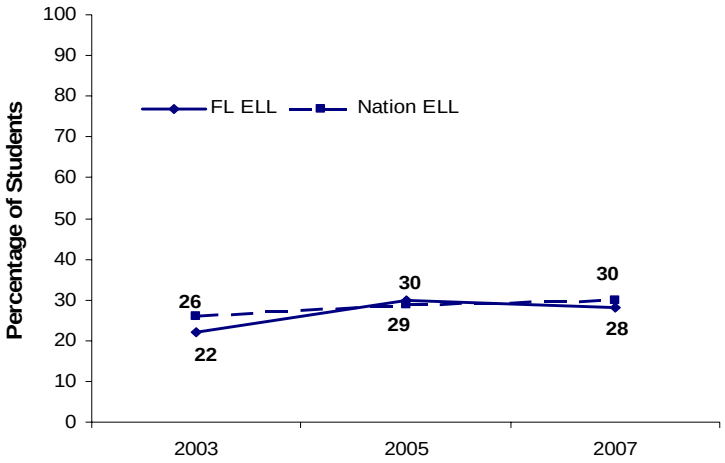
- **higher than no states.**
- **not significantly different from the nation and the following 22 states:**
  Ohio, Kansas, Oklahoma, Iowa, Texas, Utah, Massachusetts, Oregon, Idaho, Arkansas, Colorado, *Florida,* Washington, New Mexico, California, Nebraska, Nevada, Arizona, Montana, Georgia, New York, Hawaii, and Connecticut.*
- **lower than the following 8 states:**
  Virginia, Indiana, Wisconsin, North Carolina, Minnesota, New Jersey, Illinois, and Alaska.*

The sample size in the following 19 states was not large enough to permit a reliable estimate: Alabama, Delaware, Kentucky, Louisiana, Maine, Maryland, Michigan, Mississippi, Missouri, New Hampshire, North Dakota, Pennsylvania, Rhode Island, South Carolina, South Dakota, Tennessee, Vermont, West Virginia, and Wyoming.

*Within each group, states are listed from highest to lowest performance.

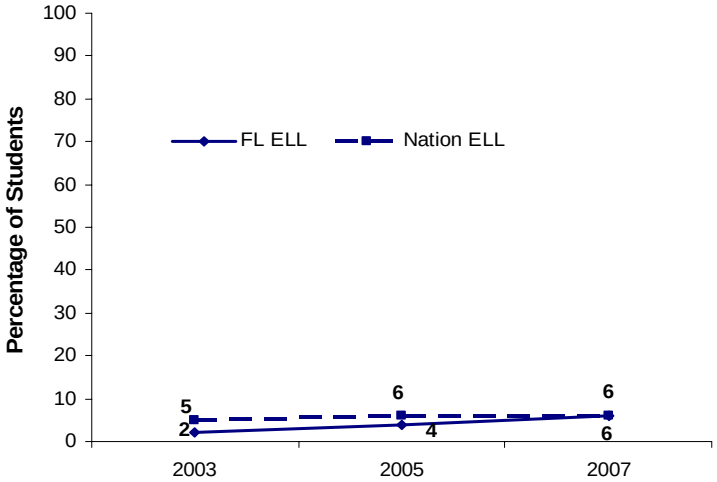
Achievement Levels

Figure 44
Percentage at *Basic* and above
Florida and the Nation 2003–2007
English Language Learners



● In 2007, Florida's English language learners performed similarly to the nation's English language learners (28% vs. 30%) at the *Basic* and above achievement level.

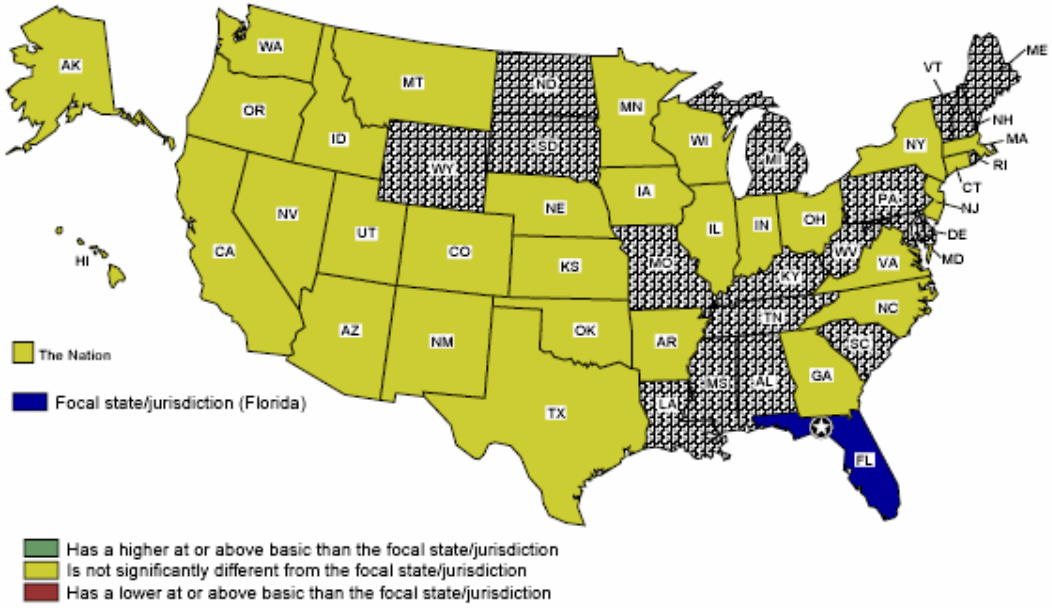
Figure 45
Percentage at *Proficient* and above
Florida and the Nation 2003–2007
English Language Learners



● In 2007, Florida's English language learners performed the same as the nation's English language learners (6%) at the *Proficient* and above achievement level.

Summary Figures 44 and 45
Florida's English language learners performing at or above *Basic* and at or above *Proficient* remained constant between 2003 and 2007. In 2007, both achievement level groups performed similarly to their national counterparts.

Figure 46
Florida's National Standing in 2007
Percentage at *Basic* and above
English Language Learners



SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 2007 Mathematics Assessments.

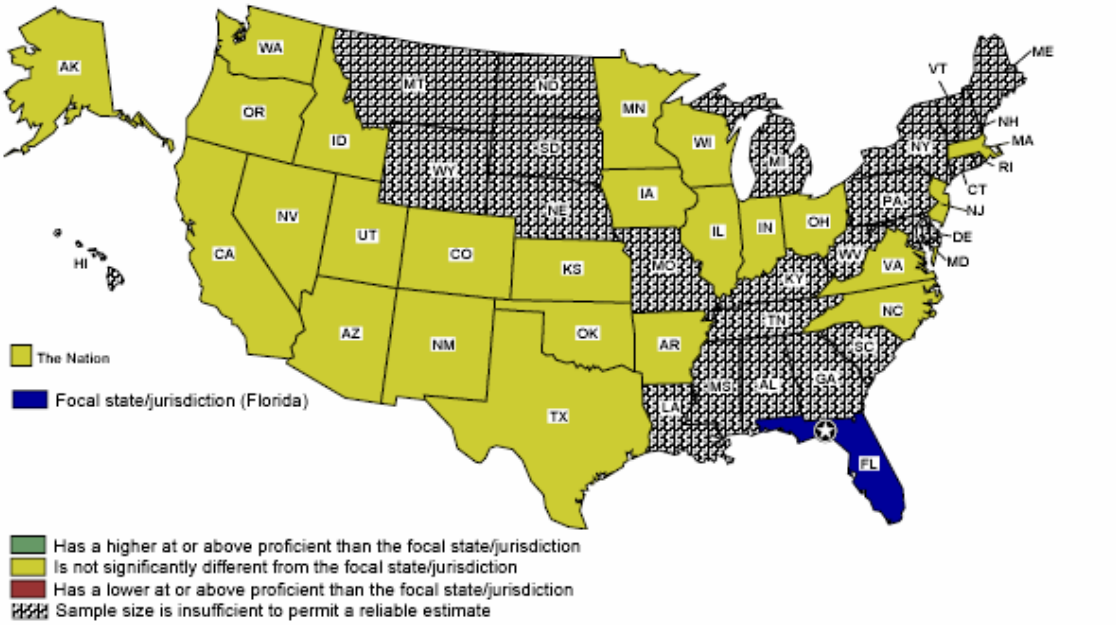
In 2007, Florida's Grade 8 mathematics percentage of English language learners who performed at *Basic* and above (28 percent) was

- **higher than no states.**
- **not significantly different from the nation and the following 30 states:**
  Virginia, Ohio, Wisconsin, Minnesota, Indiana, New Jersey, Illinois, Kansas, North Carolina, Alaska, Utah, Iowa, Oklahoma, Texas, Massachusetts, Oregon, Arkansas, Idaho, Washington, Colorado, *Florida,* California, New Mexico, Montana, Arizona, Nevada, New York, Nebraska, Georgia, Hawaii, and Connecticut.*
- **lower than no states.**

The sample size in the following 19 states was not large enough to permit a reliable estimate: Alabama, Delaware, Kentucky, Louisiana, Maine, Maryland, Michigan, Mississippi, Missouri, New Hampshire, North Dakota, Pennsylvania, Rhode Island, South Carolina, South Dakota, Tennessee, Vermont, West Virginia, and Wyoming.

*Within each group, states are listed from highest to lowest performance.

Figure 47
Florida's National Standing in 2007
Percentage at *Proficient* and above
English Language Learners



SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 2007 Mathematics Assessments.

In 2007, Florida's Grade 8 mathematics percentage of English language learners who performed at *Proficient* and above (6 percent) was

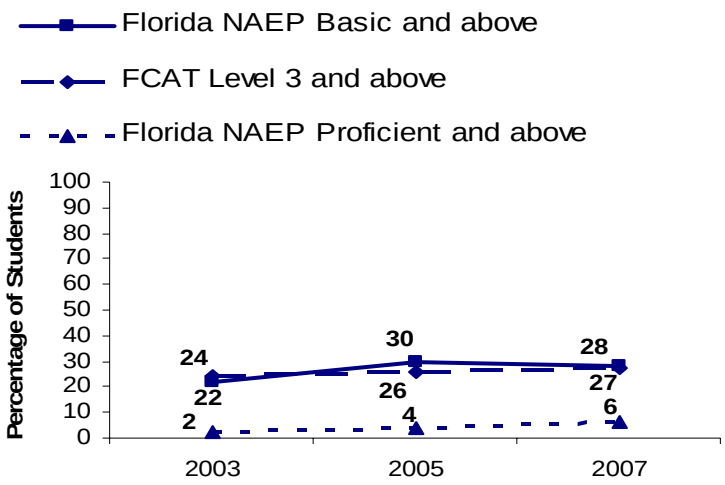
- **higher than no states.**
- **not significantly different from the nation and the following 30 states:**
  Indiana, Ohio, Massachusetts, Virginia, Wisconsin, North Carolina, Illinois, Minnesota, Utah, New Jersey, Alaska, Kansas, Idaho, Iowa, *Florida,* Oregon, Oklahoma, California, Texas, Nevada, Washington, Arizona, Arkansas, New Mexico, Colorado, Hawaii, New York, Connecticut, Georgia, Montana, and Nebraska.*
- **lower than no states.**

The sample size in the following 19 states was not large enough to permit a reliable estimate: Alabama, Delaware, Kentucky, Louisiana, Maine, Maryland, Michigan, Mississippi, Missouri, New Hampshire, North Dakota, Pennsylvania, Rhode Island, South Carolina, South Dakota, Tennessee, Vermont, West Virginia, and Wyoming.

*Within each group, states are listed from highest to lowest performance.

COMPARISON OF FCAT AND NAEP PROFICIENCY RESULTS 2003–2007

Figure 48
English Language Learners



● Between 2003 and 2007, English language learners improved their FCAT Level 3 and above achievement level scores (22% vs. 27%). Their NAEP *Basic* and above and *Proficient* and above achievement level scores remained constant.

Summary Figure 48
English language learners maintained their NAEP at *Basic* and above and at *Proficient* and above achievement level scores between 2003 and 2007. Their FCAT Level 3 and above achievement level scores increased between 2003 and 2007.

APPENDIX A
Comparing the FCAT with Florida NAEP
How does Florida NAEP compare with the FCAT?

The Florida Comprehensive Assessment Test® (FCAT) measures student performance on selected benchmarks, as defined by Florida's Sunshine State Standards (SSS). These standards identify what students are expected to know and be able to do for the 21st century and include both content and performance standards. The FCAT is designed to provide information needed to improve public schools and help parents understand the educational progress of their children. The assessment provides data to understand the "educational health" of students and to hold schools and districts accountable for making progress. The FCAT reports state, district, school, and individual student results.

In contrast, the National Assessment of Educational Progress (NAEP) reports on the performance of groups of students at a given time and across time without specifying how a subject should be taught or prescribing a particular curricular approach to teaching. NAEP encourages students to use their knowledge of the world to make meaning. This reinforces NAEP's role as an assessment of overall achievement rather than an assessment measuring individual student progress.

Caution is advised when comparing student performance on the FCAT with student performance on NAEP, as the assessments sometimes encompass different grade-level expectations. What Florida requires students to know at a particular grade level in a particular subject area does not necessarily correspond with NAEP's expectations. One useful means of comparison is to examine the long-term performance of each subgroup. If there is similar improvement on both the FCAT and NAEP, then real growth in achievement over time is more certain.

- The FCAT defines achievement Level 3 as, "Student has partial success with the challenging content of the Sunshine State Standards but is generally less successful with questions that are the most challenging."
- NAEP defines *Basic* as, "Partial mastery of prerequisite knowledge and skills that are fundamental for proficient work at each grade."
- NAEP defines *Proficient* as, "Solid academic performance for each grade assessed. Students reaching this level have demonstrated competence over challenging subject matter, including subject-matter knowledge, application of such knowledge to real-world situations, and analytical skills appropriate to the subject matter."

When reviewing the three definitions, the similarity between the FCAT Level 3 and above and NAEP's at *Basic* and above would appear to be a better fit than comparing FCAT Level 3 and above to NAEP's *Proficient* and above.

APPENDIX B
Chronology of NAEP

1963	Francis Keppel, the U.S. Commissioner of Education from 1962 to 1965, was concerned about the lack of information regarding the academic achievement of American students. He hired Ralph W. Tyler, a psychologist and the nation's most prominent education evaluator, to form a committee to make recommendations on how to obtain the information. Tyler proposed periodically assessing a small sample of different students rather than trying to test all students on the national level; however, several influential educational associations were opposed to any student assessment data being collected and released at the state level because they feared that the results would be used to make improper and harmful comparisons.
1969	The first National Assessment of Educational Progress (NAEP) was administered. The assessment content area was science.
1970–1988	Additional content areas were assessed by NAEP at the national level. In the early 1980's, NAEP was redesigned to assess four major subject areas (reading, mathematics, writing, and science) on a more regular basis. In addition to the traditional assessment of 9-, 13-, and 17-year-olds, children in Grades 3, 7, and 11 were assessed.
1986	Eight southern states, including Florida, began a three-year test of a sample of their students using NAEP reading and/or writing achievement tests. This assessment was guided by the Southern Regional Education Board (SREB).
1986–1987	A NAEP study group headed by Tennessee Governor Lamar Alexander and H. Thomas James recommended that the U.S. Department of Education change grade-level sampling from Grades 3, 7, and 11 to the more important "transition" Grades of 4, 8, and 12. They also recommended adding a state-level NAEP to the assessment program.
1988	The Augustus F. Hawkins-Robert T. Stafford Elementary and Secondary School Improvements Amendments to the Elementary and Secondary Education Act (ESEA) further expanded the NAEP program by increasing the number of educational subjects assessed and authorizing state assessments on a trial basis in reading and mathematics. This legislation also authorized NAEP to report achievement level data on a basis that ensures valid, reliable trend reporting and information on special groups. The 25-member National Assessment Governing Board (NAGB) was created as the independent overseer of NAEP (P.L. 100-297). NAGB is specifically charged with developing assessment objectives and test specifications.
1990	Florida State Statute 229.57(2), now 1008.22(2), was adopted, directing the Commissioner of Education "to provide for school districts to participate in the administration of the National Assessment of Educational Progress, or a similar national assessment program, both for the national sample and for any state-by-state comparison programs which may be initiated." NAGB identified appropriate achievement levels and performance standards for each age and grade in each subject area assessed by NAEP.
1990–1992	As part of the NAEP Trial State Assessments (TSAs), Grade 8 students were assessed in mathematics in 1990. In 1992, both Grade 4 and 8 students were assessed in mathematics and Grade 4 students were assessed in reading.

1994	The Improving America's Schools Act of 1994 introduced design changes that expanded the data that NAEP gathered to include mathematics and reading assessments for students in Grades 4, 8, and 12. Due to budget issues, only the Grade 4 reading assessment was funded.
1996	State NAEP for Grades 4 and 8 mathematics and Grade 8 science were administered. NAEP began offering accommodations on a trial basis for Students with Disabilities (SD) and English language learners (ELL).
1997	NAGB adopted a schedule for national and state NAEP through the year 2010. Every other year, state NAEP was scheduled for Grades 4 and 8, alternating between reading/writing and mathematics/science (beginning with reading/writing in 1998).
1998	NAEP first offered accommodations to Students with Disabilities (SD) and English language learners (ELL). Results were reported in two ways: accommodations not permitted and accommodations permitted.
1999	Long-term trend NAEP was administered to 9-, 13-, and 17-year-old students.
2000	Florida did not participate in state NAEP because of the expansion of the Florida Comprehensive Assessment Test® (FCAT). The Florida Department of Education decided not to participate in state NAEP to lessen the burden on the schools as Florida's own assessment program substantially expanded.
2001	No Child Left Behind Act of 2001 (NCLB) was passed, requiring states/districts who receive Title 1 funding to participate in biennial State NAEP in reading and mathematics at Grades 4 and 8, beginning with the 2002-2003 academic year. The Act also specified that NAEP science and writing were to be administered alternately, every four years.
2002	State and National NAEP were given in Grades 4 and 8 in reading and writing. This NAEP administration was the first time school personnel were not required to administer the assessment. Beginning with the 2002 administration, contractors were hired to administer NAEP.
2003	State and National NAEP were given in Grades 4 and 8 in reading and mathematics. Florida was the only state to have a significant increase in Grade 4 reading between 2002 and 2003. The position of NAEP State Coordinator (NSC) was created by the National Council on Education Statistics (NCES) to enhance the profile of NAEP and to help administer a much-expanded assessment program than what was implemented prior to NCLB.
2004	Long-term trend NAEP was administered to 9-, 13-, and 17-year-old students.
2005	State and National NAEP were administered in Grades 4 and 8 in reading, mathematics, and science. Results for reading and mathematics were published in October 2005, and the results for science were released in April 2006.
2006	National NAEP was administered in U.S. history, civics, and economics (Grade 12 only).
2007	State and National NAEP were administered in Grades 4 and 8 in reading and mathematics. Grade 8 students were also assessed in writing. Grade 12 students participated in reading and writing assessments.
2008	National NAEP was administered in Grades 4, 8, and 12 in reading, mathematics, and science, in Grade 8 in the Arts, and the Long-term Trend to 9-, 13-, and 17-year-old students.
2009	State and National NAEP were administered in Grades 4 and 8 in reading, mathematics, and science. Grade 12 students participated in the same three subjects at the national level.

APPENDIX C
Glossary of NAEP Terms

achievement gap – the difference between a referent group's average score and a group of interest's average score.

achievement levels – performance standards set by the **National Assessment Governing Board** (NAGB) that provide a context for interpreting student performance on NAEP, based on recommendations from panels of educators and members of the public. The levels, ***Basic***, ***Proficient***, and ***Advanced***, measure what students should know and be able to do at each grade assessed.

achievement-level percentages – the percentage of students within the total population, or in a particular student group, who meet or exceed expectations of what students should know and be able to do. Specifically, it is the weighted percentage of students with NAEP composite scores that are equal to, or exceed, the achievement-level cut scores specified by the **National Assessment Governing Board (NAGB)**.

***Advanced* –** one of the three NAEP **achievement levels**, denoting superior performance at each grade assessed. See each NAEP subject for a detailed description of what students should know and be able to do at Grade 4, 8, or 12 at the *Advanced* level. The cut scores determining each level are available with these descriptions.

average scaled score – arithmetic mean of the scaled scores for a given group.

***Basic* –** one of the three NAEP **achievement levels**, denoting partial mastery of prerequisite knowledge and skills that are fundamental for proficient work at each grade assessed. NAEP also reports the proportion of students whose scores place them below the *Basic* achievement level. See each NAEP subject for a detailed description of what students should know and be able to do at Grade 4, 8, or 12 at the *Basic* level. The cut scores determining each level are available with these descriptions.

below *Basic* – scale scores that fall below the cut point for *Basic*.

central city – geographical term meaning the largest city of a Metropolitan Statistical Area (MSA). Central city is not synonymous with "inner city."

English Language Learner (ELL) – a term used to describe a student who is in the process of acquiring English language skills and knowledge. Some schools refer to these students using the term **limited English proficient (LEP)**.

gender – gender classification (male or female) is obtained from school records.

item – the basic scoreable part of an assessment; a test question.

National School Lunch Program (NSLP) - a federally assisted meal program that provides low-cost or free lunches to eligible students. It is sometimes referred to as the Free/Reduced-Price Lunch program. Free lunches are offered to those students whose family incomes are at or below 130 percent of the poverty level; reduced-price lunches are offered to those students whose family incomes are between 130 percent and 185 percent of the poverty level. Based on available school records, students are classified as either currently eligible or not currently eligible for the free/reduced-price lunch component of the Department of Agriculture's National School Lunch Program. The classification refers only to the school year in which the assessment was administered and is not based on eligibility in previous years. If school records are not available, the student is classified as "Information not available." If the school does not participate in the program, all students in that school are classified as "Information not available."

NAEP – the National Assessment of Educational Progress (NAEP), also known as "the Nation's Report Card," is the only nationally representative and continuing assessment of what students in the United States know and can do in various subject areas. Since 1969, assessments have been conducted periodically in mathematics, reading, science, writing, U.S. history, geography, civics, economics, world history, the arts, and other subjects.

national average – obtained by aggregating the averages from each state. Thus, the national average is inclusive of the student information gathered at the state level.

national sample – at Grades 4 and 8, the national sample is a subset of the combined sample of students assessed in each participating state. At Grade 12, the sample is chosen using a stratified two-stage design that involves sampling students from selected schools across the country.

No Child Left Behind Act of 2001 (NCLB) – legislation reauthorizing the Elementary and Secondary Education Act (ESEA) (Public Law 107-110 Title I Part A, section 1111). NCLB requires NAEP to conduct national and state assessments at least once every two years in reading and mathematics at Grades 4 and 8. NAEP may conduct a state assessment in reading and mathematics in Grade 12 at regularly scheduled intervals. To the extent that time and money allow, NAEP will be conducted in Grades 4, 8, and 12 at regularly scheduled intervals in additional subjects including writing, science, history, geography, civics, economics, foreign language, and arts. Any state that wishes to receive a Title 1 grant must include in the state plan it submits to the Secretary of Education an assurance that beginning in the 2002 – 2003 school year the state will participate in the biennial state-level National Assessment of Educational Progress (NAEP).

oversampling – deliberately sampling a portion of the population at a higher rate than the remainder of the population.

percent correct – the percent of a target population that would answer a particular item correctly.

performance data – any data coming from the assessment.

Proficient **–** one of the three NAEP **achievement levels**, representing 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 analytical skills appropriate to the subject matter. See each NAEP subject for a detailed description of what students should know and be able to do at Grade 4, 8, or 12 at the *Proficient* level. The cut scores determining each level are available with the descriptions.

racial/ethnic minority groups – two sources of race/ethnicity data are provided: one taken from school records and one based on students' self-identification. Race/ethnicity is presented for five mutually exclusive categories: White, African American, Hispanic, Asian/Pacific Islander, and American Indian/Alaskan Native (and, since 2003, “More Than One”).

reportable population – a group that has met the reporting requirements so that an estimate can be given for that group.

rural/small town – rural includes all places and areas with a population of less than 2,500 that are classified as rural by the Bureau of the Census. A small town is defined as places outside MSAs with a population of less than 25,000 but greater than or equal to 2,500.

sample – a subset of a population whose characteristics are studied to gain information about the entire population. NAEP assesses a representative sample of students each year, rather than the entire population of students.

scale score – a score, derived from student responses to NAEP assessment items that summarize the overall level of performance attained by a group of students. NAEP does not produce scale scores for individual students. When used in conjunction with interpretive aids, such as item maps, scale scores provide information about what a particular aggregate of students in the population knows and can do.

score scale – a scale used to describe what students know and can do. NAEP subject area scales typically range from 0–500 (reading, mathematics, history, and geography) or from 0–300 (science, writing, and civics).

significantly different, statistically significant – statistical tests are conducted to determine whether the changes or differences between two result numbers are statistically significant. The term "significant" does not imply a judgment about the absolute magnitude or educational relevance of changes in student performance. Rather, it is used to indicate that the observed changes are not likely to be associated with sampling and measurement error, but are statistically dependable population differences. NAEP uses widely accepted statistical standards in analyzing data. For instance, the Nation’s Report Card website discusses only findings that are statistically significant at the 0.05 level; however, some differences that are statistically significant appear small, particularly in recent assessment years, when the sample sizes have been larger.

student group – groups of the student population identified in terms of specific demographic or background characteristics. Some of the major student groups used for reporting NAEP results are those defined by students' gender, race or ethnicity, highest level of parental education, and type of school (public or nonpublic). Information gathered from NAEP background questionnaires also makes it possible to report results based on variables such as course-taking, home discussions of schoolwork, and television-viewing habits.

students with disabilities (SD) – a student with a disability may need specially designed instruction to meet his or her learning goals. A student with a disability will usually have an Individualized Education Program (IEP), which guides his or her special education instruction. The goal of NAEP is that students who are capable of participating meaningfully in the assessment are assessed, but some students with disabilities selected by NAEP may not be able to participate, even with accommodations.

Title I – a federally funded assistance program for economically and educationally disadvantaged students. Title I refers to a section of Public Law 107-110 (and predecessor, P. L. 103-382), "Improving The Academic Achievement Of The Disadvantaged." The Title I status of each participating student is indicated on the NAEP Assessment Administration form. In the Data Explorer, NAEP began reporting Title I by aggregated student participation with the 2000 assessments. The data were collected before then (for Chapter 1 and its successor, Title I) but are reported in a non-comparable statistic due to changing criteria for qualification as a Title I school. Currently, students classified as Title I include those in schools offering targeted assistance to low-income children and also schools with high rates of low-income children that use Title I funds to support school wide programs.

trend line – provides results on performance and how it has changed over time. Usually requires at least three assessment points.

urban fringe/large town – an urban fringe includes all densely settled places and areas within Metropolitan Statistical Areas (MSAs) that are classified as urban by the Bureau of the Census. A large town is defined as places outside MSAs with a population greater than or equal to 25,000.