## Alabama

Alabama administers the Stanford Achievement Test, Tenth Edition (SAT-10) in grades 3-8 in reading and mathematics. Scores are available for Black and economically disadvantaged students. Alabama does not use multiple achievement levels for reporting purposes on the SAT-9/SAT-10; instead, it reports exam results in percentiles. Before 2003, when the SAT-10 was implemented, students took the SAT-9. School-level assessment scores based on 10 or fewer students are suppressed.

## Summary of Comparisons

The results of comparisons between NAEP and state assessment results, which for 2003 are based on 106 schools in grade 4 and 100 schools in grade 8, are shown graphically on the following pages. A brief summary of the results follows: ${ }^{1}$

- Standards. There are not enough data to compare state standards to NAEP for grade 4 or grade 8 .
- Trends. There were no significant differences between grades 4 and 8 NAEP and state assessment gains in average percentile rank between 2000 and 2003.
- Gaps. Overall, the Black-White and poverty gaps in grades 4 and 8 in mathematics in 2003 were greater when measured by NAEP compared to the state assessment. There were insufficient data for comparing the NAEP and state assessment measurement of the Hispanic-White gap in mathematics in grades 4 and 8 in 2003.

[^0]Figure 1. Distribution of grades 4 and 8 NAEP mathematics achievement scores: 2003

Grade 4


Grade 8


NOTE: State does not use multiple achievement levels for reporting; it reports exam results in percentiles.
SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 2003 Mathematics Assessment: Full population estimates.

Table 1. School-level correlations between NAEP and state assessment of percentages of students achieving state's mathematics standards: 2003

|  | Grade 4 |  |  | Grade 8 |  |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: |
| Standard | Correlation | Standard error |  | Correlation | Standard error |
| Percentile Rank | 0.80 | 0.010 | 0.84 | 0.016 |  |

SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 2003 Mathematics Assessment: Full population estimates. The National Longitudinal School-Level State Assessment Score Database (NLSLSASD) 2004.

Table 2. Percentages of English language learners and students with disabilities identified, excluded, and accommodated in the NAEP mathematics assessments, by grade: 2000 and 2003

| Students | Grade 4 |  | Grade 8 |  |
| :---: | :---: | :---: | :---: | :---: |
|  | 2000 | 2003 | 2000 | 2003 |
| Identified | 12.8 | 11.6 | 14.1 | 13.6 |
| English language learner | 0.2 | 0.4 | 0.5 | 0.9 |
| Student with disability | 12.6 | 10.6 | 13.3 | 12.2 |
| Both | \# | 0.5 | 0.4 | 0.5 |
| Excluded | 3.2 | 1.6 | 6.4 | 2.2 |
| English language learner | \# | 0.1 | 0.1 | 0.3 |
| Student with disability | 3.2 | 1.5 | 6.0 | 1.8 |
| Both | \# | \# | 0.3 | 0.1 |
| Accommodated | 2.9 | 2.4 | 0.6 | 2.6 |
| English language learner | \# | \# | \# | \# |
| Student with disability | 2.9 | 2.2 | 0.5 | 2.4 |
| Both | \# | 0.1 | 0.1 | 0.1 |

\# Rounds to zero.
SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 2000 and 2003 Mathematics Assessments.

Figure 2. Comparison of NAEP and state assessment achievement changes in percent meeting mathematics standards, by grade: 2000 and 2003

## Grade 4



Grade 8


SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 2003 Mathematics Assessment: Full population estimates. The National Longitudinal School-Level State Assessment Score Database (NLSLSASD) 2004.

Figure 3. Comparison of NAEP and state assessment Black-White achievement gaps in percent meeting grade 4 mathematics standards: 2003

State


## Gap comparison



| Population | Average <br> NAEP-state gap <br> difference |
| :--- | ---: |
| Overall | $-7.5^{*}$ |
| Lower half | $-7.1^{*}$ |
| Upper half | $-8.6^{*}$ |
| Lower quarter | $-6.6^{*}$ |
| Middle half | $-5.7^{*}$ |
| Upper quarter | $-10.6^{*}$ |

* NAEP-State gap difference significantly different from zero ( $p<.05$ ).

SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 2003 Mathematics Assessment: Full population estimates. The National Longitudinal School-Level State Assessment Score Database (NLSLSASD) 2004.

Figure 4. Comparison of NAEP and state assessment Black-White achievement gaps in percent meeting grade 8 mathematics standards: 2003


Gap comparison


| Population | Average <br> NAEP-state gap <br> difference |
| :--- | ---: |
| Overall | $-8.1^{*}$ |
| Lower half | $-7.6^{*}$ |
| Upper half | $-7.3^{*}$ |
| Lower quarter | $-5.5^{*}$ |
| Middle half | $-10.8^{*}$ |
| Upper quarter | $-10.1^{*}$ |

[^1]Figure 5. Comparison of NAEP and state assessment poverty achievement gaps in percent meeting grade 4 mathematics standards: 2003

State


Gap comparison


NAEP


| Population | Average <br> NAEP-state gap <br> difference |
| :--- | :---: |
| Overall | $-4.2^{*}$ |
| Lower half | -3.0 |
| Upper half | $-6.1^{*}$ |
| Lower quarter | -0.5 |
| Middle half | -2.9 |
| Upper quarter | -5.2 |

* NAEP-State gap difference significantly different from zero ( $p<.05$ ).

NOTE: The poverty gap refers to the difference in achievement between economically disadvantaged students and other students, where disadvantaged students are defined as those 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), 2003 Mathematics Assessment: Full population estimates. The National Longitudinal School-Level State Assessment Score Database (NLSLSASD) 2004.

Figure 6. Comparison of NAEP and state assessment poverty achievement gaps in percent meeting grade 8 mathematics standards: 2003


## Gap comparison



| Population | Average <br> NAEP-state gap <br> difference |
| :--- | :---: |
| Overall | -3.6 |
| Lower half | $-7.3^{*}$ |
| Upper half | -0.2 |
| Lower quarter | -5.1 |
| Middle half | -5.3 * |
| Upper quarter | 1.1 |

* NAEP-State gap difference significantly different from zero ( $p<.05$ ).

NOTE: The poverty gap refers to the difference in achievement between economically disadvantaged students and other students, where disadvantaged students are defined as those 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), 2003 Mathematics Assessment: Full population estimates. The National Longitudinal School-Level State Assessment Score Database (NLSLSASD) 2004.

## Alaska

Alaska administers the Alaska Benchmark Examinations and the California Achievement Tests, Sixth Edition Survey (CAT/6). The Benchmark exams test students in grade 8 in reading and mathematics; the CAT/6 tests students in grade 4 in reading and mathematics. Scores are available for Black students in grade 4 , but there are too few students in this subgroup to provide a reliable comparison. Alaska uses four achievement levels for reporting purposes on the Benchmark exams: not proficient, below proficient, proficient, and advanced. However, 2003 data were available for only one level: proficient. The CAT/6 results are reported on only two levels: not proficient and proficient. Trend graphs are not included because Alaska did not participate in State NAEP prior to 2003. School-level assessment scores based on 5 or fewer students are suppressed.

## Summary of Comparisons

The results of comparisons between NAEP and state assessment results, which for 2003 are based on 110 schools in grade 4 and 57 schools in grade 8, are shown graphically on the following pages. A brief summary of the results follows: ${ }^{1}$

- Standards. The state's primary grade 4 mathematics performance standard (proficient) is between the NAEP basic and proficient levels. This is also true for grade 8.
- Trends. No comparisons were possible for grades 4 and 8 .
- Gaps. There were insufficient data for comparing the NAEP and state assessment measurement of the Black-White, Hispanic-White, and poverty gaps in mathematics in grades 4 and 8 in 2003.

[^2]Figure 1. Distribution of grades 4 and 8 NAEP mathematics achievement scores: 2003

Grade 4


Grade 8


SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 2003 Mathematics Assessment: Full population estimates. The National Longitudinal School-Level State Assessment Score Database (NLSLSASD) 2004.

Table 1. School-level correlations between NAEP and state assessment of percentages of students achieving state's mathematics standards: 2003

|  | Grade 4 |  |  | Grade 8 |  |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: |
|  | Correlation | Standard error |  | Correlation | Standard error |
| Sroficient | 0.78 | 0.023 | 0.86 | 0.028 |  |

SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 2003 Mathematics Assessment: Full population estimates. The National Longitudinal School-Level State Assessment Score Database (NLSLSASD) 2004.

Table 2. Percentages of English language learners and students with disabilities identified, excluded, and accommodated in the NAEP mathematics assessments, by grade: 2000 and 2003

| Students | Grade 4 |  | Grade 8 |  |
| :---: | :---: | :---: | :---: | :---: |
|  | 2000 | 2003 | 2000 | 2003 |
| Identified | - | 30.5 | - | 23.4 |
| English language learner | - | 14.1 | - | 8.6 |
| Student with disability | - | 12.8 | - | 12.1 |
| Both | - | 3.6 | - | 2.6 |
| Excluded | - | 1.0 | - | 1.0 |
| English language learner | - | 0.1 | - | 0.2 |
| Student with disability | - | 0.8 | - | 0.8 |
| Both | - | 0.1 | - | \# |
| Accommodated | - | 9.9 | - | 7.9 |
| English language learner | - | 0.9 | - | 0.2 |
| Student with disability | - | 7.0 | - | 6.9 |
| Both | - | 2.0 | - | 0.8 |

- Not available.
\# Rounds to zero.
SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 2000 and 2003 Mathematics Assessments.


## Arizona

The state administers Arizona's Instrument to Measure Standards (AIMS) in grades 3,5 , and 8 in reading and mathematics. Scores are available for Hispanic and Black students, but there are too few Black students to provide a reliable comparison. Arizona uses four achievement levels for reporting purposes: falls far below the standard, approaches the standard, meets the standard, and exceeds the standard. School-level assessment scores based on 10 or fewer students are suppressed.

## Summary of Comparisons

The results of comparisons between NAEP and state assessment results, which for 2003 are based on 99 schools in grade 5 and 105 schools in grade 8, are shown graphically on the following pages. A brief summary of the results follows: ${ }^{1}$

- Standards. The state's primary grade 5 mathematics performance standard (meeting) is between the NAEP basic and proficient levels. The state's primary grade 8 mathematics performance standard (meeting) is close to the NAEP proficient level.
- Trends. Between 2000 and 2003, the NAEP grade 4 gains in percent meeting are greater than the state assessment gains. There were no significant differences between grade 8 NAEP and state assessment gains in percent meeting between 2000 and 2003.
- Gaps. There were insufficient data for comparing the NAEP and state assessment measurement of the Black-White and poverty gaps in mathematics in grades 5 and 8 in 2003. Overall, the Hispanic-White gap in grades 5 and 8 in percent meeting the state's standard in mathematics in 2003 was greater when measured by NAEP compared to the state assessment.

[^3]Figure 1. Distribution of grades 4 and 8 NAEP mathematics achievement scores: 2003

Grade 4 (state 5th grade standards)


Grade 8


SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 2003 Mathematics Assessment: Full population estimates. The National Longitudinal School-Level State Assessment Score Database (NLSLSASD) 2004.

Table 1. School-level correlations between NAEP and state assessment of percentages of students achieving state's mathematics standards: 2003

|  | Grade 5 |  |  | Grade 8 |  |
| :--- | ---: | ---: | ---: | ---: | ---: |
| Standard | Correlation | Standard error |  | Correlation | Standard error |
| Approaching | 0.68 | 0.019 | 0.74 | 0.016 |  |
| Meeting | 0.77 | 0.012 | 0.69 | 0.014 |  |
| Exceeding | 0.78 | 0.018 | 0.58 | 0.063 |  |

SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 2003 Mathematics Assessment: Full population estimates. The National Longitudinal School-Level State Assessment Score Database (NLSLSASD) 2004.

Table 2. Percentages of English language learners and students with disabilities identified, excluded, and accommodated in the NAEP mathematics assessments, by grade: 2000 and 2003

|  | Grade $\mathbf{4}$ |  |  | Grade 8 |  |
| :--- | ---: | ---: | ---: | ---: | ---: |
| Students | $\mathbf{2 0 0 0}$ | $\mathbf{2 0 0 3}$ | $\mathbf{2 0 0 0}$ | $\mathbf{2 0 0 3}$ |  |
| Identified | 24.9 | 27.4 | 18.8 | 23.9 |  |
| English language learner | 14.3 | 15.2 |  | 8.2 | 12.8 |
| Student with disability | 9.1 | 7.9 | 9.0 | 8.2 |  |
| Both | 1.6 | 4.3 | 1.7 | 3.0 |  |
| Excluded | 4.3 | 4.6 | 3.0 | 3.6 |  |
| English language learner | 1.7 | 1.1 | 1.0 | 1.1 |  |
| Student with disability | 1.8 | 2.2 | 1.6 | 1.6 |  |
| Both | 0.8 | 1.3 | 0.4 | 0.9 |  |
| Accommodated | 8.9 | 4.5 | 4.5 | 5.6 |  |
| English language learner | 4.8 | 1.3 | 2.0 | 1.4 |  |
| Student with disability | 3.6 | 2.6 | 2.1 | 3.4 |  |
| Both | 0.5 | 0.7 | 0.3 | 0.8 |  |

SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 2000 and 2003 Mathematics Assessments.

Figure 2. Comparison of NAEP and state assessment achievement changes in percent meeting mathematics standards, by grade: 2000 and 2003

## Grade 4 (state assessment grade 5)

Grade 8


* NAEP and state assessment 2000-2003 changes are significantly different ( $p<.05$ ).

SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 2003 Mathematics Assessment: Full population estimates. The National Longitudinal School-Level State Assessment Score Database (NLSLSASD) 2004.

Table 3. Percentage meeting standards as reported by state: 2000 and 2003

| Level | 2000 | 2003 |
| :--- | :---: | :---: |
| Grade 5 | 35.0 | 49.0 |
| Grade 8 | 18.0 | 21.0 |

SOURCE: Arizona Department of Education retrieved from http://www.ade.state.az.us/profile/publicview/.

Figure 3. Comparison of NAEP and state assessment Hispanic-White achievement gaps in percent meeting grade 4 mathematics standards: 2003


## Gap comparison



Average

| Population | Average <br> NAEP-state gap <br> difference |
| :--- | ---: |
| Overall | $-12.1^{*}$ |
| Lower half | $-10.8^{*}$ |
| Upper half | $-14.2^{*}$ |
| Lower quarter | $-7.1^{*}$ |
| Middle half | $-15.1^{*}$ |
| Upper quarter | $-11.0^{*}$ |

* NAEP-State gap difference significantly different from zero ( $p<.05$ ).

NOTE: State assessment data used are for grade 5.
SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 2003 Mathematics Assessment: Full population estimates. The National Longitudinal School-Level State Assessment Score Database (NLSLSASD) 2004.

Figure 4. Comparison of NAEP and state assessment Hispanic-White achievement gaps in percent meeting grade 8 mathematics standards: 2003


Gap comparison


|  | Average <br> NAEP-state gap <br> difference |
| :--- | :---: |
| Population | $-5.4^{*}$ |
| Overall | -0.8 |
| Lower half | -7.6 |
| Upper half | -0.2 |
| Lower quarter | -2.5 |
| Middle half | -14.0 * |
| Upper quarter |  |

[^4]
## Arkansas

Through the Arkansas Comprehensive Testing, Assessment and Accountability Program (ACTAAP), the state administers Benchmark Exams in grades 4 and 8 in reading and mathematics. Scores are available for Black and economically disadvantaged students in grades 4 and 8 and for Hispanic students in grade 4, but there are too few Hispanic students to provide a reliable comparison. Arkansas uses four achievement levels for reporting purposes: below basic, basic, proficient, and advanced. However, due to data unavailability, the trend graphs are presented using only the proficient level. School-level assessment scores based on 9 or fewer students are suppressed.

## Summary of Comparisons

The results of comparisons between NAEP and state assessment results, which for 2003 are based on 117 schools in grade 4 and 101 schools in grade 8, are shown graphically on the following pages. A brief summary of the results follows: ${ }^{1}$

- Standards. The state's primary grade 4 mathematics performance standard (proficient) is between the NAEP basic and proficient levels. The state's primary grade 8 mathematics performance standard (proficient) is close to the NAEP proficient level.
- Trends. Between 2000 and 2003, the NAEP grades 4 and 8 gains in percent proficient are less than the state assessment gains.
- Gaps. Overall, the Black-White gap in grade 4 in percent meeting the state's standard in mathematics in 2003 was greater when measured by NAEP compared to the state assessment. Overall, there were no significant differences between NAEP and the state assessment in measurement of the Black-White gap in mathematics in grade 8 in 2003. There were insufficient data for comparing the NAEP and state assessment measurement of the Hispanic-White gap in mathematics in grades 4 and 8 in 2003. Overall, there were no significant differences between NAEP and the state assessment in measurement of the poverty gap in mathematics in grades 4 and 8 in 2003.

[^5]Figure 1. Distribution of grades 4 and 8 NAEP mathematics achievement scores: 2003

Grade 4


Grade 8


SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 2003 Mathematics Assessment: Full population estimates. The National Longitudinal School-Level State Assessment Score Database (NLSLSASD) 2004.

Table 1. School-level correlations between NAEP and state assessment of percentages of students achieving state's mathematics standards: 2003

|  | Grade 4 |  |  | Grade 8 |  |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: |
| Standard | Correlation | Standard error |  | Correlation | Standard error |
| Basic | 0.80 | 0.011 |  | 0.79 | 0.015 |
| Proficient | 0.81 | 0.009 | 0.77 | 0.025 |  |
| Advanced | 0.81 | 0.019 | 0.55 | 0.069 |  |

SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 2003 Mathematics Assessment: Full population estimates. The National Longitudinal School-Level State Assessment Score Database (NLSLSASD) 2004.

Table 2. Percentages of English language learners and students with disabilities identified, excluded, and accommodated in the NAEP mathematics assessments, by grade: 2000 and 2003

| Students | Grade 4 |  | Grade 8 |  |
| :---: | :---: | :---: | :---: | :---: |
|  | 2000 | 2003 | 2000 | 2003 |
| Identified | 13.6 | 16.7 | 13.6 | 16.7 |
| English language learner | 1.3 | 2.8 | 0.6 | 2.2 |
| Student with disability | 12.2 | 13.0 | 13.0 | 13.8 |
| Both | 0.2 | 0.9 | \# | 0.7 |
| Excluded | 4.0 | 2.2 | 2.2 | 1.9 |
| English language learner | 0.1 | 0.8 | 0.4 | 0.5 |
| Student with disability | 3.7 | 1.2 | 1.8 | 1.3 |
| Both | 0.2 | 0.2 | \# | 0.1 |
| Accommodated | 4.1 | 7.9 | 3.7 | 7.8 |
| English language learner | 0.2 | 0.3 | \# | 0.6 |
| Student with disability | 3.9 | 7.5 | 3.7 | 7.0 |
| Both | \# | 0.1 | 0.0 | 0.2 |

\# Rounds to zero.
SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 2000 and 2003 Mathematics Assessments.

Figure 2. Comparison of NAEP and state assessment achievement changes in percent meeting mathematics standards, by grade: 2000 and 2003

## Grade 4



Grade 8


* NAEP and state assessment 2000-2003 changes are significantly different ( $p<.05$ ).

SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 2003 Mathematics Assessment: Full population estimates. The National Longitudinal School-Level State Assessment Score Database (NLSLSASD) 2004.

Table 3. Percentage meeting standards as reported by state: 2000 and 2003

| Level | $\mathbf{2 0 0 0}$ | $\mathbf{2 0 0 3}$ |
| :--- | :---: | :---: |
| Grade 4 | 37.0 | 60.0 |
| Grade 8 | 14.0 | 22.0 |

SOURCE: Arkansas School Information Site retrieved from http://www.as-is.org/reportcard/.

Figure 3. Comparison of NAEP and state assessment Black-White achievement gaps in percent meeting grade 4 mathematics standards: 2003


## Gap comparison



Average

| Population | Average <br> NAEP-state gap <br> difference |
| :--- | ---: |
| Overall | $-8.5^{*}$ |
| Lower half | $-8.7^{*}$ |
| Upper half | $-8.4^{*}$ |
| Lower quarter | -6.5 |
| Middle half | $-10.1^{*}$ |
| Upper quarter | -8.2 |

* NAEP-State gap difference significantly different from zero (p<.05).

SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 2003 Mathematics Assessment: Full population estimates. The National Longitudinal School-Level State Assessment Score Database (NLSLSASD) 2004.

Figure 4. Comparison of NAEP and state assessment Black-White achievement gaps in percent meeting grade 8 mathematics standards: 2003


Gap comparison


| Population | Average <br> NAEP-state gap <br> difference |
| :--- | ---: |
| Overall | 0.9 |
| Lower half | 0.3 |
| Upper half | 0.8 |
| Lower quarter | 1.6 |
| Middle half | 0.3 |
| Upper quarter | -1.0 |

SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 2003 Mathematics Assessment: Full population estimates. The National Longitudinal School-Level State Assessment Score Database (NLSLSASD) 2004.

Figure 5. Comparison of NAEP and state assessment poverty achievement gaps in percent meeting grade 4 mathematics standards: 2003


## Gap comparison



| Population | Average <br> NAEP-state gap <br> difference |
| :--- | ---: |
| Overall | 0.5 |
| Lower half | 0.1 |
| Upper half | 0.3 |
| Lower quarter | 4.8 |
| Middle half | -1.2 |
| Upper quarter | -1.4 |

NOTE: The poverty gap refers to the difference in achievement between economically disadvantaged students and other students, where disadvantaged students are defined as those 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), 2003 Mathematics Assessment: Full population estimates. The National Longitudinal School-Level State Assessment Score Database (NLSLSASD) 2004.

Figure 6. Comparison of NAEP and state assessment poverty achievement gaps in percent meeting grade 8 mathematics standards: 2003


## Gap comparison



| Population | Average <br> NAEP-state gap <br> difference |
| :--- | ---: |
| Overall | 4.1 |
| Lower half | 2.9 |
| Upper half | 5.9 |
| Lower quarter | 3.3 |
| Middle half | 3.2 |
| Upper quarter | 5.9 |

NOTE: The poverty gap refers to the difference in achievement between economically disadvantaged students and other students, where disadvantaged students are defined as those 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), 2003 Mathematics Assessment: Full population estimates. The National Longitudinal School-Level State Assessment Score Database (NLSLSASD) 2004.

## California

Through the Standardized Testing and Reporting (STAR) Program, the state administers two exams: the California Standards Tests (CST) and the California Achievement Tests, Sixth Edition Survey (CAT/6). The CST tests students in grades 2-11 in English language arts and grades 2-7 in mathematics; the CAT/6 tests students in grades 2-11 in both reading and mathematics. Scores are available for Hispanic, Black, and economically disadvantaged students, but there are too few Black students to provide a reliable comparison. California uses five achievement levels for reporting purposes on the CST: far below basic, below basic, basic, proficient, and advanced. The CAT/6 results are reported as the percent at or above the 25 th, 50 th, and 75 th percentiles. Before 2003, when the CAT/6 was implemented, the Stanford Achievement Test, Ninth Edition (SAT-9) was California's norm-referenced test. Therefore, the scores from 2003 and from 2000 are not comparable and since CST data are not available for 2000, the report does not include trend graphs. School-level assessment scores based on 10 or fewer students are suppressed.

## Summary of Comparisons

The results of comparisons between NAEP and state assessment results, which for 2003 are based on 216 schools in grade 4 and 180 schools in grade 7, are shown graphically on the following pages. A brief summary of the results follows: ${ }^{1}$

- Standards. The state's primary grade 4 mathematics standard, proficient, is between the NAEP basic and proficient levels. This is also true for grade 7.
- Trends. No comparisons were possible for grades 4 and 7.
- Gaps. There were insufficient data for comparing the NAEP and state assessment measurement of the Black-White gap in grades 4 and 7 in 2003. Overall, the Hispanic-White and poverty gaps in grade 4 in percent proficient in 2003 were greater when measured by NAEP compared to the state assessment. Overall, there were no significant differences between NAEP and the state assessment in measurement of the Hispanic-White and poverty gaps in grade 7 in 2003.

[^6]Figure 1. Distribution of grades 4 and 8 NAEP mathematics achievement scores: 2003

Grade 4


Grade 8 (state 7th grade standards)


SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 2003 Mathematics Assessment: Full population estimates. The National Longitudinal School-Level State Assessment Score Database (NLSLSASD) 2004.

Table 1. School-level correlations between NAEP and state assessment of percentages of students achieving state's mathematics standards: 2003

|  | Grade 4 |  |  | Grade 7 |  |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: |
| Standard | Correlation | Standard error |  | Correlation | Standard error |
| Below Basic | 0.56 | 0.039 |  | 0.63 | 0.028 |
| Basic | 0.77 | 0.014 | 0.82 | 0.010 |  |
| Proficient | 0.84 | 0.009 |  | 0.88 | 0.011 |
| Advanced | 0.82 | 0.013 | 0.81 | 0.018 |  |

SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 2003 Mathematics Assessment: Full population estimates. The National Longitudinal School-Level State Assessment Score Database (NLSLSASD) 2004.

Table 2. Percentages of English language learners and students with disabilities identified, excluded, and accommodated in the NAEP mathematics assessments, by grade: 2000 and 2003

|  | Grade 4 |  |  | Grade 8 |  |
| :--- | ---: | ---: | ---: | ---: | ---: |
| Students | $\mathbf{2 0 0 0}$ | $\mathbf{2 0 0 3}$ | $\mathbf{2 0 0 0}$ | $\mathbf{2 0 0 3}$ |  |
| Identified | 33.0 | 38.4 | 26.6 | 27.3 |  |
| English language learner | 24.8 | 28.5 | 16.4 | 16.5 |  |
| Student with disability | 6.5 | 5.6 | 8.0 | 7.0 |  |
| Both | 1.8 | 4.3 | 2.2 | 3.8 |  |
| Excluded | 5.6 | 3.4 | 4.2 | 2.6 |  |
| English language learner | 2.3 | 1.5 | 1.3 | 1.2 |  |
| Student with disability | 2.5 | 1.0 | 2.3 | 0.7 |  |
| Both | 0.7 | 0.9 | 0.5 | 0.7 |  |
| Accommodated | 8.3 | 4.2 | 5.3 | 2.6 |  |
| English language learner | 7.0 | 2.1 | 2.8 | 0.3 |  |
| Student with disability | 1.0 | 1.2 | 1.7 | 1.5 |  |
| Both | 0.2 | 0.9 | 0.9 | 0.8 |  |

SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 2000 and 2003 Mathematics Assessments.

Figure 2. Comparison of NAEP and state assessment Hispanic-White achievement gaps in percent meeting grade 4 mathematics standards: 2003


## Gap comparison



| Population | Average <br> NAEP-state gap <br> difference |
| :--- | ---: |
| Overall | $-11.1^{*}$ |
| Lower half | $-14.7^{*}$ |
| Upper half | $-7.6^{*}$ |
| Lower quarter | $-13.0^{*}$ |
| Middle half | $-10.5^{*}$ |
| Upper quarter | $-8.8^{*}$ |

* NAEP-State gap difference significantly different from zero ( $p<.05$ ).

SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 2003 Mathematics Assessment: Full population estimates. The National Longitudinal School-Level State Assessment Score Database (NLSLSASD) 2004.

Figure 3. Comparison of NAEP and state assessment Hispanic-White achievement gaps in percent meeting grade 8 mathematics standards: 2003


Gap comparison


| Population | Average <br> NAEP-state gap <br> difference |
| :--- | ---: |
| Overall | -4.6 |
| Lower half | $-5.9 *$ |
| Upper half | -3.4 |
| Lower quarter | -5.1 |
| Middle half | -6.1 |
| Upper quarter | -1.8 |

* NAEP-State gap difference significantly different from zero ( $p<.05$ ).

NOTE: State assessment data used are for grade 7.
SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 2003 Mathematics Assessment: Full population estimates. The National Longitudinal School-Level State Assessment Score Database (NLSLSASD) 2004.

Figure 4. Comparison of NAEP and state assessment poverty achievement gaps in percent meeting grade 4 mathematics standards: 2003

State


## Gap comparison



NAEP


| Population | Average <br> NAEP-state gap <br> difference |
| :--- | :---: |
| Overall | $-6.7^{*}$ |
| Lower half | $-9.5^{*}$ |
| Upper half | -4.2 |
| Lower quarter | -8.7 |
| Middle half | $-8.3^{*}$ |
| Upper quarter | -3.6 |

* NAEP-State gap difference significantly different from zero ( $p<.05$ ).

NOTE: The poverty gap refers to the difference in achievement between economically disadvantaged students and other students, where disadvantaged students are defined as those 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), 2003 Mathematics Assessment: Full population estimates. The National Longitudinal School-Level State Assessment Score Database (NLSLSASD) 2004.

Figure 5. Comparison of NAEP and state assessment poverty achievement gaps in percent meeting grade 8 mathematics standards: 2003


Gap comparison


| Population | Average <br> NAEP-state gap <br> difference |
| :--- | ---: |
| Overall | -2.1 |
| Lower half | -2.8 |
| Upper half | -1.8 |
| Lower quarter | 1.5 |
| Middle half | -3.4 |
| Upper quarter | -1.5 |

NOTE: The poverty gap refers to the difference in achievement between economically disadvantaged students and other students, where disadvantaged students are defined as those eligible for free/reduced-price lunch. State assessment data used are for grade 7.
SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 2003 Mathematics Assessment: Full population estimates. The National Longitudinal School-Level State Assessment Score Database (NLSLSASD) 2004.

## Colorado

Through the Colorado Student Assessment Program (CSAP), the state administers exams in grades 4 and 8 in reading and grades 5 and 8 in mathematics. The scores available for this report do not include any breakdowns by race/ethnicity or poverty status. Colorado uses four achievement levels for reporting purposes: unsatisfactory, partially proficient, proficient, and advanced. Colorado did not participate in State NAEP prior to 2003; therefore, trend graphs are not included. School-level assessment scores based on 15 or fewer students are suppressed.

## Summary of Comparisons

The results of comparisons between NAEP and state assessment results, which for 2003 are based on 111 schools in grade 5 and 104 schools in grade 8, are shown graphically on the following pages. A brief summary of the results follows: ${ }^{1}$

- Standards. The state's primary grade 5 mathematics performance standard (partially proficient) is below the NAEP basic level. The state's primary grade 8 mathematics performance standard (partially proficient) is between the NAEP basic and proficient levels.
- Trends. No comparisons were possible for grades 5 and 8.
- Gaps. There were insufficient data for comparing the NAEP and state assessment measurement of the Black-White, Hispanic-White, and poverty gaps in mathematics in grades 5 and 8 in 2003.

[^7]Figure 1. Distribution of grades 4 and 8 NAEP mathematics achievement scores: 2003

Grade 4 (state 5th grade standards)


Grade 8


SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 2003 Mathematics Assessment: Full population estimates. The National Longitudinal School-Level State Assessment Score Database (NLSLSASD) 2004.

Table 1. School-level correlations between NAEP and state assessment of percentages of students achieving state's mathematics standards: 2003

|  | Grade 5 |  |  | Grade 8 |  |
| :--- | ---: | ---: | ---: | ---: | ---: |
| Standard | Correlation | Standard error |  | Correlation | Standard error |
| Partially Proficient | 0.79 | 0.013 | 0.87 | 0.017 |  |
| Proficient | 0.83 | 0.013 | 0.89 | 0.010 |  |
| Advanced | 0.74 | 0.016 | 0.80 | 0.017 |  |

SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 2003 Mathematics Assessment: Full population estimates. The National Longitudinal School-Level State Assessment Score Database (NLSLSASD) 2004.

Table 2. Percentages of English language learners and students with disabilities identified, excluded, and accommodated in the NAEP mathematics assessments, by grade: 2000 and 2003

| Students | Grade 4 |  | Grade 8 |  |
| :---: | :---: | :---: | :---: | :---: |
|  | 2000 | 2003 | 2000 | 2003 |
| Identified | - | 19.7 | - | 15.4 |
| English language learner | - | 7.6 | - | 3.7 |
| Student with disability | - | 10.4 | - | 10.7 |
| Both | - | 1.7 | - | 1.0 |
| Excluded | - | 2.3 | - | 1.9 |
| English language learner | - | 0.7 | - | 0.6 |
| Student with disability | - | 1.5 | - | 1.1 |
| Both | - | 0.1 | - | 0.2 |
| Accommodated | - | 10.8 | - | 8.1 |
| English language learner | - | 3.6 | - | 1.3 |
| Student with disability | - | 6.4 | - | 6.4 |
| Both | - | 0.9 | - | 0.5 |

- Not available.

SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 2000 and 2003 Mathematics Assessments.

## Connecticut

The state administers the Connecticut Mastery Test (CMT) in grades 4 and 8 in reading and mathematics. Scores are available for Hispanic, Black, and economically disadvantaged students. The CMT was administered from 19982002 using four achievement levels for reporting purposes: below basic, basic, proficient, and goal. Results for 2003 have been reported with one additional level: advanced. Because the data included for 2000 have only percent at or above goal, the trend graph does not include any other levels. School-level assessment scores based on 19 or fewer students are suppressed.

## Summary of Comparisons

The results of comparisons between NAEP and state assessment results, which for 2003 are based on 108 schools in grade 4 and 102 schools in grade 8, are shown graphically on the following pages. A brief summary of the results follows: ${ }^{1}$

- Standards. The state's primary grade 4 mathematics performance standard (goal) is between the NAEP basic and proficient levels. This is also true for grade 8 .
- Trends. Between 2000 and 2003, NAEP reported a gain in grades 4 and 8 in percent achieving performance standard (goal), which the state did not.
- Gaps. Overall, the Black-White and poverty gaps in grade 4 in percent meeting the state's standard in mathematics in 2003 were greater when measured by NAEP compared to the state assessment. Overall, there were no significant differences between NAEP and the state assessment in measurement of the Black-White and poverty gaps in mathematics in grade 8 in 2003. Overall, there were no significant differences between NAEP and the state assessment in measurement of the Hispanic-White gap in mathematics in grades 4 and 8 in 2003.

[^8]Figure 1. Distribution of grades 4 and 8 NAEP mathematics achievement scores: 2003

Grade 4


Grade 8


SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 2003 Mathematics Assessment: Full population estimates. The National Longitudinal School-Level State Assessment Score Database (NLSLSASD) 2004.

Table 1. School-level correlations between NAEP and state assessment of percentages of students achieving state's mathematics standards: 2003

|  | Grade 4 |  |  | Grade 8 |  |
| :--- | ---: | ---: | ---: | ---: | ---: |
| Standard | Correlation | Standard error |  | Correlation | Standard error |
| Basic | 0.79 | 0.022 |  | 0.79 | 0.029 |
| Proficient | 0.87 | 0.006 | 0.87 | 0.012 |  |
| Goal | 0.89 | 0.004 |  | 0.89 | 0.007 |
| Advanced | 0.74 | 0.008 | 0.86 | 0.005 |  |

SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 2003 Mathematics Assessment: Full population estimates. The National Longitudinal School-Level State Assessment Score Database (NLSLSASD) 2004.

Table 2. Percentages of English language learners and students with disabilities identified, excluded, and accommodated in the NAEP mathematics assessments, by grade: 2000 and 2003

| Students | Grade 4 |  | Grade 8 |  |
| :---: | :---: | :---: | :---: | :---: |
|  | 2000 | 2003 | 2000 | 2003 |
| Identified | 14.4 | 16.1 | 15.8 | 17.1 |
| English language learner | 2.9 | 3.3 | 2.1 | 2.7 |
| Student with disability | 11.0 | 11.9 | 13.3 | 13.6 |
| Both | 0.4 | 0.9 | 0.4 | 0.9 |
| Excluded | 4.7 | 4.0 | 6.0 | 3.8 |
| English language learner | 1.2 | 0.7 | 1.2 | 0.5 |
| Student with disability | 3.3 | 2.8 | 4.4 | 3.0 |
| Both | 0.2 | 0.5 | 0.4 | 0.3 |
| Accommodated | 4.2 | 7.5 | 3.8 | 7.8 |
| English language learner | 0.5 | 1.3 | 0.6 | 1.0 |
| Student with disability | 3.7 | 5.9 | 3.2 | 6.6 |
| Both | \# | 0.3 | \# | 0.2 |

\# Rounds to zero.
SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 2000 and 2003 Mathematics Assessments.

Figure 2. Comparison of NAEP and state assessment achievement changes in percent meeting mathematics standards, by grade: 2000 and 2003

## Grade 4



Grade 8


* NAEP and state assessment 2000-2003 changes are significantly different ( $p<.05$ ).

SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 2003 Mathematics Assessment: Full population estimates. The National Longitudinal School-Level State Assessment Score Database (NLSLSASD) 2004.

Table 3. Percentage meeting standards as reported by state: 2000 and 2003

| Level | $\mathbf{2 0 0 0}$ | $\mathbf{2 0 0 3}$ |
| :--- | :---: | :---: |
| Grade 4 | 60.2 | 60.4 |
| Grade 8 | 54.8 | 56.1 |

SOURCE: Connecticut State Department of Education retrieved from http://www.sde.ct.gov/sde/site/default.asp.

Figure 3. Comparison of NAEP and state assessment Black-White achievement gaps in percent meeting grade 4 mathematics standards: 2003


Gap comparison


* NAEP-State gap difference significantly different from zero ( $p<.05$ ).

SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 2003 Mathematics Assessment: Full population estimates. The National Longitudinal School-Level State Assessment Score Database (NLSLSASD) 2004.

Figure 4. Comparison of NAEP and state assessment Black-White achievement gaps in percent meeting grade 8 mathematics standards: 2003


Gap comparison


| Population | Average <br> NAEP-state gap <br> difference |
| :--- | ---: |
| Overall | 0.2 |
| Lower half | -1.6 |
| Upper half | 2.7 |
| Lower quarter | -6.1 |
| Middle half | 1.9 |
| Upper quarter | 1.6 |

SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 2003 Mathematics Assessment: Full population estimates. The National Longitudinal School-Level State Assessment Score Database (NLSLSASD) 2004.

Figure 5. Comparison of NAEP and state assessment Hispanic-White achievement gaps in percent meeting grade 4 mathematics standards: 2003

State


Gap comparison


Average

| Population | NAEP-state gap <br> difference |
| :--- | ---: |
| Overall | -5.4 |
| Lower half | -4.7 |
| Upper half | -6.7 |
| Lower quarter | -2.6 |
| Middle half | -6.6 |
| Upper quarter | -6.8 |

SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 2003 Mathematics Assessment: Full population estimates. The National Longitudinal School-Level State Assessment Score Database (NLSLSASD) 2004.

Figure 6. Comparison of NAEP and state assessment Hispanic-White achievement gaps in percent meeting grade 8 mathematics standards: 2003


Gap comparison


| Population | Average <br> NAEP-state gap <br> difference |
| :--- | ---: |
| Overall | 1.6 |
| Lower half | -0.7 |
| Upper half | 4.1 |
| Lower quarter | -2.3 |
| Middle half | 2.9 |
| Upper quarter | 6.4 |

SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 2003 Mathematics Assessment: Full population estimates. The National Longitudinal School-Level State Assessment Score Database (NLSLSASD) 2004.

Figure 7. Comparison of NAEP and state assessment poverty achievement gaps in percent meeting grade 4 mathematics standards: 2003


Gap comparison


NAEP


| Population | Average <br> NAEP-state gap <br> difference |
| :--- | :---: |
| Overall | $-5.5^{*}$ |
| Lower half | -4.2 |
| Upper half | $-6.4^{*}$ |
| Lower quarter | -1.4 |
| Middle half | $-8.1^{*}$ |
| Upper quarter | -3.3 |

* NAEP-State gap difference significantly different from zero ( $p<.05$ ).

NOTE: The poverty gap refers to the difference in achievement between economically disadvantaged students and other students, where disadvantaged students are defined as those 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), 2003 Mathematics Assessment: Full population estimates. The National Longitudinal School-Level State Assessment Score Database (NLSLSASD) 2004.

Figure 8. Comparison of NAEP and state assessment poverty achievement gaps in percent meeting grade 8 mathematics standards: 2003


## Gap comparison



| Population | Average <br> NAEP-state gap <br> difference |
| :--- | ---: |
| Overall | 0.6 |
| Lower half | 1.5 |
| Upper half | 1.0 |
| Lower quarter | -1.9 |
| Middle half | 3.0 |
| Upper quarter | -1.8 |

NOTE: The poverty gap refers to the difference in achievement between economically disadvantaged students and other students, where disadvantaged students are defined as those 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), 2003 Mathematics Assessment: Full population estimates. The National Longitudinal School-Level State Assessment Score Database (NLSLSASD) 2004.

## Delaware

Through the Delaware Student Testing Program (DSTP), the state administers exams in grades 3,5 , and 8 in reading and mathematics. Scores are available for Hispanic, Black, and economically disadvantaged students, but there are too few Hispanic students to provide a reliable comparison. Delaware uses five achievement levels for reporting purposes: well below the standard, below the standard, meets the standard, exceeds the standard, and distinguished performance. Scores from 2000 are not available for this report, so no direct comparisons could be made with scores from 2003; therefore, trend graphs are not included. School-level assessment scores based on 14 or fewer students are suppressed.

## Summary of Comparisons

The results of comparisons between NAEP and state assessment results, which for 2003 are based on 50 schools in grade 5 and 32 schools in grade 8, are shown graphically on the following pages. A brief summary of the results follows: ${ }^{1}$

- Standards. The state's primary grade 5 mathematics performance standard (meeting) is close to the NAEP basic level. The state's primary grade 8 mathematics performance standard (meeting) is between the NAEP basic and proficient levels.
- Trends. No comparisons were possible for grades 5 and 8.
- Gaps. Overall, there were no significant differences between NAEP and the state assessment in measurement of the Black-White and poverty gaps in mathematics in grades 5 and 8 in 2003. There were insufficient data for comparing the NAEP and state assessment measurement of the Hispanic-White gap in mathematics in grades 5 and 8 in 2003.

[^9]Figure 1. Distribution of grades 4 and 8 NAEP mathematics achievement scores: 2003

Grade 4 (state 5th grade standards)


## Grade 8



SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 2003 Mathematics Assessment: Full population estimates. The National Longitudinal School-Level State Assessment Score Database (NLSLSASD) 2004.

Table 1. School-level correlations between NAEP and state assessment of percentages of students achieving state's mathematics standards: 2003

|  | Grade 5 |  |  | Grade 8 |  |
| :--- | ---: | ---: | ---: | ---: | ---: |
| Standard | Correlation | Standard error |  | Correlation | Standard error |
| Below | 0.54 | 0.072 | 0.73 | 0.028 |  |
| Meeting | 0.58 | 0.035 | 0.79 | 0.041 |  |
| Exceeding | 0.60 | 0.047 | 0.81 | 0.038 |  |
| Distinguished | 0.55 | 0.062 | 0.79 | 0.046 |  |

SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 2003 Mathematics Assessment: Full population estimates. The National Longitudinal School-Level State Assessment Score Database (NLSLSASD) 2004.

Table 2. Percentages of English language learners and students with disabilities identified, excluded, and accommodated in the NAEP mathematics assessments, by grade: 2000 and 2003

| Students | Grade 4 |  | Grade 8 |  |
| :---: | :---: | :---: | :---: | :---: |
|  | 2000 | 2003 | 2000 | 2003 |
| Identified | - | 18.0 | - | 17.9 |
| English language learner | - | 2.2 | - | 1.4 |
| Student with disability | - | 15.0 | - | 15.4 |
| Both | - | 0.8 | - | 1.0 |
| Excluded | - | 6.9 | - | 9.1 |
| English language learner | - | 0.8 | - | 0.7 |
| Student with disability | - | 5.8 | - | 8.0 |
| Both | - | 0.3 | - | 0.4 |
| Accommodated | - | 7.4 | - | 5.6 |
| English language learner | - | 0.7 | - | 0.2 |
| Student with disability | - | 6.5 | - | 5.1 |
| Both | - | 0.3 | - | 0.4 |

- Not available.

SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 2000 and 2003 Mathematics Assessments.

Figure 2. Comparison of NAEP and state assessment Black-White achievement gaps in percent meeting grade 4 mathematics standards: 2003


## Gap comparison



Average

| Population | Average <br> NAEP-state gap <br> difference |
| :--- | :---: |
| Overall | -1.4 |
| Lower half | $-5.8^{*}$ |
| Upper half | 2.9 |
| Lower quarter | $-7.2^{*}$ |
| Middle half | -2.2 |
| Upper quarter | $5.6^{*}$ |

* NAEP-State gap difference significantly different from zero ( $p<.05$ ).

NOTE: State assessment data used are for grade 5.
SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 2003 Mathematics Assessment: Full population estimates. The National Longitudinal School-Level State Assessment Score Database (NLSLSASD) 2004.

Figure 3. Comparison of NAEP and state assessment Black-White achievement gaps in percent meeting grade 8 mathematics standards: 2003


Gap comparison


| Population | Average <br> NAEP-state gap <br> difference |
| :--- | ---: |
| Overall | -2.3 |
| Lower half | -3.4 |
| Upper half | -1.0 |
| Lower quarter | $-4.3^{*}$ |
| Middle half | -3.2 |
| Upper quarter | -0.5 |

[^10]Figure 4. Comparison of NAEP and state assessment poverty achievement gaps in percent meeting grade 4 mathematics standards: 2003


## Gap comparison



| Population | Average <br> NAEP-state gap <br> difference |
| :--- | ---: |
| Overall | 0.5 |
| Lower half | -2.7 |
| Upper half | 2.5 |
| Lower quarter | -1.3 |
| Middle half | -2.0 |
| Upper quarter | $9.2^{*}$ |

* NAEP-State gap difference significantly different from zero ( $p<05$ ).

NOTE: The poverty gap refers to the difference in achievement between economically disadvantaged students and other students, where disadvantaged students are defined as those eligible for free/reduced-price lunch. State assessment data used are for grade 5.
SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 2003 Mathematics Assessment: Full population estimates. The National Longitudinal School-Level State Assessment Score Database (NLSLSASD) 2004.

Figure 5. Comparison of NAEP and state assessment poverty achievement gaps in percent meeting grade 8 mathematics standards: 2003


Gap comparison


| Population | Average <br> NAEP-state gap <br> difference |
| :--- | :---: |
| Overall | 1.3 |
| Lower half | -3.0 |
| Upper half | $4.8^{*}$ |
| Lower quarter | -5.1 |
| Middle half | 1.9 |
| Upper quarter | $9.2^{*}$ |

* NAEP-State gap difference significantly different from zero ( $p<.05$ ).

NOTE: The poverty gap refers to the difference in achievement between economically disadvantaged students and other students, where disadvantaged students are defined as those 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), 2003 Mathematics Assessment: Full population estimates. The National Longitudinal School-Level State Assessment Score Database (NLSLSASD) 2004.

## District of Columbia

The District of Columbia administers the Stanford Achievement Test, Ninth Edition (SAT-9) in reading and mathematics in grades 3-11. Scores are available for economically disadvantaged students. DC uses four performance levels: below basic, basic, proficient, and advanced. Direct comparisons cannot be made between the data from 2000 and the data from 2003 because scores from 2000 are for different grades than are those from 2003; therefore, trend graphs are not included. School-level assessment scores based on 9 or fewer students are suppressed.

## Summary of Comparisons

The results of comparisons between NAEP and state assessment results, which for 2003 are based on 99 schools in grade 4 and 26 schools in grade 8, are shown graphically on the following pages. A brief summary of the results follows: ${ }^{1}$

- Standards. The state's primary grade 4 mathematics performance standard (proficient) is between the NAEP basic and proficient levels. This is also true for grade 8.
- Trends. No comparisons were possible for grades 4 and 8 .
- Gaps. There were insufficient data for comparing the NAEP and state assessment measurement of the Black-White and Hispanic-White gaps in mathematics in grades 4 and 8 in 2003. Overall, the poverty gap in grade 4 in percent meeting the state's standard in mathematics in 2003 was greater when measured by NAEP compared to the state assessment. Overall, there were no significant differences between NAEP and the state assessment in measurement of the poverty gap in mathematics in grade 8 in 2003.

[^11]Figure 1. Distribution of grades 4 and 8 NAEP mathematics achievement scores: 2003

Grade 4


Grade 8


SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 2003 Mathematics Assessment: Full population estimates. The National Longitudinal School-Level State Assessment Score Database (NLSLSASD) 2004.

Table 1. School-level correlations between NAEP and state assessment of percentages of students achieving state's mathematics standards: 2003

|  | Grade 4 |  |  | Grade 8 |  |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: |
| Standard | Correlation | Standard error |  | Correlation | Standard error |
| Basic | 0.69 | 0.017 |  | 0.90 | 0.014 |
| Proficient | 0.69 | 0.003 | 0.97 | 0.008 |  |

SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 2003 Mathematics Assessment: Full population estimates. The National Longitudinal School-Level State Assessment Score Database (NLSLSASD) 2004.

Table 2. Percentages of English language learners and students with disabilities identified, excluded, and accommodated in the NAEP mathematics assessments, by grade: 2000 and 2003

|  | Grade $\mathbf{4}$ |  |  | Grade 8 |  |
| :--- | ---: | ---: | ---: | ---: | ---: |
| Students | $\mathbf{2 0 0 0}$ | $\mathbf{2 0 0 3}$ | $\mathbf{2 0 0 0}$ | $\mathbf{2 0 0 3}$ |  |
| Identified | 19.3 | 18.4 | 15.2 | 19.8 |  |
| English language learner | 6.0 | 5.0 |  | 4.0 | 4.0 |
| Student with disability | 13.2 | 11.7 | 10.9 | 14.6 |  |
| Both | 0.2 | 1.6 | 0.3 | 1.1 |  |
| Excluded | 5.1 | 4.4 | 6.3 | 6.0 |  |
| English language learner | 1.9 | 0.7 | 1.7 | 0.9 |  |
| Student with disability | 3.3 | 3.1 | 4.4 | 4.6 |  |
| Both | $\#$ | 0.7 | 0.2 | 0.5 |  |
| Accommodated | 7.0 | 9.8 | 5.9 | 9.0 |  |
| English language learner | 2.3 | 2.6 | 1.5 | 1.4 |  |
| Student with disability | 4.6 | 6.6 | 4.2 | 7.2 |  |
| Both | 0.1 | 0.7 | 0.2 | 0.4 |  |

\# Rounds to zero.
SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 2000 and 2003 Mathematics Assessments.

Figure 2. Comparison of NAEP and state assessment poverty achievement gaps in percent meeting grade 4 mathematics standards: 2003


## Gap comparison



Average

| Population | Average <br> NAEP-state gap <br> difference |
| :--- | ---: |
| Overall | $-15.8^{*}$ |
| Lower half | $-7.9^{*}$ |
| Upper half | $-26.4^{*}$ |
| Lower quarter | -0.4 |
| Middle half | $-12.9^{*}$ |
| Upper quarter | $-35.4^{*}$ |

* NAEP-State gap difference significantly different from zero ( $p<.05$ ).

NOTE: The poverty gap refers to the difference in achievement between economically disadvantaged students and other students, where disadvantaged students are defined as those 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), 2003 Mathematics Assessment: Full population estimates. The National Longitudinal School-Level State Assessment Score Database (NLSLSASD) 2004.

Figure 3. Comparison of NAEP and state assessment poverty achievement gaps in percent meeting grade 8 mathematics standards: 2003


Gap comparison


|  | Average <br> NAEP-state gap <br> difference |
| :--- | ---: |
| Population | -1.3 |
| Overall | -0.3 |
| Lower half | -3.1 |
| Upper half | 0.2 |
| Lower quarter | -1.6 |
| Middle half | $-7.4^{*}$ |
| Upper quarter |  |

* NAEP-State gap difference significantly different from zero (p<.05).

NOTE: The poverty gap refers to the difference in achievement between economically disadvantaged students and other students, where disadvantaged students are defined as those 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), 2003 Mathematics Assessment: Full population estimates. The National Longitudinal School-Level State Assessment Score Database (NLSLSASD) 2004.

## Florida

The state administers the Florida Comprehensive Assessment Test (FCAT) in grades 3-10 in reading and mathematics. Scores are available for Hispanic, Black, and economically disadvantaged students. Florida uses five achievement levels for reporting purposes: Level 1 (little success), Level 2 (limited success), Level 3 (partial success), Level 4 (some success), and Level 5 (success). Scores from 2000 are not available for this report, so no direct comparisons could be made with scores from 2003; therefore, trend graphs are not included. School-level assessment scores based on 9 or fewer students are suppressed.

## Summary of Comparisons

The results of comparisons between NAEP and state assessment results, which for 2003 are based on 103 schools in grade 4 and 96 schools in grade 8, are shown graphically on the following pages. A brief summary of the results follows: ${ }^{1}$

- Standards. The state's primary grade 4 mathematics performance standard ((3) partial success) is between the NAEP basic and proficient levels. This is also true for grade 8.
- Trends. No comparisons were possible for grades 4 and 8 .
- Gaps. Overall, the Black-White gap in grades 4 and 8 in percent meeting the state's standard in mathematics in 2003 was greater when measured by NAEP compared to the state assessment. Overall, there were no significant differences between NAEP and the state assessment in measurement of the Hispanic-White gap in mathematics in grade 4 in 2003. Overall, the Hispanic-White gap in grade 8 in percent meeting the state's standard in mathematics in 2003 was greater when measured by NAEP compared to the state assessment. Overall, there were no significant differences between NAEP and the state assessment in measurement of the poverty gap in mathematics in grades 4 and 8 in 2003.

[^12]Figure 1. Distribution of grades 4 and 8 NAEP mathematics achievement scores: 2003

Grade 4


Grade 8


SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 2003 Mathematics Assessment: Full population estimates. The National Longitudinal School-Level State Assessment Score Database (NLSLSASD) 2004.

Table 1. School-level correlations between NAEP and state assessment of percentages of students achieving state's mathematics standards: 2003

|  | Grade 4 |  |  | Grade 8 |  |
| :--- | ---: | ---: | ---: | ---: | ---: |
| Standard | Correlation | Standard error |  | Correlation | Standard error |
| (2) Limited Success | 0.80 | 0.009 |  | 0.82 | 0.011 |
| (3) Partial Success | 0.89 | 0.012 | 0.86 | 0.018 |  |
| (4) Some Success | 0.86 | 0.022 |  | 0.78 | 0.020 |
| (5) Success | 0.73 | 0.037 |  | 0.76 | 0.041 |

SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 2003 Mathematics Assessment: Full population estimates. The National Longitudinal School-Level State Assessment Score Database (NLSLSASD) 2004.

Table 2. Percentages of English language learners and students with disabilities identified, excluded, and accommodated in the NAEP mathematics assessments, by grade: 2000 and 2003

| Students | Grade 4 |  | Grade 8 |  |
| :---: | :---: | :---: | :---: | :---: |
|  | 2000 | 2003 | 2000 | 2003 |
| Identified | - | 26.3 | - | 19.2 |
| English language learner | - | 7.9 | - | 5.2 |
| Student with disability | - | 15.3 | - | 12.2 |
| Both | - | 3.1 | - | 1.7 |
| Excluded | - | 3.3 | - | 3.0 |
| English language learner | - | 1.2 | - | 1.1 |
| Student with disability | - | 1.5 | - | 1.5 |
| Both | - | 0.7 | - | 0.4 |
| Accommodated | - | 14.7 | - | 11.3 |
| English language learner | - | 2.2 | - | 2.0 |
| Student with disability | - | 10.6 | - | 8.6 |
| Both | - | 1.9 | - | 0.7 |

- Not available.

SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 2000 and 2003 Mathematics Assessments.

Figure 2. Comparison of NAEP and state assessment Black-White achievement gaps in percent meeting grade 4 mathematics standards: 2003

State



## Gap comparison



Average

| Population | NAEP-state gap <br> difference |
| :--- | ---: |
| Overall | $-8.2^{*}$ |
| Lower half | $-8.5^{*}$ |
| Upper half | $-7.5^{*}$ |
| Lower quarter | $-9.8^{*}$ |
| Middle half | $-6.9^{*}$ |
| Upper quarter | -4.8 |

* NAEP-State gap difference significantly different from zero ( $p<.05$ ).

SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 2003 Mathematics Assessment: Full population estimates. The National Longitudinal School-Level State Assessment Score Database (NLSLSASD) 2004.

Figure 3. Comparison of NAEP and state assessment Black-White achievement gaps in percent meeting grade 8 mathematics standards: 2003


Gap comparison


|  | Average <br> NAEP-state gap <br> difference |
| :--- | :---: |
| Population | $-6.8^{*}$ |
| Overall | $-8.4^{*}$ |
| Lower half | -5.3 |
| Upper half | -5.4 |
| Lower quarter | $-11.2^{*}$ |
| Middle half | -0.5 |
| Upper quarter |  |

[^13]Figure 4. Comparison of NAEP and state assessment Hispanic-White achievement gaps in percent meeting grade 4 mathematics standards: 2003

State


Gap comparison


NAEP


Average

| Population | NAEP-state gap <br> difference |
| :--- | ---: |
| Overall | -3.8 |
| Lower half | -5.1 |
| Upper half | -3.1 |
| Lower quarter | -2.7 |
| Middle half | -6.6 |
| Upper quarter | 1.6 |

SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 2003 Mathematics Assessment: Full population estimates. The National Longitudinal School-Level State Assessment Score Database (NLSLSASD) 2004.

Figure 5. Comparison of NAEP and state assessment Hispanic-White achievement gaps in percent meeting grade 8 mathematics standards: 2003


Gap comparison


| Population | Average <br> NAEP-state gap <br> difference |
| :--- | :---: |
| Overall | $-6.3^{*}$ |
| Lower half | $-11.2^{*}$ |
| Upper half | -2.2 |
| Lower quarter | $-11.5^{*}$ |
| Middle half | -5.8 |
| Upper quarter | 2.9 |

[^14]Figure 6. Comparison of NAEP and state assessment poverty achievement gaps in percent meeting grade 4 mathematics standards: 2003

State


Gap comparison


NAEP


| Population | Average <br> NAEP-state gap <br> difference |
| :--- | :---: |
| Overall | -3.4 |
| Lower half | -6.1 * |
| Upper half | -0.7 |
| Lower quarter | $-5.9 *$ |
| Middle half | -3.4 |
| Upper quarter | 1.1 |

* NAEP-State gap difference significantly different from zero ( $p<.05$ ).

NOTE: The poverty gap refers to the difference in achievement between economically disadvantaged students and other students, where disadvantaged students are defined as those 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), 2003 Mathematics Assessment: Full population estimates. The National Longitudinal School-Level State Assessment Score Database (NLSLSASD) 2004.

Figure 7. Comparison of NAEP and state assessment poverty achievement gaps in percent meeting grade 8 mathematics standards: 2003

State


Gap comparison


NAEP


Average NAEP-state gap
Population difference

| Overall | -1.7 |
| :--- | :---: |
| Lower half | -4.1 |
| Upper half | 1.1 |
| Lower quarter | -3.6 |
| Middle half | -4.9 |
| Upper quarter | 6.6 |

NOTE: The poverty gap refers to the difference in achievement between economically disadvantaged students and other students, where disadvantaged students are defined as those 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), 2003 Mathematics Assessment: Full population estimates. The National Longitudinal School-Level State Assessment Score Database (NLSLSASD) 2004.

## Georgia

Georgia administers the Criterion-Referenced Competency Test (CRCT) in grades $1-8$ in reading and mathematics. Scores are available for Hispanic, Black, and economically disadvantaged students, but there are too few Hispanic students to provide a reliable comparison. Georgia uses three performance levels for reporting purposes: does not meet, meets, and exceeds the standard. Schoollevel assessment scores based on 9 or fewer students are suppressed.

## Summary of Comparisons

The results of comparisons between NAEP and state assessment results, which for 2003 are based on 147 schools in grade 4 and 113 schools in grade 8, are shown graphically on the following pages. A brief summary of the results follows: ${ }^{1}$

- Standards. The state's primary grade 4 mathematics performance standard (meeting) is below the NAEP basic level. This is also true for grade 8.
- Trends. There were no significant differences between grade 4 NAEP and state assessment gains in percent meeting between 2000 and 2003. Between 2000 and 2003, the NAEP grade 8 gains in percent meeting are less than the state assessment gains.
- Gaps. Overall, the Black-White gap in grades 4 and 8 in percent meeting the state's standard in mathematics in 2003 was greater when measured by NAEP compared to the state assessment. There were insufficient data for comparing the NAEP and state assessment measurement of the Hispanic-White gap in mathematics in grades 4 and 8 in 2003. Overall, there were no significant differences between NAEP and the state assessment in measurement of the poverty gap in mathematics in grade 4 in 2003. Overall, the poverty gap in grade 8 in percent meeting the state's standard in mathematics in 2003 was greater when measured by NAEP compared to the state assessment.

[^15]Figure 1. Distribution of grades 4 and 8 NAEP mathematics achievement scores: 2003

Grade 4


Grade 8


SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 2003 Mathematics Assessment: Full population estimates. The National Longitudinal School-Level State Assessment Score Database (NLSLSASD) 2004.

Table 1. School-level correlations between NAEP and state assessment of percentages of students achieving state's mathematics standards: 2003

|  | Grade 4 |  |  | Grade 8 |  |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: |
| Standard | Correlation | Standard error |  | Correlation | Standard error |
| Meeting | 0.83 | 0.017 |  | 0.80 | 0.012 |
| Exceeding | 0.85 | 0.008 |  | 0.78 | 0.018 |

SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 2003 Mathematics Assessment: Full population estimates. The National Longitudinal School-Level State Assessment Score Database (NLSLSASD) 2004.

Table 2. Percentages of English language learners and students with disabilities identified, excluded, and accommodated in the NAEP mathematics assessments, by grade: 2000 and 2003

|  | Grade $\mathbf{4}$ |  |  | Grade 8 |  |
| :--- | ---: | ---: | ---: | ---: | ---: |
| Students | $\mathbf{2 0 0 0}$ | $\mathbf{2 0 0 3}$ | $\mathbf{2 0 0 0}$ | $\mathbf{2 0 0 3}$ |  |
| Identified | 10.9 | 15.7 | 10.6 | 12.8 |  |
| English language learner | 1.5 | 3.3 |  | 1.4 | 1.6 |
| Student with disability | 9.4 | 11.4 | 9.0 | 10.4 |  |
| Both | $\#$ | 1.0 | 0.3 | 0.8 |  |
| Excluded | 3.0 | 2.1 | 4.8 | 2.0 |  |
| English language learner | 0.5 | 0.5 | 1.2 | 0.3 |  |
| Student with disability | 2.5 | 1.5 | 3.4 | 1.4 |  |
| Both | $\#$ | 0.1 | 0.3 | 0.3 |  |
| Accommodated | 3.9 | 7.3 | 2.6 | $\#$ | 6.0 |
| English language learner | 0.2 | 0.8 | 2.6 | 0.3 |  |
| Student with disability | 3.7 | 6.2 | 5 | 5.4 |  |
| Both | $\#$ | 0.3 |  | 0.3 |  |

\# Rounds to zero.
SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 2000 and 2003 Mathematics Assessments.

Figure 2. Comparison of NAEP and state assessment achievement changes in percent meeting mathematics standards, by grade: 2000 and 2003

## Grade 4



Grade 8


* NAEP and state assessment 2000-2003 changes are significantly different ( $p<.05$ ).

SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 2003 Mathematics Assessment: Full population estimates. The National Longitudinal School-Level State Assessment Score Database (NLSLSASD) 2004.

Table 3. Percentage meeting standards as reported by state: 2000 and 2003

| Level | 2000 | $\mathbf{2 0 0 3}$ |
| :--- | :---: | :---: |
| Grade 4 | 62.0 | 74.0 |
| Grade 8 | 54.0 | 67.0 |

SOURCE: Georgia Department of Education site retrieved from http://public.doe.k12.ga.us/.

Figure 3. Comparison of NAEP and state assessment Black-White achievement gaps in percent meeting grade 4 mathematics standards: 2003
State



## Gap comparison



Average

| Population | NAEP-state gap <br> difference |
| :--- | ---: |
| Overall | $-8.4^{*}$ |
| Lower half | $-9.7^{*}$ |
| Upper half | $-7.3^{*}$ |
| Lower quarter | -10.4 |
| Middle half | $-9.3^{*}$ |
| Upper quarter | $-7.2^{*}$ |

* NAEP-State gap difference significantly different from zero ( $p<.05$ ).

SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 2003 Mathematics Assessment: Full population estimates. The National Longitudinal School-Level State Assessment Score Database (NLSLSASD) 2004.

Figure 4. Comparison of NAEP and state assessment Black-White achievement gaps in percent meeting grade 8 mathematics standards: 2003


## Gap comparison



| Population | Average <br> NAEP-state gap <br> difference |
| :--- | ---: |
| Overall | $-13.1^{*}$ |
| Lower half | $-17.4^{*}$ |
| Upper half | $-9.3^{*}$ |
| Lower quarter | $-19.8^{*}$ |
| Middle half | $-14.3^{*}$ |
| Upper quarter | -4.4 |

[^16]Figure 5. Comparison of NAEP and state assessment poverty achievement gaps in percent meeting grade 4 mathematics standards: 2003
State



## Gap comparison



Average

| Population | NAEP-state gap <br> difference |
| :--- | ---: |
| Overall | -3.9 |
| Lower half | -4.0 |
| Upper half | -3.8 |
| Lower quarter | -3.6 |
| Middle half | -4.2 |
| Upper quarter | -2.3 |

NOTE: The poverty gap refers to the difference in achievement between economically disadvantaged students and other students, where disadvantaged students are defined as those 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), 2003 Mathematics Assessment: Full population estimates. The National Longitudinal School-Level State Assessment Score Database (NLSLSASD) 2004.

Figure 6. Comparison of NAEP and state assessment poverty achievement gaps in percent meeting grade 8 mathematics standards: 2003


## Gap comparison



| Population | Average <br> NAEP-state gap <br> difference |
| :--- | :---: |
| Overall | $-7.5^{*}$ |
| Lower half | $-10.6^{*}$ |
| Upper half | -4.7 |
| Lower quarter | $-11.1^{*}$ |
| Middle half | $-9.2^{*}$ |
| Upper quarter | -1.2 |

* NAEP-State gap difference significantly different from zero ( $p<.05$ )

NOTE: The poverty gap refers to the difference in achievement between economically disadvantaged students and other students, where disadvantaged students are defined as those 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), 2003 Mathematics Assessment: Full population estimates. The National Longitudinal School-Level State Assessment Score Database (NLSLSASD) 2004.

## Hawaii

The state administers the Hawaii Content and Performance Standards II (HCPS-II) exam and the Stanford Achievement Test, Ninth Edition (SAT9). Both exams test students in grades 3,5 , and 8 in reading and mathematics. Scores are available for Hispanic students for grade 8 and for economically disadvantaged students for grades 5 and 8, but there are too few Hispanic students to provide a reliable comparison. Hawaii uses four achievement levels for reporting purposes on the HCPS-II: well below, approaches, meets, and exceeds the standard. The achievement levels used for reporting purposes on the SAT-9 are percent at or above stanines 4,5 , and 7 . SAT-9 results are used for trend graphs because the SAT-9 kept the same performance levels every year, while the HCPS-II set new standards in 2003. School-level assessment scores based on 9 or fewer students are suppressed.

## Summary of Comparisons

The results of comparisons between NAEP and state assessment results, which for 2003 are based on 107 schools in grade 5 and 54 schools in grade 8, are shown graphically on the following pages. A brief summary of the results follows: ${ }^{1}$

- Standards. The state's primary grade 5 mathematics performance standard (meeting) is close to the NAEP proficient level. This is also true for grade 8.
- Trends. Between 2000 and 2003, the NAEP grade 4 gains in percent at or above stanine 5 are greater than the state assessment gains. Between 2000 and 2003, the state assessment declines in grade 8 in percent stanine 5 are greater than NAEP's.
- Gaps. There were insufficient data for comparing the NAEP and state assessment measurement of the Black-White and Hispanic-White gaps in mathematics in grades 5 and 8 in 2003. Overall, the poverty gap in grades 5 and 8 in mathematics in 2003 was greater when measured by NAEP compared to the state assessment.

[^17]Figure 1. Distribution of grades 4 and 8 NAEP mathematics achievement scores: 2003

Grade 4 (state 5th grade standards)


Grade 8


SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 2003 Mathematics Assessment: Full population estimates. The National Longitudinal School-Level State Assessment Score Database (NLSLSASD) 2004.

Table 1. School-level correlations between NAEP and state assessment of percentages of students achieving state's mathematics standards: 2003

|  | Grade 5 |  |  | Grade 8 |  |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: |
| Standard | Correlation | Standard error |  | Correlation | Standard error |
| Approaching | 0.67 | 0.019 |  | 0.79 | 0.037 |
| Meeting | 0.78 | 0.010 |  | 0.83 | 0.017 |
| Exceeding | 0.45 | 0.083 |  | 0.31 | 0.120 |

SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 2003 Mathematics Assessment: Full population estimates. The National Longitudinal School-Level State Assessment Score Database (NLSLSASD) 2004.

Table 2. Percentages of English language learners and students with disabilities identified, excluded, and accommodated in the NAEP mathematics assessments, by grade: 2000 and 2003

|  | Grade 4 |  |  | Grade 8 |  |
| :--- | ---: | ---: | ---: | ---: | ---: |
| Students | $\mathbf{2 0 0 0}$ | $\mathbf{2 0 0 3}$ | $\mathbf{2 0 0 0}$ | $\mathbf{2 0 0 3}$ |  |
| Identified | 19.4 | 16.6 | 20.3 | 20.3 |  |
| English language learner | 6.1 | 5.3 |  | 5.0 | 4.8 |
| Student with disability | 11.9 | 9.9 | 14.4 | 14.2 |  |
| Both | 1.4 | 1.3 | 0.9 | 1.3 |  |
| Excluded | 8.6 | 3.1 | 5.3 | 3.7 |  |
| English language learner | 2.5 | 1.3 | 1.2 | 1.0 |  |
| Student with disability | 5.3 | 1.3 | 3.8 | 2.2 |  |
| Both | 0.8 | 0.4 | 0.3 | 0.5 |  |
| Accommodated | 2.7 | 8.2 | 2.0 | 8.8 |  |
| English language learner | 0.2 | 1.7 | 0.3 | 1.3 |  |
| Student with disability | 2.2 | 5.9 | 1.7 | 7.2 |  |
| Both | 0.3 | 0.6 |  | $\#$ | 0.3 |

\# Rounds to zero.
SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 2000 and 2003 Mathematics Assessments.

Figure 2. Comparison of NAEP and state assessment achievement changes in percent meeting mathematics standards, by grade: 2000 and 2003

## Grade 4 (state assessment grade 5)



Grade 8


* NAEP and state assessment 2000-2003 changes are significantly different ( $p<.05$ ).

SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 2003 Mathematics Assessment: Full population estimates. The National Longitudinal School-Level State Assessment Score Database (NLSLSASD) 2004.

Figure 3. Comparison of NAEP and state assessment poverty achievement gaps in percent meeting grade 4 mathematics standards: 2003

State


Gap comparison


NAEP


| Population | Average <br> NAEP-state gap <br> difference |
| :--- | ---: |
| Overall | $-5.7^{*}$ |
| Lower half | $-5.1^{*}$ |
| Upper half | $-5.9^{*}$ |
| Lower quarter | -3.3 |
| Middle half | $-6.9^{*}$ |
| Upper quarter | -5.0 |

* NAEP-State gap difference significantly different from zero ( $p<.05$ ).

NOTE: The poverty gap refers to the difference in achievement between economically disadvantaged students and other students, where disadvantaged students are defined as those eligible for free/reduced-price lunch. State assessment data used are for grade 5.
SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 2003 Mathematics Assessment: Full population estimates. The National Longitudinal School-Level State Assessment Score Database (NLSLSASD) 2004.

Figure 4. Comparison of NAEP and state assessment poverty achievement gaps in percent meeting grade 8 mathematics standards: 2003


## Gap comparison



| Population | Average <br> NAEP-state gap <br> difference |
| :--- | ---: |
| Overall | $-4.6^{*}$ |
| Lower half | $-4.5^{*}$ |
| Upper half | $-5.0^{*}$ |
| Lower quarter | -2.9 |
| Middle half | $-5.3^{*}$ |
| Upper quarter | $-5.7^{*}$ |

* NAEP-State gap difference significantly different from zero (p<.05).

NOTE: The poverty gap refers to the difference in achievement between economically disadvantaged students and other students, where disadvantaged students are defined as those 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), 2003 Mathematics Assessment: Full population estimates. The National Longitudinal School-Level State Assessment Score Database (NLSLSASD) 2004.


[^0]:    1. All statements of differences are based on statistical tests at the $5 \%$ significance level. However, these results must be considered in the context of the available data. NAEP and state assessments may employ different test items, testing accommodations, and scoring methods; and they may involve different students in each school, at different times of the year, with different motivational characteristics. At the present time, in spite of controlling for effects of school sampling, differences in standards, and NAEP exclusion rates, we cannot identify specific reasons for differences between NAEP and state assessment results.
[^1]:    * NAEP-State gap difference significantly different from zero ( $p<.05$ )

    SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 2003 Mathematics Assessment: Full population estimates. The National Longitudinal School-Level State Assessment Score Database (NLSLSASD) 2004.

[^2]:    1. All statements of differences are based on statistical tests at the $5 \%$ significance level. However, these results must be considered in the context of the available data. NAEP and state assessments may employ different test items, testing accommodations, and scoring methods; and they may involve different students in each school, at different times of the year, with different motivational characteristics. At the present time, in spite of controlling for effects of school sampling, differences in standards, and NAEP exclusion rates, we cannot identify specific reasons for differences between NAEP and state assessment results.
[^3]:    1. All statements of differences are based on statistical tests at the $5 \%$ significance level. However, these results must be considered in the context of the available data. NAEP and state assessments may employ different test items, testing accommodations, and scoring methods; and they may involve different students in each school, at different times of the year, with different motivational characteristics. At the present time, in spite of controlling for effects of school sampling, differences in standards, and NAEP exclusion rates, we cannot identify specific reasons for differences between NAEP and state assessment results.
[^4]:    * NAEP-State gap difference significantly different from zero (p<.05).

    SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 2003 Mathematics Assessment: Full population estimates. The National Longitudinal School-Level State Assessment Score Database (NLSLSASD) 2004.

[^5]:    1. All statements of differences are based on statistical tests at the $5 \%$ significance level. However, these results must be considered in the context of the available data. NAEP and state assessments may employ different test items, testing accommodations, and scoring methods; and they may involve different students in each school, at different times of the year, with different motivational characteristics. At the present time, in spite of controlling for effects of school sampling, differences in standards, and NAEP exclusion rates, we cannot identify specific reasons for differences between NAEP and state assessment results.
[^6]:    1. All statements of differences are based on statistical tests at the $5 \%$ significance level. However, these results must be considered in the context of the available data. NAEP and state assessments may employ different test items, testing accommodations, and scoring methods; and they may involve different students in each school, at different times of the year, with different motivational characteristics. At the present time, in spite of controlling for effects of school sampling, differences in standards, and NAEP exclusion rates, we cannot identify specific reasons for differences between NAEP and state assessment results.
[^7]:    1. All statements of differences are based on statistical tests at the $5 \%$ significance level. However, these results must be considered in the context of the available data. NAEP and state assessments may employ different test items, testing accommodations, and scoring methods; and they may involve different students in each school, at different times of the year, with different motivational characteristics. At the present time, in spite of controlling for effects of school sampling, differences in standards, and NAEP exclusion rates, we cannot identify specific reasons for differences between NAEP and state assessment results.
[^8]:    1. All statements of differences are based on statistical tests at the $5 \%$ significance level. However, these results must be considered in the context of the available data. NAEP and state assessments may employ different test items, testing accommodations, and scoring methods; and they may involve different students in each school, at different times of the year, with different motivational characteristics. At the present time, in spite of controlling for effects of school sampling, differences in standards, and NAEP exclusion rates, we cannot identify specific reasons for differences between NAEP and state assessment results.
[^9]:    1. All statements of differences are based on statistical tests at the $5 \%$ significance level. However, these results must be considered in the context of the available data. NAEP and state assessments may employ different test items, testing accommodations, and scoring methods; and they may involve different students in each school, at different times of the year, with different motivational characteristics. At the present time, in spite of controlling for effects of school sampling, differences in standards, and NAEP exclusion rates, we cannot identify specific reasons for differences between NAEP and state assessment results.
[^10]:    * NAEP-State gap difference significantly different from zero ( $p<.05$ )

    SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 2003 Mathematics Assessment: Full population estimates. The National Longitudinal School-Level State Assessment Score Database (NLSLSASD) 2004.

[^11]:    1. All statements of differences are based on statistical tests at the $5 \%$ significance level. However, these results must be considered in the context of the available data. NAEP and state assessments may employ different test items, testing accommodations, and scoring methods; and they may involve different students in each school, at different times of the year, with different motivational characteristics. At the present time, in spite of controlling for effects of school sampling, differences in standards, and NAEP exclusion rates, we cannot identify specific reasons for differences between NAEP and state assessment results.
[^12]:    1. All statements of differences are based on statistical tests at the $5 \%$ significance level. However, these results must be considered in the context of the available data. NAEP and state assessments may employ different test items, testing accommodations, and scoring methods; and they may involve different students in each school, at different times of the year, with different motivational characteristics. At the present time, in spite of controlling for effects of school sampling, differences in standards, and NAEP exclusion rates, we cannot identify specific reasons for differences between NAEP and state assessment results.
[^13]:    * NAEP-State gap difference significantly different from zero (p<.05).

    SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 2003 Mathematics Assessment: Full population estimates. The National Longitudinal School-Level State Assessment Score Database (NLSLSASD) 2004.

[^14]:    * NAEP-State gap difference significantly different from zero (p<.05).

    SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 2003 Mathematics Assessment: Full population estimates. The National Longitudinal School-Level State Assessment Score Database (NLSLSASD) 2004.

[^15]:    1. All statements of differences are based on statistical tests at the $5 \%$ significance level. However, these results must be considered in the context of the available data. NAEP and state assessments may employ different test items, testing accommodations, and scoring methods; and they may involve different students in each school, at different times of the year, with different motivational characteristics. At the present time, in spite of controlling for effects of school sampling, differences in standards, and NAEP exclusion rates, we cannot identify specific reasons for differences between NAEP and state assessment results.
[^16]:    * NAEP-State gap difference significantly different from zero ( $p<.05$ )

    SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 2003 Mathematics Assessment: Full population estimates. The National Longitudinal School-Level State Assessment Score Database (NLSLSASD) 2004.

[^17]:    1. All statements of differences are based on statistical tests at the $5 \%$ significance level. However, these results must be considered in the context of the available data. NAEP and state assessments may employ different test items, testing accommodations, and scoring methods; and they may involve different students in each school, at different times of the year, with different motivational characteristics. At the present time, in spite of controlling for effects of school sampling, differences in standards, and NAEP exclusion rates, we cannot identify specific reasons for differences between NAEP and state assessment results.
