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2009-10

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Opening Remarks By:

Mr. Darryl D. Morin
State Director
League of United American Citizens

Prepared For:

**COMMITTEE ON EDUCATION
SENATE
STATE OF WISCONSIN**

PUBLIC HEARING
Senate Bill 405 & Senate Bill 437
January 5, 2010



**League of United Latin
American Citizens**

State of Wisconsin

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Senate Bill 405

Relating to: The powers and duties of the board of school directors and the superintendent of schools in a first class city school district, awarding a grant to a nonprofit corporation, requiring a referendum, and granting rule-making authority.

Sponsors:

Senators Taylor, Plale and Carpenter; cosponsored by Representatives Colon, Fields, Richards, Staskunas, Hints and Danou.

Senate Bill 437

Relating to: Authorizing the state superintendent of public instruction to direct a school district to implement a new curriculum or instructional design, make personnel changes, or adopt accountability measures, and requiring the exercise of rule-making authority.

Sponsors:

Committee on Education

HEARING
BEFORE THE

COMMITTEE ON EDUCATION
SENATE
STATE OF WISCONSIN

JANUARY 5, 2010

OPENING STATEMENT by Mr. Darryl D. Morin,
State Director for the
League of United Latin American Citizens (LULAC)



League of United Latin
American Citizens

State of Wisconsin

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Mr. Chairman, Mr. Vice Chairman, and Members of the Committee on Education, I wish to thank you for scheduling this hearing regarding what could be the most important piece of legislation to be passed by the Senate this year. I am here before you today to ask for your support of Senate Bill 405 (S.B. 405), approving Mayoral Governance of the Milwaukee Public Schools District.

As State Director of the League of United Latin American Citizens (LULAC), our nation's oldest and largest Hispanic advocacy organization, my responsibilities include insuring that all children regardless of religion, color, country of origin or socioeconomic status have the same opportunity to achieve the American Dream. We are asking for nothing given, but the equal education and opportunity to compete as called for under the laws of our great country. For all the discussion, surrounding this legislation, not once have I heard anyone defending the civil rights to an equal education of our Children.

LULAC frequently receives request for assistance from members of the community. It was for the numerous requests for assistance we received from teachers, parents, students and staff regarding MPS that LULAC began to participate in a dialogue with MPS. I wish to thank Superintendent Andrekopoulos and members of his staff for their access and candor during our meetings. It was our hope that we could resolve the issues brought forth through our discussions.

However the more discussions we held, the more research we did, a process that took over two years and included the analysis of 20 years of data, the more we understood the systemic issues, conflicting priorities and lack of accountability that currently exists within the district. It was for this reason that on July 23, 2009 at the direction of the LULAC State Assembly, I filed a complaint with the Office of Civil Rights regarding the districts compliance with Title VI of the Civil Rights Act of 1964. I can share with you today, that I have just been notified that the Office of Civil Rights has found sufficient information obtained through the Wisconsin Department of Public Instruction and MPS to warrant a full and formal investigation of the district and is in the process of doing so.

There is no escaping the academic realities that exist at MPS. There is no denying the education gap that we have here in Wisconsin¹. There is no denying that for each student that does not receive a high school degree, not only do they forfeit an average of \$1,000,000 of additional income over his/her lifetime but cost taxpayers over \$260,000 in lost tax revenue, health care/welfare programs, criminal justice and penal costs². There is no denying that a 2006-2007 study found that 22.9% of African American males, 7.2% of Asian Males, and 6.1% of Hispanic males between the ages of 16-24 that dropped out of high school are currently institutionalized³. It has been projected that in the Metro Milwaukee area alone, that the 6,485 dropouts of the class

¹ Achievement Gaps: How Black and White Students in Public Schools Perform in Mathematics and Reading on the National Assessment of Educational Progress (NAEP), U.S. Department of Education

² The High Cost of High School Dropouts: What the National Pays for Inadequate High Schools, Alliance for Excellent Education

³ The Consequences of Dropping Out of High School: Joblessness and Jailing for High School Dropouts and the High Cost for Taxpayers, Center for Labor Market Studies, Northeastern University



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of 2008 lost more than \$41,000,000 of wages and cost the state over \$7,000,000 annually in tax revenue⁴. How many of these children will grow up to be chronically unemployed or worse, incarcerated instead of becoming loving parents and productive members of Wisconsin's business community?

I have met with many of your colleagues in Madison and often been asked, "Why should I get involved?" My answer is plain and simple. You already are and rightfully so. In the last budget the State of Wisconsin provided MPS with over \$1,000,000,000. This includes roughly \$850,000,000 from the state and an additional \$175,000,000 under various Recovery Act programs. The legislature has rightfully invested this money in trying to improve the quality of education in the state's largest school district, in a sense, a significant portion of Wisconsin's workforce of tomorrow. However as President Obama shared with us during his visit to Madison, money alone can not fix the ills of our failed large urban school districts and in the words of Secretary of Education Arnie Duncan, "Mayoral Control provides the strong leadership and stability needed to overhaul urban schools"⁵ That is why today, I once again ask for your support of S.B. 405.

This is a special time in history in which you have the opportunity to demonstrate true leadership and fix what is broken once and for all and to put someone in charge, with the required authority, and to whom each and everyone of us can hold accountable. We also must make the decision as to whether we are serious about competing for the \$250,000,000 which Wisconsin is eligible for under the President's Race To The Top program. In the face of the 20 high schools considered drop out factories in the district⁶, the numerous independent educational⁷, operational⁸ and fiscal⁹ studies that have been conducted, I cannot imagine how we could turn to our children and say, we are not serious about education reform, we are not serious about your future. Nor in these difficult economic times where Wisconsinites are trying to keep their homes and trying to feed their families, how we can turn to them as taxpayers and say, that we didn't do everything possible to bring \$250,000,000 in Federal money back into our state.

I wish to once again thank you for your time and serious consideration. You will each find all facts referenced with supporting materials in the packets we have provided. I am prepared to answer any questions you may have.

⁴ Milwaukee's Path to Economic Growth: The Economic Benefits of Reducing Milwaukee's Dropout Rate, Alliance for Excellent Education

⁵ School Chief: Mayors need control of urban schools by Libby Quad, Associated Press

⁶ High Schools in the United States: How Does Your Local High School Measure Up, Criteria: U.S. 4th Congressional District, Schools under 60% Promoting Power are considered "Drop Out Factories," Alliance For Excellent Education

⁷ Mathematics 2009 TUDA Snapshot Report on National Assessment of Education Progress (NAEP), U.S. Department of Education (See also Tab 1 Achievement Gaps, NAEP, U.S. Department of Education)

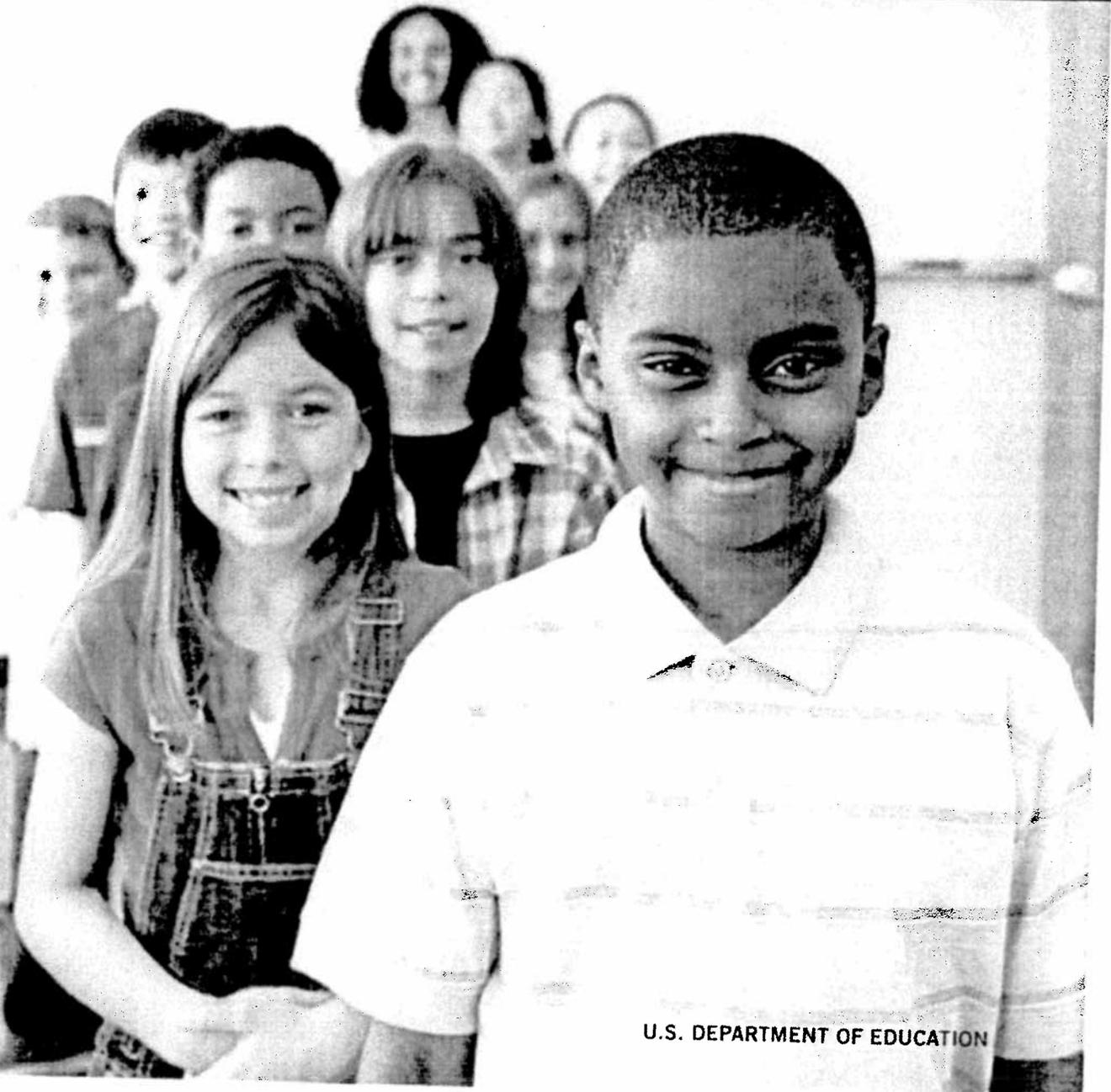
⁸ Review of Operations of the Department of Human Resources of the Milwaukee Public Schools: Summer 2009, The Council of Great City Schools

⁹ Toward Stronger Milwaukee Public Schools: Executive Summary, 2009, McKinsey & Company

Achievement Gaps

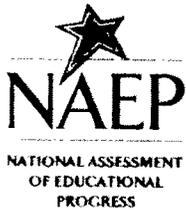
How Black and White Students in Public Schools Perform in Mathematics and Reading on the National Assessment of Educational Progress

Statistical Analysis Report





U.S. Department of Education
NCES 2009-455



Achievement Gaps

How Black and White Students in Public Schools Perform in Mathematics and Reading on the National Assessment of Educational Progress

Statistical Analysis Report

July 2009

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The National Assessment of Educational Progress (NAEP), a congressionally mandated project of the U.S. Department of Education, informs the public periodically about the academic achievement of elementary and secondary students in reading, mathematics, science, writing and other subjects. Only information related to academic achievement and relevant variables is collected under this program from students representing the country. By making objective information available on performance of all race/ethnic groups at the national and state levels, NAEP is an integral part of our nation's evaluation of the condition and progress of education. While the National Center for Education Statistics (NCES) within the Institute of Education Sciences (IES) of the U.S. Department of Education conducts the survey, the National Assessment Governing Board oversees and sets policies for NAEP.

Executive Summary

In 2007, mathematics scores for both Black and White public school students in grades 4 and 8 nationwide, as measured by the main NAEP assessments of the National Assessment of Educational Progress (NAEP), were higher than in any previous assessment, going back to 1990. This was also true for Black and White fourth-graders on the NAEP 2007 Reading Assessment. For grade 8, reading scores for both Black and White students were higher in 2007 than in the first reading assessment year, 1992, as well as the most recent previous assessment year, 2005.

White students, however, had higher scores than Black students, on average, on all assessments. While the nationwide gaps in 2007 were narrower than in previous assessments at both grades 4 and 8 in mathematics and at grade 4 in reading, White students had average scores at least 26 points higher than Black students in each subject, on a 0-500 scale. This report will use results from both the main NAEP and the long-term trend NAEP assessments to examine the Black-White achievement gaps, and changes in those gaps, at the national and state level.

The main NAEP 2007 Reading and Mathematics Assessments included grade 4 and grade 8 students both nationally and for all 50 states, as well as the Department of Defense Education Activity (DoDEA) and the District of Columbia (hereinafter referred to as states). Not all states had Black (or White) student populations large enough to provide reliable data, and not all states participated in the earliest NAEP state assessments.

Most of the data in this report comes from the main NAEP assessments, supplemented with some data from the NAEP long-term trend assessments. Main NAEP assessments, which began in 1990 for mathematics and 1992 for reading, are administered at the fourth and eighth grades, both nationally and at the state level. Because main NAEP only

assesses public schools in its state assessments, this report contains only public school results. The most recent results in this report are for 2007.

NAEP long-term trend assessments are administered by age rather than grade. This report references long-term trend assessment public school results from the earliest assessment through 2004, with results for ages 9 and 13 instead of grades 4 and 8. The long-term trend assessments provide public school results for mathematics going back to 1978 and for reading going back to 1980, at ages 9, 13, and 17, at the national level only, on a 0-500 point scale.

At both ages 9 and 13, mathematics scores for both Black and White students were higher in 2004 than in any previous assessment. The 23-point Black-White achievement gap in mathematics for age 9 public school students in 2004 was narrower than in the first assessment in 1978 but not significantly different from the gap in the most recent previous assessment in 1999. The same was true for the 26-point gap at age 13.

For age 9 reading, scores for both Black and White students were higher in 2004 than in any previous assessment, going back to 1980. The 26-point gap between Black and White students in 2004 was not significantly different from the gap in 1980, but was narrower than the gap in 1999. At age 13 reading, scores were higher for Black students in 2004 than in 1980, but did not show a significant difference from 1999. Scores for White students were not significantly different for either comparison year. The 21-point gap in student performance at age 13 reading in 2004 was narrower than in both 1980 and 1999.

The following two sections summarize state-level achievement gaps between Black and White students in the main NAEP assessments in mathematics and reading.

State Black-White Achievement Gaps—Mathematics

- At the state level, gaps in grade 4 mathematics existed in 2007 in the 46 states for which results were available. In 15 states, the 2007 gaps were narrower than in 1992, as Black students demonstrated a greater gain in average scores than that of the White students.
- At grade 8, mathematics gaps existed in 2007 in the 41 states for which results were available. The gaps were narrower in 2007 than in 1990 in four states: Arkansas, Colorado, Oklahoma, and Texas. In all four, scores for both Black and White students increased, but scores for Black students increased more.
- At grade 4, five states had mathematics gaps in 2007 that were larger than the national gap of 26 points, while 10 states had gaps that were smaller.
- At grade 8, seven states had mathematics gaps in 2007 that were larger than the national gap of 31 points, while 12 had gaps that were smaller.

State Black-White Achievement Gaps—Reading

- At the state level, gaps in grade 4 reading existed in 2007 in the 44 states for which results were available. Gaps narrowed from 1992 to 2007 in Delaware, Florida, and New Jersey, due to larger increases in Black students' scores.
- At grade 8, reading gaps existed in 2007 in 41 of the 42 states for which results were available. In Hawaii, the 7-point difference between Black and White students' scores in 2007 was not statistically significant, and thus there was no gap for Hawaii. There was no significant change in the gap in any state from 1998 to 2007.

- At grade 4, eight states had reading gaps that were larger than the 2007 national gap of 27 points, while nine had gaps that were smaller.
- At grade 8, one state had a reading gap that was larger than the 2007 national gap of 26 points, while nine had gaps that were smaller.

The NAEP reading and mathematics scales make it possible to examine relationships between students' performance and various background factors measured by NAEP, such as race. However, a relationship that exists between achievement and another variable does not reveal its underlying cause, which may be influenced by a number of other variables. Similarly, the assessments do not reflect the influence of unmeasured variables. At the state level, changes in the size of the achievement gap between Black and White students could be affected by demographic changes in the size and makeup of the populations involved, as well as policy changes in the schools and communities. The results of this study are most useful when they are considered in combination with other knowledge about the student population and the education system, such as trends in instruction, changes in the school-age population, and societal demands and expectations.

This report focuses on the size of the achievement gap between Black and White students and the direction of average scores within states, regardless of the states' scores. Large gaps may occur in some states with scores above the national average, as well as in states with scores below the national average. Similarly, small gaps may occur in states with scores above or below the national average. All differences discussed in this report are statistically significant at the .05 level after controlling for multiple comparisons. The technical notes for this report provide information about sampling, accommodations, interpreting statistical significance, and other technical features. For more information on both the main NAEP and long-term trend assessments, see appendix A.

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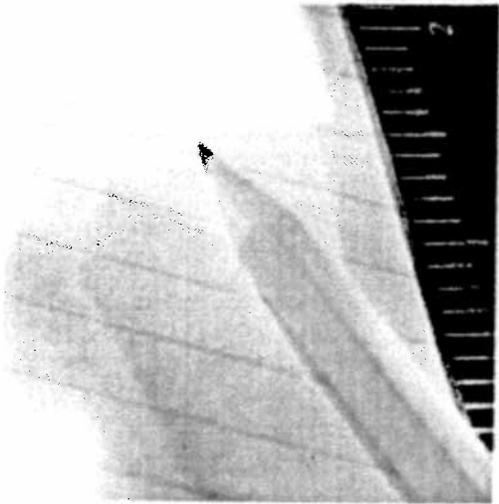
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Introduction

The past half century has witnessed considerable gains in educational attainment in the United States. Between 1950 and 2005, the percentage of young adults ages 25-29 who had completed high school rose from 53 to 86. For White young adults, the percentage increased from 56 to 93, and for Black young adults it increased from 24 to 86.¹

There have also been gains in educational achievement. National and state mathematics scores in grades 4 and 8 on the National Assessment of Educational Progress (NAEP) were at their highest levels in 2007.² Reading scores for the nation and a substantial number of states have also increased since the early 1990s.³

Although scores have increased for both Black students and White students, on average Black students do not perform as well as their White peers. At the national level, the fourth-grade Black-White achievement gap in mathematics for 2007 was narrower than in 1990, while the fourth-grade reading gap was narrower than in either 1992 or 2005. At the eighth grade, the gap in mathematics was narrower in 2007 than in 2005, while the reading gap did not change significantly compared to either prior assessment year.

The Elementary and Secondary Education Act⁴ when first authorized intended to improve the educational achievement of low-performing students, particularly low-income students and Black students. Subsequent reauthorizations of the act have reaffirmed the importance of closing the achievement gaps. This report uses NAEP data to examine the progress of the nation and each of the states in reducing the gap between Black and White students at grades 4 and 8 in both reading and mathematics.

Issues relating to the Black-White achievement gap have been addressed by a number of recent studies. *Status and Trends in the Education of Racial and Ethnic Minorities*,⁵ issued by the National Center for Education Statistics (NCES), for example, examined the education of all major racial and ethnic groups in the United States from pre-kindergarten through the postsecondary level, along with employment and income data for these groups. The report identified a variety of factors which are correlated with the achievement gap between Black and White students. For example, Black students were more likely than White students to come from families living in poverty, which is associated with lower educational performance.

Other reports have used NAEP data in analyses attempting to isolate important factors related to the Black-White achievement gap. For example, *The Family: America's Smallest School*,⁶ issued by the Educational Testing Service, correlates student achievement, as measured by NAEP, with four home factors: the presence of two parents in the home, the hours children spend watching television, the hours parents spend reading to them, and the frequency of absence from school. Compared to White students, Black children were less likely to come from a family with both parents in the home, spent more hours watching television, were read to by their parents for fewer hours, and were more likely to be absent from school.

Another report issued by the Educational Testing Service, *Pursing the Achievement Gap II*,⁷ considered 16 factors previously identified as being correlated with how well students performed in school. Seven were school-related (including, for example, curriculum rigor and teacher preparation), eight "before and after" school factors (including, for example, weight at birth, exposure to lead, and excessive TV watching), and the "home school connection," parent

¹ Snyder, T.D., Dillow, S.A., and Hoffman, C.M. (2007). *Digest of Education Statistics 2006* (NCES 2007-017). National Center for Education Statistics, Institute of Education Sciences, U.S. Department of Education, Washington, DC.

² Lee, J., Grigg, W., and Dion, G. (2007). *The Nation's Report Card: Mathematics 2007* (NCES 2007-494). National Center for Education Statistics, Institute of Education Sciences, U.S. Department of Education, Washington, D.C.

³ Lee, J., Grigg, W., and Donahue, P. (2007). *The Nation's Report Card: Reading 2007* (NCES 2007-496). National Center for Education Statistics, Institute of Education Sciences, U.S. Department of Education, Washington, D.C.

⁴ Elementary and Secondary Education Act of 1965, P.L. 89-10, 79 Stat. 27.

⁵ KewalRamani, A., Gilbertson, L., Fox, M., and Provasnik, S. (2007). *Status and Trends in the Education of Racial and Ethnic Minorities* (NCES 2007-039). National Center for Education Statistics, Institute of Education Sciences, U.S. Department of Education, Washington, DC.

⁶ Barton, P., and Coley, R. (2007). *The Family: America's Smallest School*. Princeton, NJ: Educational Testing Service.

⁷ Barton, P., and Coley, R. (2009). *Pursing the Achievement Gap II*. Princeton, NJ: Educational Testing Service.

participation. Using data from NAEP and other sources, the report said that for all 16 factors there were gaps that favored White students over Black students—for example, White students were more likely than Black students to attend schools offering rigorous curriculums and less likely to suffer from low birth weight.

This report uses data from both the “main NAEP” and the NAEP long-term trend assessments. NCES and the National Assessment Governing Board, which sets policy for NAEP, have maintained comparability of data for both main and long-term trend NAEP. Main NAEP assessments, which began in 1990 for mathematics and 1992 for reading, are administered at the fourth and eighth grades, both nationally and at the state level. The most recent administration was in 2007. The long-term trend assessments provide public school results for mathematics going back to 1978 and for reading going back to 1980, at ages 9, 13, and 17, at the national level only. The most recent long-term trend report available at the time of the preparation of this report contains results for the assessments administered in 2004. Discussion of main NAEP grade 12 assessments is omitted in this report because these assessments are conducted at the national level only.

While the main NAEP assessments do not go as far back in time as the long-term trend assessments, they allow the examination of trends in the Black and White performance gap in every state, plus the District of Columbia and the U.S. Department of Defense Education Activity (DoDEA) schools. In addition, the main NAEP assessments use frameworks that are more closely aligned with current practices regarding instructional content; they include more questions overall and more questions that require a written response; and they employ much larger samples than long-term NAEP.

All data presented in this report for main NAEP are for public school students only. Main NAEP and long-term trend provide national results for both public and private school students, but NAEP state results are for public school students only. To maintain consistency of data for comparison purposes, this report uses only public school data at the national level as well.

The major questions addressed in this study are: 1) how do gaps in 2007 compare to the gaps in the initial and most recent prior years of the NAEP national and state assessment series? And 2) how do states compare to the nation in 2007? The current report presents these results in graphs that show the NAEP achievement gaps in a format that makes it possible to see at a glance the national and state gaps results for all available years.

In previous NAEP reports, achievement gaps results have been available to users in two ways: 1) online, using the NAEP Data Explorer, and 2) by year, in the report cards for a given assessment. The NAEP Achievement Gaps report is the first NCES publication to present the Black and White NAEP achievement gaps across time for all the states and the nation, including results for every assessment year since state assessments began.

States first participated in the eighth-grade mathematics assessment in 1990, the fourth-grade reading and mathematics assessments in 1992, and the eighth-grade reading assessment in 1998. The No Child Left Behind Act of 2001 requires each state, beginning in 2003, to participate in the NAEP mathematics and reading assessments if they are to receive Title I education funding (Public Law 107-110 Title I Part A, Sec. 1111). Prior to the passage of the Act, participation was voluntary and about 40 states participated in each assessment. (In this report, “state” and “jurisdiction” will be used interchangeably to refer to the 50 states, the District of Columbia, and the Department of Defense Education Activity (DoDEA) schools.) Additional information about the years when the national and state assessments were administered is in appendix B.

Sources of the Main NAEP data

This report presents national data from the NAEP reading and mathematics assessments for Black and White public school students at the fourth and eighth grades. Only results for White (non-Hispanic) and Black (non-Hispanic) public school students are contained in this report. Additional information on the national and state assessments is given in appendix B.

Administration of main NAEP national and state reading and mathematics assessments

			1990	1992	1994	1996	1998	2000	2002	2003	2005	2007
Reading	4th Grade	National		✓	✓		✓	✓	✓	✓	✓	✓
		State		✓	✓		✓		✓	✓	✓	✓
	8th Grade	National		✓	✓		✓	✓	✓	✓	✓	✓
		State					✓		✓	✓	✓	✓
Mathematics	4th Grade	National	✓	✓		✓		✓		✓	✓	✓
		State		✓		✓		✓		✓	✓	✓
	8th Grade	National	✓	✓		✓		✓		✓	✓	✓
		State	✓	✓		✓		✓		✓	✓	✓

In 2007, Black and White students together comprised about three-fourths of the nation's public school students at the fourth and eighth grades. At the fourth-grade level, 58 percent of assessed students were White and 16 percent were Black. At the eighth-grade level, 60 percent of assessed students were White and 16 percent were Black.

In the earliest main NAEP assessments, students with disabilities and English language learners did not receive accommodations. Since 1994 (1996 at the state level) students receiving accommodations on their state assessment received the same accommodations on NAEP, as long as NAEP approved them (see appendix A for details.)

In 2007, the reading assessment was given to 183,000 fourth-graders and 155,000 eighth-graders, while the mathematics assessment was given to 190,000 fourth-graders and 147,000 eighth-graders. The main NAEP samples are so large because they include representative samples for each of the 50 states, plus the District of Columbia and Department of Defense school system for Armed Forces dependents in the United States and overseas. This allows examination of the achievement gaps for public school students for individual states as well as for the nation as a whole.

NAEP assessments are conducted in a six-week window starting in January of each assessment year. The same assessment is administered in both the national and state assessments. Because the content of the assessments given to fourth-graders and eighth-graders differs, scores for the two grades should be compared with caution, even though the scores appear on similar 0-500 scales. Scores for reading and mathematics cannot be compared because the two assessments are scaled independently. See appendix A for more details.

Sources of the Long-Term Trend NAEP data

This report presents national data for public school students aged 9 and 13 from the 1978, 1982, 1986, 1990, 1992, 1994, 1996, 1999, and 2004 mathematics long-term trend assessments and the 1982, 1986, 1990, 1992, 1994, 1996, 1999, and 2004 reading long-term trend assessments. Unlike the main NAEP assessments, these assessments did not allow accommodations for students with disabilities and English language learners for the years included in this report. Sample sizes for the 2004 long-term trend assessments were 7,500 (9-year-old students) and 8,300 (13-year-old students) for reading and 7,300 (9-year-old students) and 7,500 (13-year-old students) for mathematics. See appendix A for more details.

Understanding score gaps

Ways the gap can change

The achievement gap between Black and White students is defined as the difference between the average score for Black students and the average score for White students. Comparisons are made for main NAEP between the most recent assessment year (2007) and all previous assessment years. Only changes between the earliest assessment year and 2007, and between 2005 and 2007, are discussed. For long-term trend, only changes between the earliest assessment year and 2004, and between 1999 and 2004, are discussed.

Changes in the size of the achievement gap depend on both changes in the average scores for Black and White students and the rate of change in those scores. Generally, widening gaps are seen as undesirable, while narrowing gaps are seen as desirable. However, it is possible for the gap to widen even if scores for both Black students and White students increase, if scores for the higher scoring group increase more than scores for the other group. And it is also possible for the gap to narrow even if scores for both Black and White students decline, if scores for the higher scoring group decline more than those of the other group. The following images illustrate the various ways that gaps can narrow.

Ways gaps can narrow



The average scores of *both* groups increase, while the score of the lower performing group increases even more.



The average score of the *higher* performing group does not change, while the score of the lower performing group increases.



The average score of the *higher* performing group declines, while the score of the lower performing group increases.



The average score of the *higher* performing group declines, while the score of the lower performing group does not change.



The average scores of *both* groups decline, but the score of the higher performing group declines even more.

It is important to note that although NAEP data can identify gaps and changes in gaps, these data cannot explain why gaps exist or why they change. NAEP assessments are designed to measure student performance and identify factors associated with it, not to identify or explain the causes of differences in student performance.

Understanding statistical significance

NAEP data are based on samples of students, and the results are subject to sampling and measurement error. Statistical tests are used to determine whether the differences between average scores are statistically significant—that is, whether they exceed the margin of error. Changes in average scores for Black students and White students and changes in the size of the gap between these scores are analyzed separately. Therefore, it is possible for the size of the achievement gap to increase or decrease even though the average scores of neither Black nor White students changed statistically significantly during the same period.

The term “significant” is not intended to imply a judgment about the absolute magnitude or the educational relevance of the differences. It is intended to identify statistically reliable population differences to help inform discussion among policymakers, educators, researchers, and the public.

Beginning in 2002, the main NAEP national sample was obtained by aggregating the samples from each state, rather than by using an independently selected national sample. As a result, the national samples in mathematics and reading were larger in 2003, 2005, and 2007 than in previous assessment years. Thus, smaller score differences between years or between student groups were found to be statistically significant than would have been detected in previous assessments. All differences discussed in the text are significant at the .05 level with appropriate adjustments for part-to-whole and multiple comparisons.

Statistical comparisons of NAEP scores from different assessment years are made using a multiple comparison procedure (see appendix A, “Conducting multiple tests,” for details). However, in figures 9, 11, 21, and 23, comparisons of the size of the Black-White achievement gap

for each state to the national gap are made using pairwise comparisons, where each state is compared to the nation one at a time. For this reason, the results shown in these four figures may not correspond to results obtained from the NAEP Online Data Tool, which currently does not permit pairwise comparisons for this type of gap analysis.

Cautions in interpreting the data

All results given here are in terms of average scores, which reflect a wide range of student performance. Many Black students score above the average for White students and many White students score below the average for Black students. For detailed information on variations in performance, including standard deviations, consult the NAEP Data Explorer online at <http://nces.ed.gov/nationsreportcard/nde/viewresults.asp>.

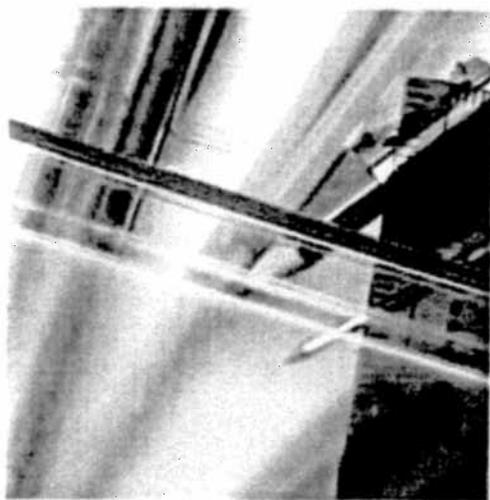
The analysis of NAEP data contained in this report should not be seen to imply causal relations. Simple cross-tabulations of a variable with measures of educational achievement, like the ones presented here, cannot be considered as evidence that differences in the variable cause differences in educational achievement. As noted earlier, NAEP surveys are not designed to identify causal relationships. There are many possible reasons why the performance of one group of students

will differ from that of another. Inferences related to student group performance should take into consideration the many socioeconomic and educational factors that may also be associated with performance.

All statistical tests are performed using unrounded scale scores. The Black-White achievement gap is calculated by subtracting the average scale score for Black students from the average scale score for White students. Because all results are presented as rounded numbers, occasionally the lower scale score plus the gap will not equal the higher scale score shown in this report's graphics.

How this report is organized

The remainder of this report presents first mathematics and then reading results. In each section, long-term trend results are presented first, giving national results only for public school students ages 9 and 13. These are followed by both national and state results for public school fourth- and eighth-graders from main NAEP. National data from main NAEP are also presented by 1) gender and 2) eligibility categories for the National School Lunch Program. The last section consists of an appendix that contains relevant technical notes and supplemental tables.

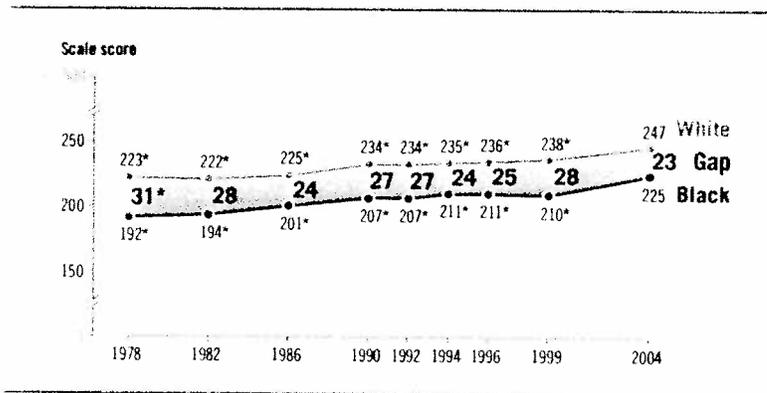


Long-Term Trend Results for Black and White 9- and 13-Year-Olds

Trends in mathematics scores and achievement gaps, 1978–2004

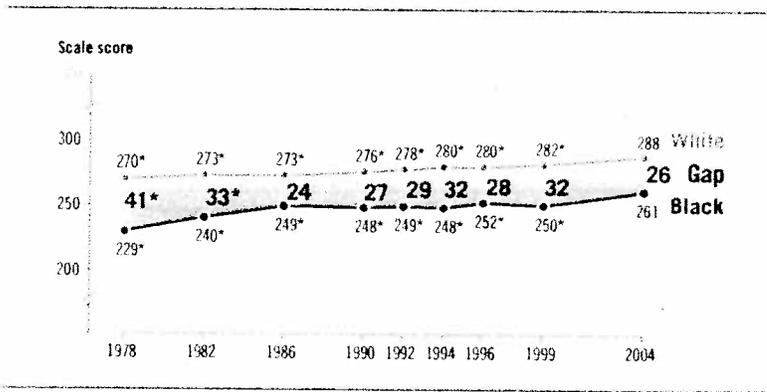
Mathematics scores for both 9- and 13-year-old Black and White students were higher in 2004 than on any previous long-term trend assessment (figures 1 & 2). In addition, the score gaps for Black and White students were narrower in 2004 than in the first assessment in 1978 for both age groups, as scores of Black students showed a greater increase than those of White students. The gaps in 2004 were not significantly different from the gaps in 1999.

Figure 1. Trends in average mathematics scale scores and score gaps for White students and Black students at age 9: Various years, 1978–2004



* Significantly different ($p < .05$) from 2004.
 NOTE: Detail may not sum to totals due to rounding.
 SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics, National Assessment of Educational Progress (NAEP), various years, 1978–2004 Long-Term Trend Mathematics Assessments.

Figure 2. Trends in average mathematics scale scores and score gaps for White students and Black students at age 13: Various years, 1978–2004



* Significantly different ($p < .05$) from 2004.
 NOTE: Detail may not sum to totals due to rounding.
 SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics, National Assessment of Educational Progress (NAEP), various years, 1978–2004 Long-Term Trend Mathematics Assessments.

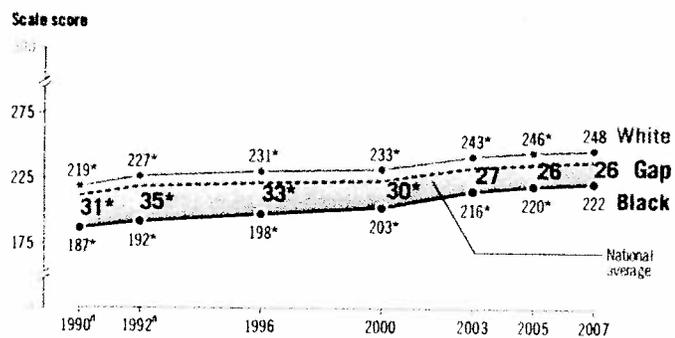
Main NAEP National Results for Black and White Fourth- and Eighth-Graders

Trends in mathematics scores and achievement gaps, 1990–2007

In main NAEP, average fourth-grade mathematics scores for the nation were higher in 2007 than in 1990 for both Black and White public school students (figure 3). The greater increase for Black fourth-graders resulted in the gap narrowing from 31 points in 1990 to 26 points in 2007. From 2005 to 2007, scores increased for both Black and White students, but there was no significant change in the gap.

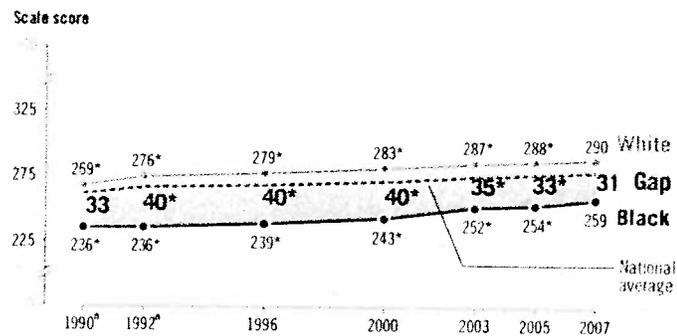
Average mathematics scores were higher in 2007 than in 1990 for both Black and White eighth-graders (figure 4). The 31-point gap in 2007 was not significantly different from the 33-point gap in 1990. However, the gap was narrower in 2007, at 31 points, than in 2005, at 33 points. Although scores for both groups were higher in 2007, a greater increase in Black students' scores caused the gap to narrow. The 2-point decrease in the gap from 2005 to 2007 was significant while the 2-point decrease from 1990 to 2007 was not. It is possible that the smaller standard errors in 2005, due to the increased sample size in that year, allowed the difference in 2005 to be identified as statistically significant.

Figure 3. Mathematics achievement score gaps between Black and White public school students at grade 4: Various years, 1990–2007



* Accommodations were not permitted for this assessment.
 * Significantly different ($p < .05$) from 2007.
 NOTE: Detail may not sum to totals due to rounding.
 SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics, National Assessment of Educational Progress (NAEP), various years, 1990–2007 Mathematics Assessments.

Figure 4. Mathematics achievement score gaps between Black and White public school students at grade 8: Various years, 1990–2007



* Accommodations were not permitted for this assessment.
 * Significantly different ($p < .05$) from 2007.
 NOTE: Detail may not sum to totals due to rounding.
 SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics, National Assessment of Educational Progress (NAEP), various years, 1990–2007 Mathematics Assessments.

Mathematics scores and achievement gaps by gender, 1990–2007

Average mathematics scores were higher in 2007 than in 1990 for the nation's Black and White fourth-graders, regardless of gender (figure 5). Among females, the gap was narrower in 2007 as the average score gains of Black females were greater than those of their White peers. Among fourth-grade males, the Black-White gap did not change significantly.

In addition to the 17-year gain, mathematics scores also increased during the two-year period, 2005 to 2007, for both Black and White fourth-graders, regardless of gender. However, the gaps did not change significantly either for males or for females during this period.

In 2007, average mathematics scores were higher than they had been in 1990 for Black and White eighth-graders (figure 6). However, the Black-White mathematics gap did not change significantly for either males or females.

At grade 8, mathematics scores increased from 2005 to 2007 for Black and White students, regardless of gender (figure 6). Female eighth-graders showed a narrowing of the gap during this period as Black females' scores increased more than those of White females, while the gap for males did not change significantly.

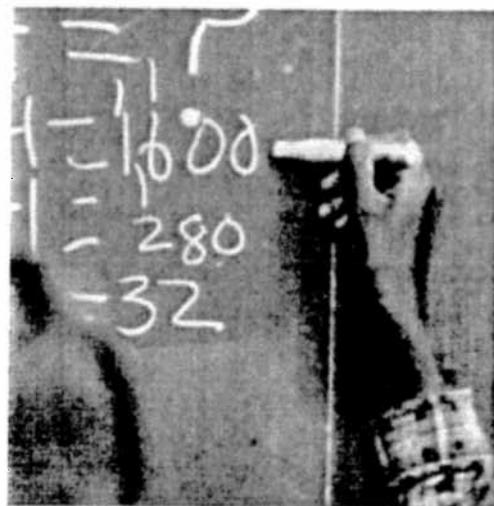
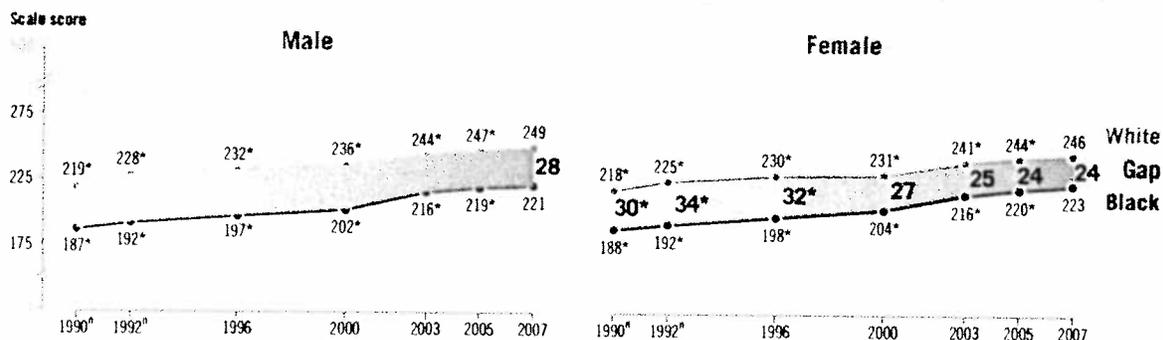


Figure 5. Gaps in average mathematics scores between Black and White public school students at grade 4, by gender: Various years, 1990–2007

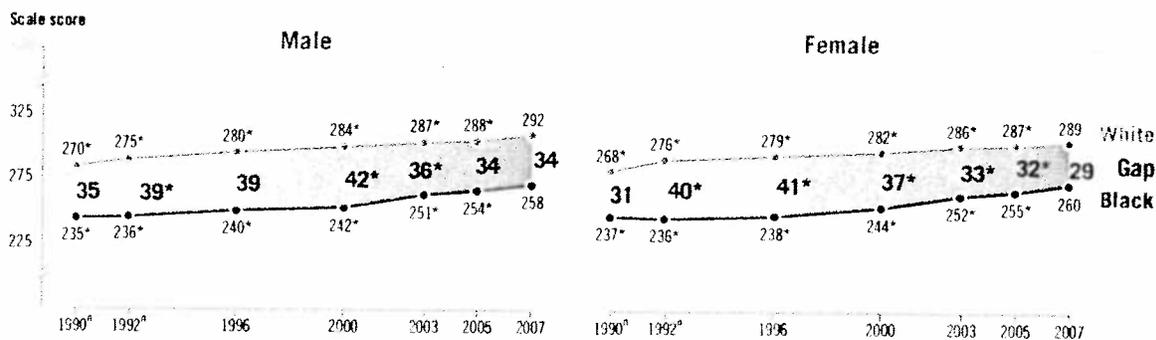


^a Accommodations were not permitted for this assessment.

* Significantly different ($p < .05$) from 2007.

SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics, National Assessment of Educational Progress (NAEP), various years, 1990–2007 Mathematics Assessments.

Figure 6. Gaps in average mathematics scores between Black and White public school students at grade 8, by gender: Various years, 1990–2007



^a Accommodations were not permitted for this assessment.

* Significantly different ($p < .05$) from 2007.

SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics, National Assessment of Educational Progress (NAEP), various years, 1990–2007 Mathematics Assessments.

Mathematics scores and achievement gaps by family income, 2003–2007

NAEP uses student eligibility for free or reduced-price school lunch as an indicator of family income. At grade 4, mathematics scores were higher in 2007 than in 2003 and 2005 for all Black and White public school students, regardless of school-lunch eligibility (figure 7). Despite these increases, the only significant Black-White gap change was between 2003 and 2007, for students eligible for reduced-price lunch.

At grade 8, mathematics scores were higher in 2007 than in 2003 and 2005 for all Black and White public school students (figure 8). The Black-White score gaps for students eligible for free or reduced-price lunch narrowed in 2007 in comparison to both previous assessments, as scores for eligible Black students showed greater gains than those of their White peers.

Table 1. Percentage of public school students assessed in NAEP mathematics by eligibility for free or reduced-price school lunch, race/ethnicity and grade: 2003, 2005, and 2007

	Not eligible		Eligible for reduced-price lunch		Eligible for free lunch	
	Black	White	Black	White	Black	White
Grade 4						
2007	26	72	7	6	66	21
2005	25	71	8	7	66	20
2003	24	72	9	8	66	19
Grade 8						
2007	32	76	7	5	60	18
2005	31	75	9	6	58	17
2003	32	76	9	6	56	15

NOTE: Detail may not sum to totals due to rounding.
SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 2003, 2005, and 2007 Mathematics Assessments.

Eligibility for free and reduced-price lunch

NAEP collects data on students' eligibility for the National School Lunch Program (NSLP)—sometimes referred to as the free and reduced-price school lunch program—as an indicator of family economic status. Eligibility for free and reduced-price lunch is based on students' family income in relation to the federally established poverty level.

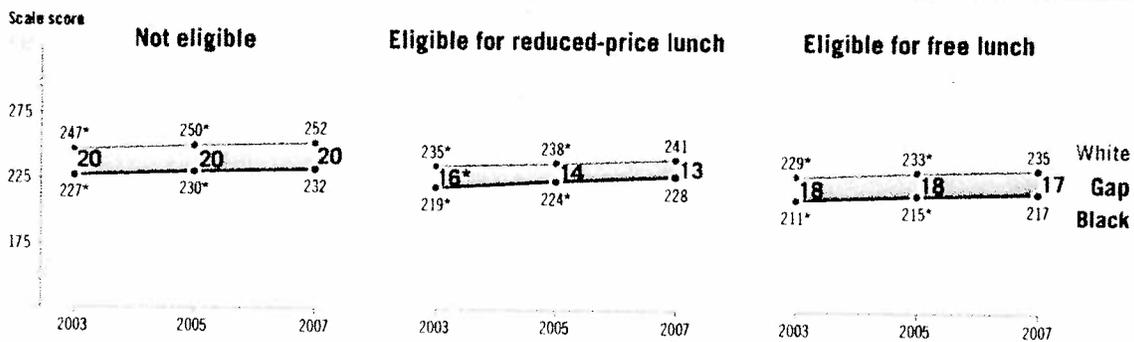
Not eligible: Students who are not eligible for the program because their family's income is above 185 percent of the poverty level.

Eligible for reduced-price lunch: Students who are eligible for reduced-price lunch because their family's income is between 130 percent and 185 percent of the poverty level.

Eligible for free lunch: Students who are eligible for free lunch because their family's income is below 130 percent of the poverty level.

As a result of improvements in the quality of the data on students' eligibility for NSLP, the percentage of students for whom information was not available has decreased in comparison to the percentages reported prior to the 2003 assessment. Therefore, trend comparisons are only made back to 2003 in this report.

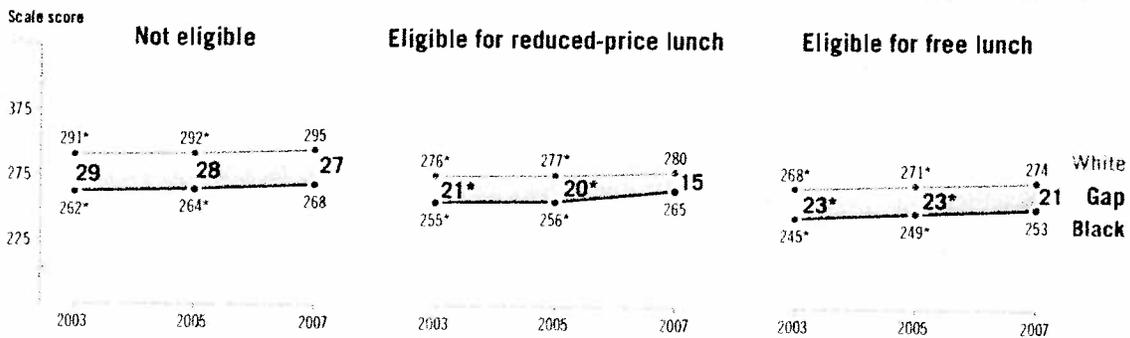
Figure 7. Gaps in average mathematics scores between Black and White public school students at grade 4, by eligibility for free or reduced-price school lunch: 2003, 2005, and 2007



* Significantly different (p < .05) from 2007.

SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 2003, 2005, and 2007 Mathematics Assessments.

Figure 8. Gaps in average mathematics scores between Black and White public school students at grade 8, by eligibility for free or reduced-price school lunch: 2003, 2005, and 2007



* Significantly different (p < .05) from 2007.

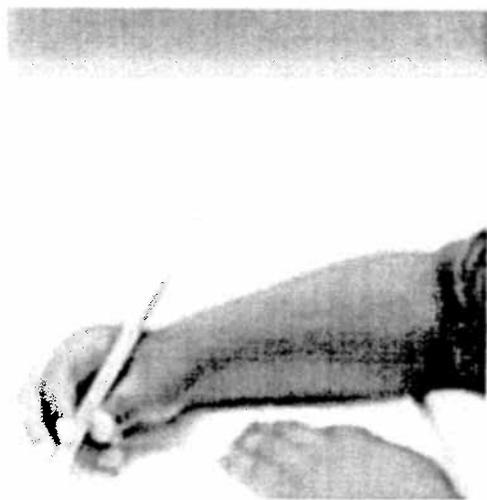
SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 2003, 2005, and 2007 Mathematics Assessments.

Main NAEP State Results for Black and White Fourth- and Eighth-Graders

The NAEP state mathematics assessments were administered to public school fourth-graders in 1992, 1996, 2000, 2003, 2005, and 2007 and to public school eighth-graders in 1990, 1992, 1996, 2000, 2003, 2005, and 2007. Before 2003, states were not required to participate in NAEP to qualify for Title I education funds. Typically, 40 or more states participated in each prior assessment. In 2003, 2005, and 2007, all 50 states, the District of Columbia, and the DoDEA participated.

State results are presented in two ways. Comparisons of fourth-grade mathematics gaps in 2007 between each state and the nation are presented in figure 9.

Comparisons of the mathematics gaps within a state over time are presented in a series of small graphs in figure 10. At the top left of each two-page spread, the mathematics scores and gaps for the nation are presented for reference. Each state figure, as well as the national figure, also contains a dotted red line representing the national average for public school students. The data for the national averages are located in the appendix in Table B-2.

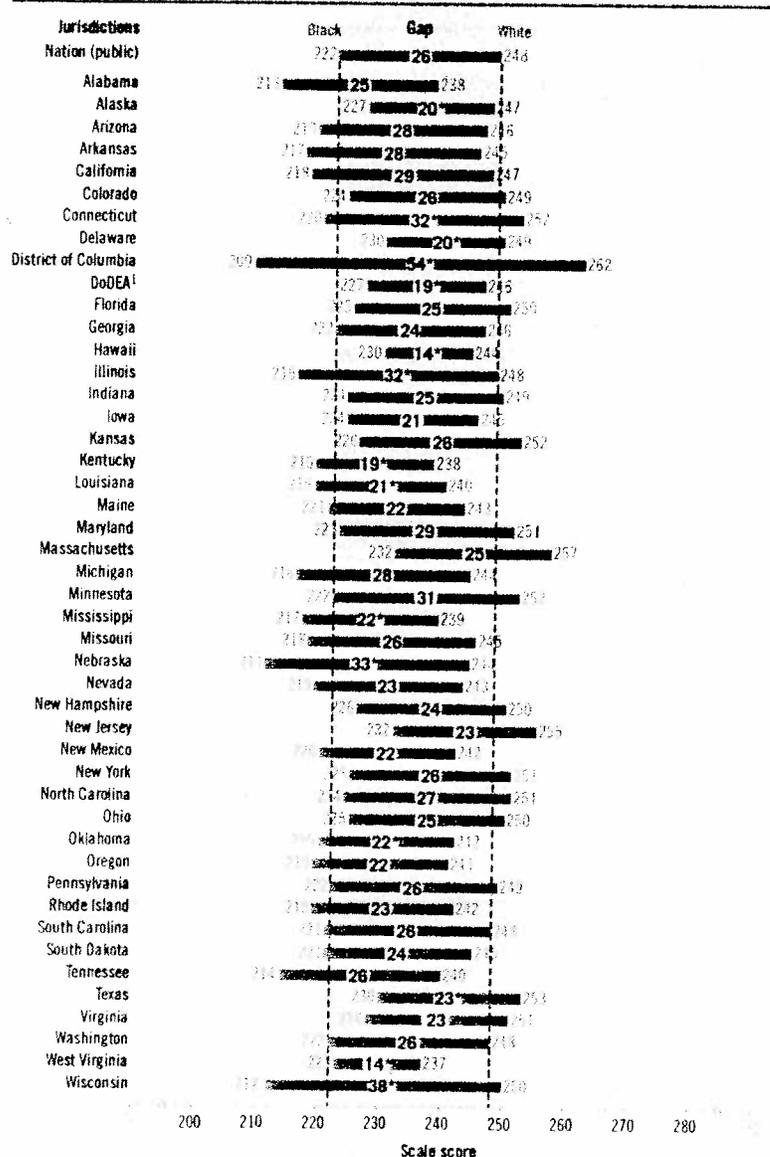


State and national mathematics achievement gaps at grade 4, 2007

Ten states had a smaller Black-White gap than the nation's 26-point gap in 2007 (Alaska, Delaware, DoDEA, Hawaii, Kentucky, Louisiana, Mississippi, Oklahoma, Texas, and West Virginia) and five had a gap that was larger (Connecticut, District of Columbia, Illinois, Nebraska, and Wisconsin). In 31 states, the gap was not significantly different from the nation's gap. Gaps that are different from the nation's gap are indicated with an asterisk (figure 9).

The fourth-grade mathematics gap in 2007 was statistically significant in all 46 states for which data could be reported. The gaps ranged from 14 points in Hawaii and West Virginia to 54 points in the District of Columbia.

Figure 9. The Black-White achievement score gap in mathematics for public school students at grade 4, by state or jurisdiction: 2007



* Significantly different (p<.05) from the nation (public) when comparing one state to the nation at a time
¹ Department of Defense Education Activity (overseas and domestic schools)
 NOTE: States whose Black student population size was insufficient for comparison are omitted. Reporting standards not met for Idaho, Montana, North Dakota, Utah, Vermont, and Wyoming.
 SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 2007 Mathematics Assessment.

Trends in state mathematics achievement gaps at grade 4, 1992–2007

The Black-White mathematics gap among the nation's public school fourth-graders was narrower in 2007 than in 1992, as Black students' scores showed a greater gain than White students' scores (figure 10, National results). From 2005 to 2007, there was no significant change in the gap.

In 35 states, both Black students and White students achieved higher average scores in mathematics from 1992 to 2007. Fifteen of these states also narrowed the achievement gap as Black students' scores increased more than White students' scores.

Short-term changes were also notable. In Illinois, New Jersey, and Virginia, average scores for both Black and White students increased between 2005 and 2007.

Narrowing of the Gap

In the following 15 states, the gap narrowed between **1992 and 2007** as gains of Black students outpaced the gains of White students.

- | | |
|----------------------|----------------|
| California | Michigan |
| Connecticut | Mississippi |
| Delaware | New Jersey |
| District of Columbia | Pennsylvania |
| Florida | South Carolina |
| Georgia | Texas |
| Louisiana | Virginia |
| Massachusetts | |

In **Rhode Island**, the gap narrowed between **2005 and 2007** as Black students' scores increased while those of White students did not change significantly.

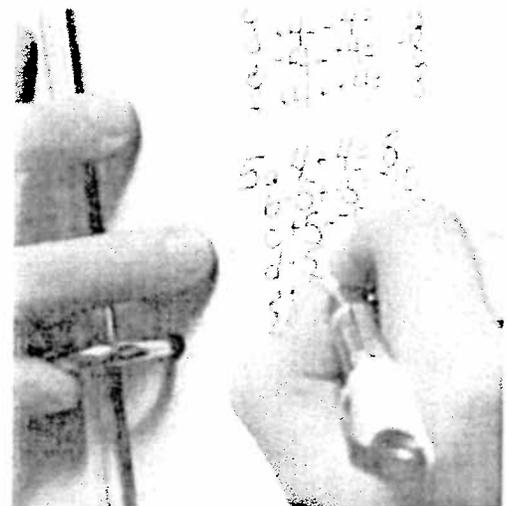
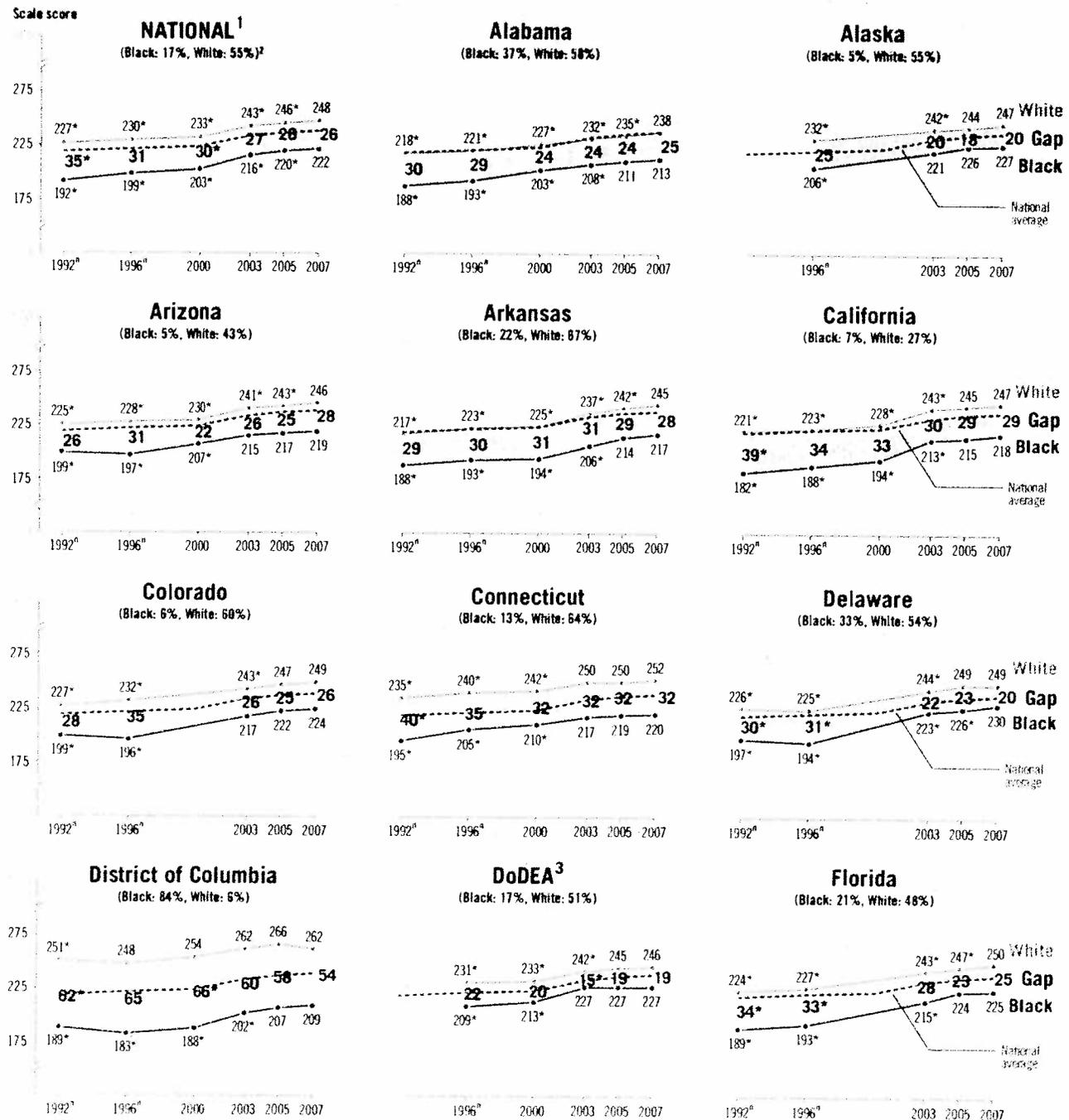
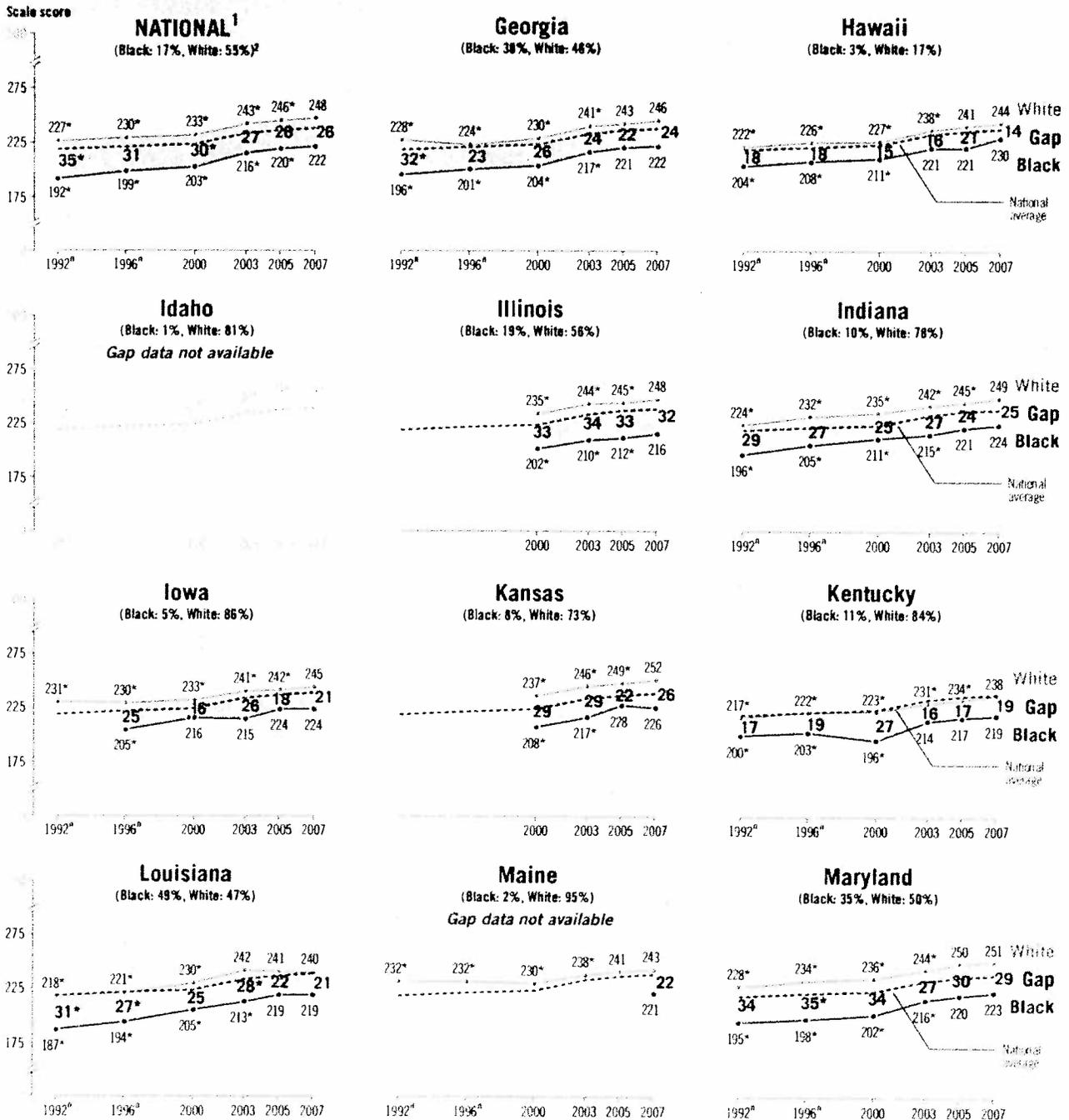


Figure 10. Gaps in average mathematics scores between Black and White public school students at grade 4, by state: Various years, 1992–2007



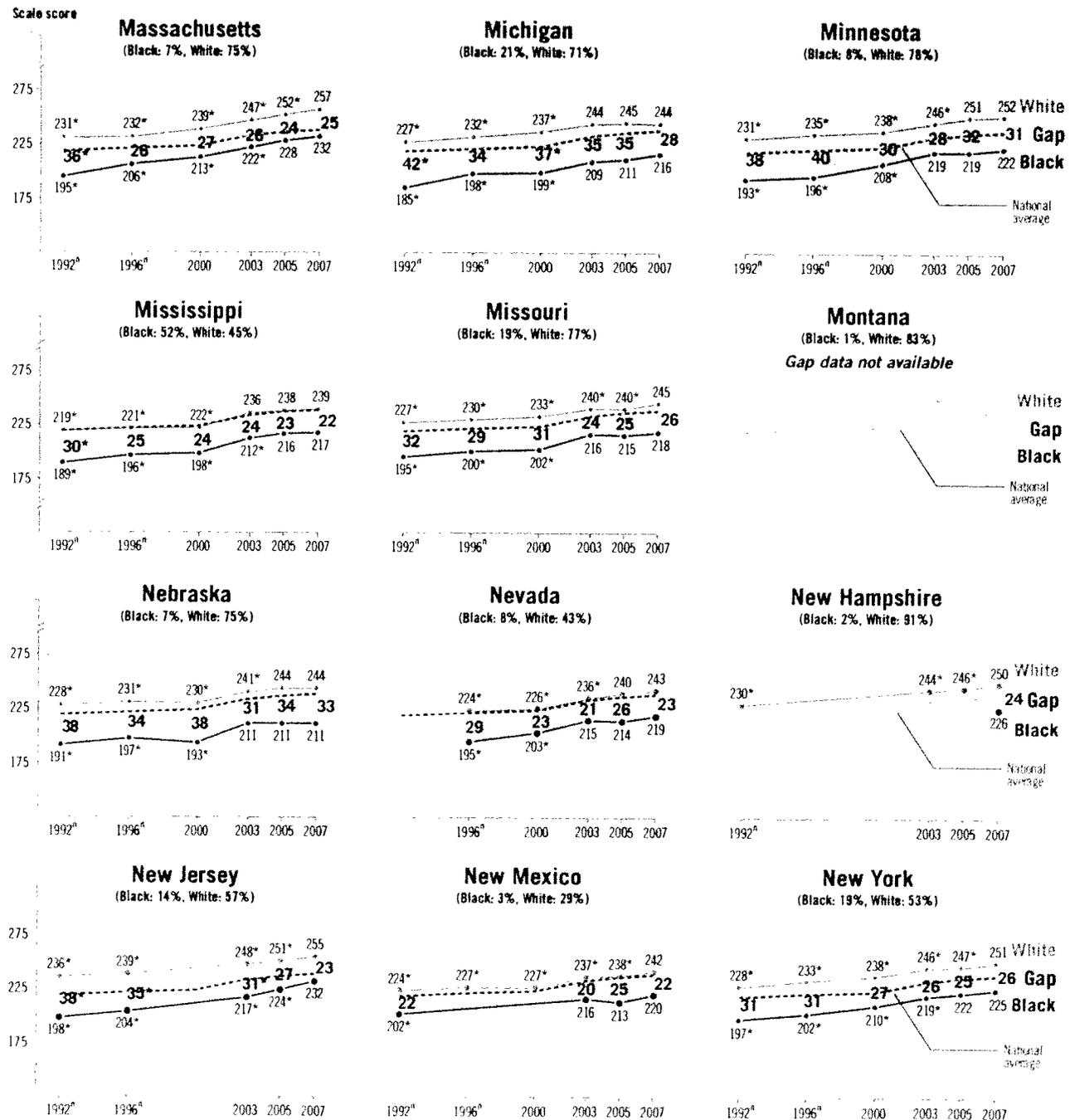
See notes at end of figure.

Figure 10. Gaps in average mathematics scores between Black and White public school students at grade 4, by state: Various years, 1992–2007—Continued



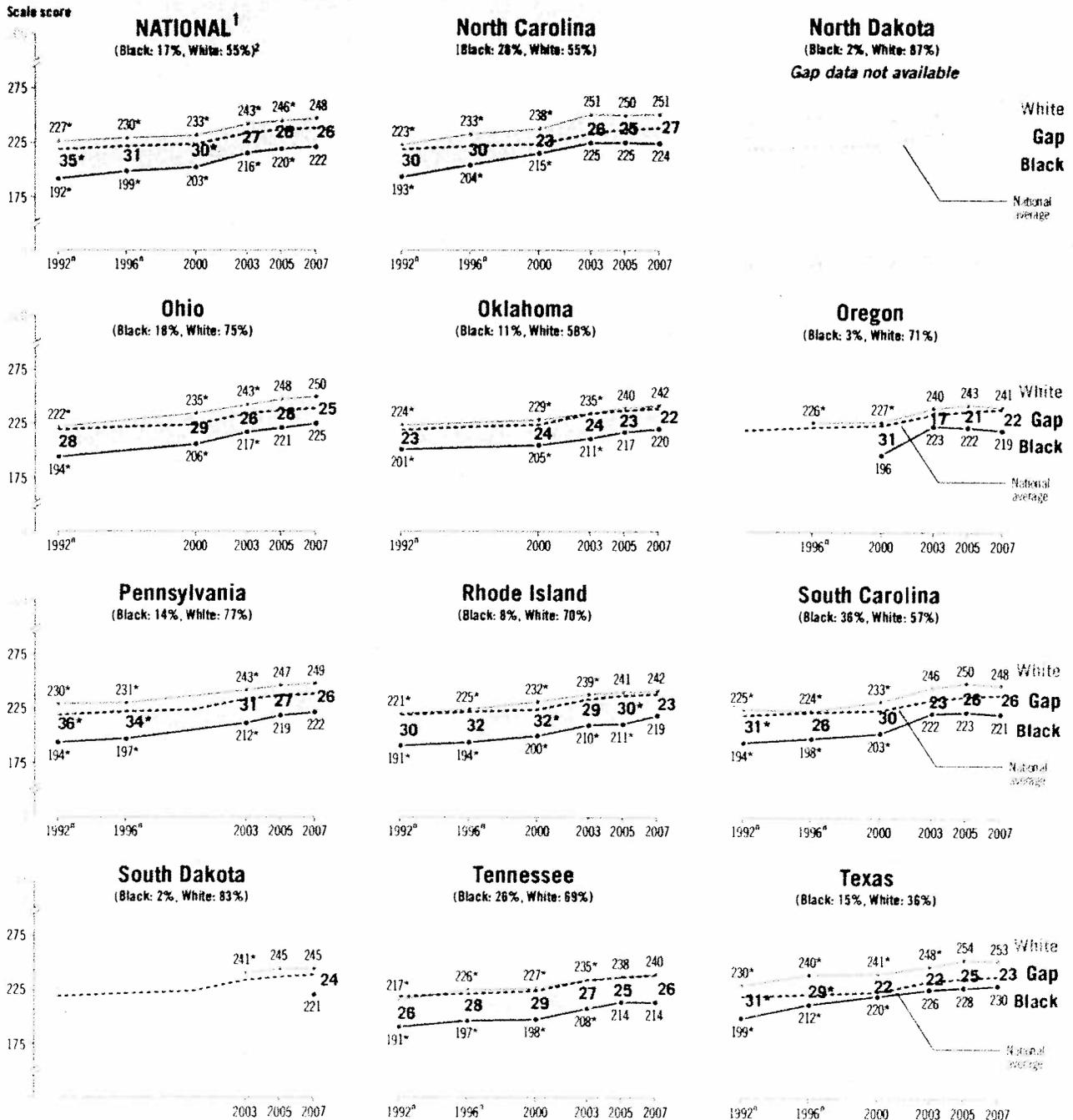
See notes at end of figure.

Figure 10. Gaps in average mathematics scores between Black and White public school students at grade 4, by state: Various years, 1992–2007—Continued



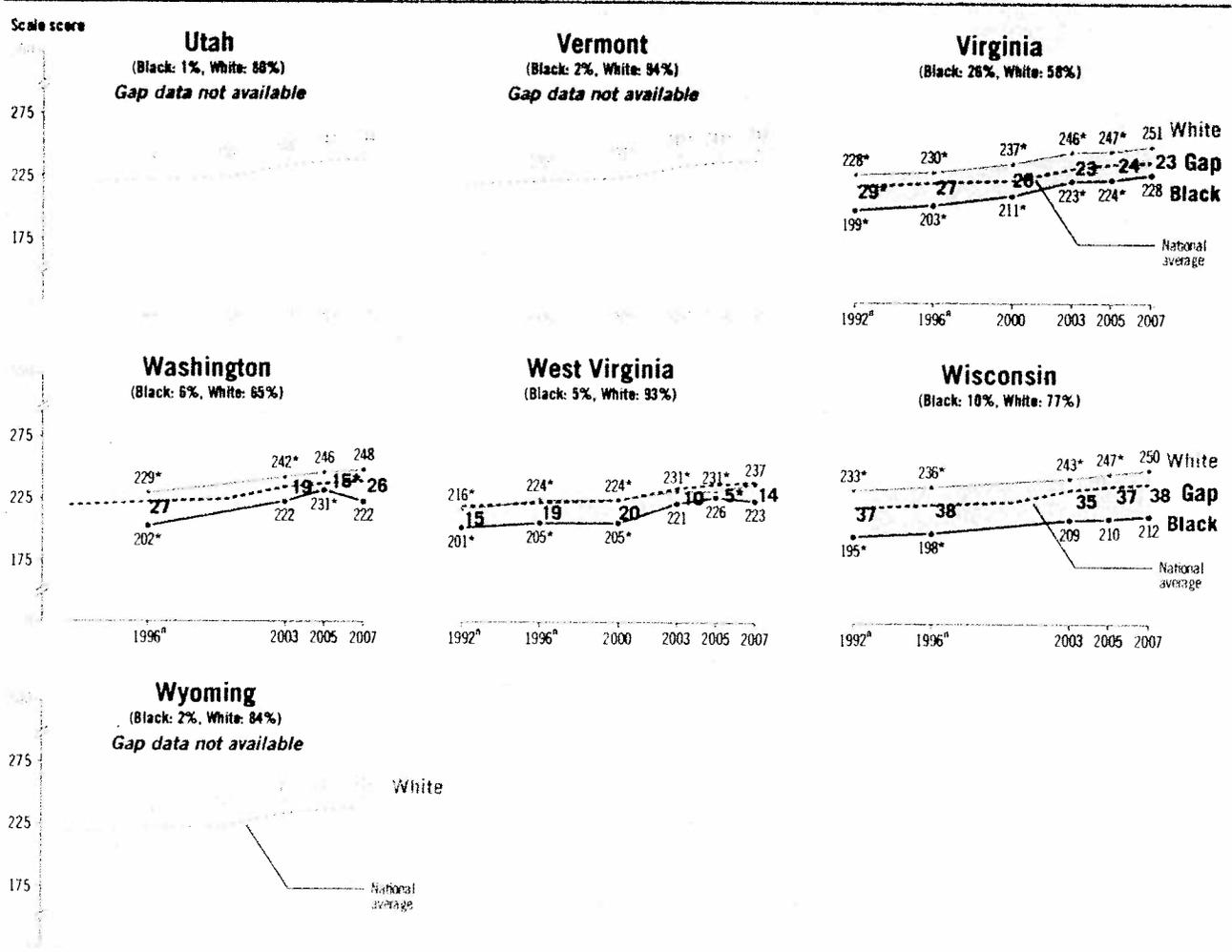
See notes at end of figure.

Figure 10. Gaps in average mathematics scores between Black and White public school students at grade 4, by state: Various years, 1992–2007—Continued

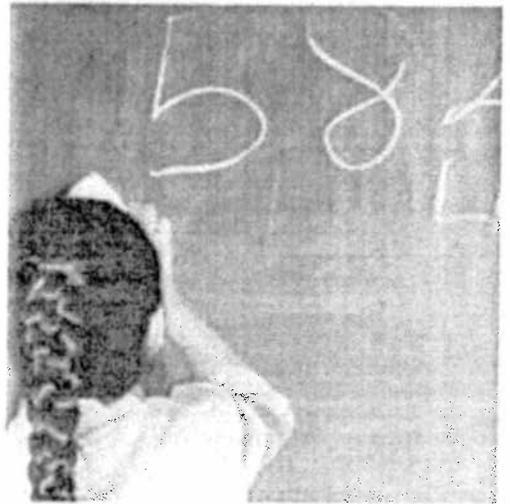


See notes at end of figure

Figure 10. Gaps in average mathematics scores between Black and White public school students at grade 4, by state: Various years, 1992–2007—Continued



^a Accommodations were not permitted for this assessment.
^{*} Significantly different (p < .05) from 2007.
¹ National results for assessments prior to 2002 are based on the national sample, not on aggregated state samples.
² Black and White percentages are based on students tested in 2007.
³ Department of Defense Education Activity (overseas and domestic schools). Before 2005, DoDEA overseas and domestic schools were separate jurisdictions in NAEP. Pre-2005 data reported here were recalculated for comparability.
 NOTE: Detail may not sum to totals due to rounding. Where data are not present, the jurisdiction did not participate or did not meet the minimum participation guidelines for reporting. State level data were not collected in 1990. Comparative performance results may be affected by changes in exclusion rates for students with disabilities and English language learners in the NAEP samples.
 SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics, National Assessment of Educational Progress (NAEP), various years, 1992–2007 Mathematics Assessments.

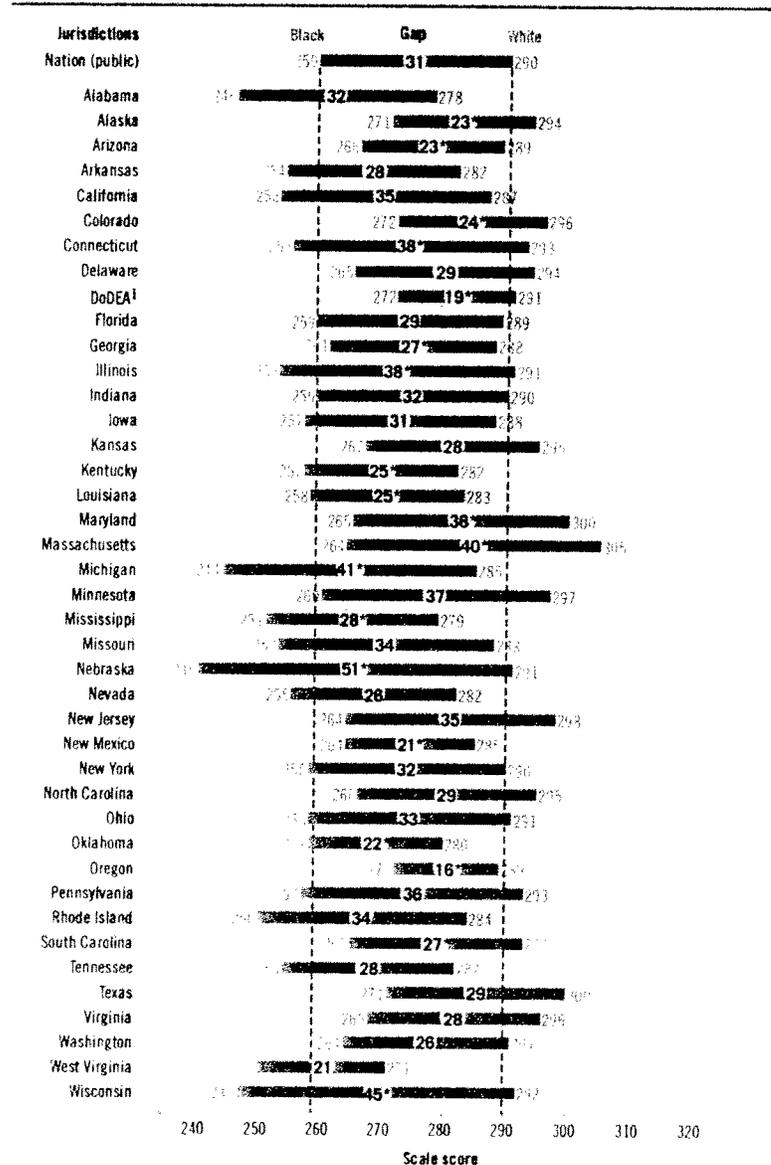


State and national mathematics achievement gaps at grade 8, 2007

Twelve states had a smaller gap than the nation's 31-point gap in 2007 (Alaska, Arizona, Colorado, DoDEA, Georgia, Kentucky, Louisiana, Mississippi, New Mexico, Oklahoma, Oregon, and South Carolina) and seven had a gap that was larger (Connecticut, Illinois, Maryland, Massachusetts, Michigan, Nebraska, and Wisconsin). In 22 states, the gap was not significantly different from the nation's gap. Gaps that are different from the nation's gap are indicated with an asterisk (figure 11).

The eighth-grade mathematics gap in 2007 was statistically significant in all 41 states for which data could be reported. The gaps ranged from 16 points in Oregon to 51 points in Nebraska.

Figure 11. The Black-White achievement score gap in mathematics for public school students at grade 8, by state or jurisdiction: 2007



* Significantly different ($p < .05$) from the nation (public) when comparing one state to the nation at a time.
¹ Department of Defense Education Activity (overseas and domestic schools).
 NOTE: States whose Black or White student population size was insufficient for comparison are omitted.
 Reporting standards not met for District of Columbia, Hawaii, Idaho, Maine, Montana, New Hampshire, North Dakota, South Dakota, Utah, Vermont, and Wyoming.
 SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 2007 Mathematics Assessment.

Trends in state mathematics achievement gaps at grade 8, 1990–2007

The national Black-White mathematics gap was not significantly narrower in 2007 than in 1990, despite higher average scores for both Black and White students in 2007 (figure 12, National results). The gap was narrower in 2007 than in 2005.

In 26 states, mathematics scores of both Black and White eighth-graders were higher in 2007 than in 1990. The 2007 gap was narrower in Arkansas, Colorado, Oklahoma, and Texas, as increases in Black students' scores were greater than those of their White peers.

Between 2005 and 2007, gaps narrowed in Arkansas and Florida as scores for Black eighth-graders increased while those of their White peers showed no change. In Colorado, scores for both groups increased, but a greater increase in Black students' scores caused the gap to narrow.

Narrowing of the Gap

In the following four states, the mathematics gap narrowed between **1990 and 2007** as gains of Black students outpaced the gains of White students.

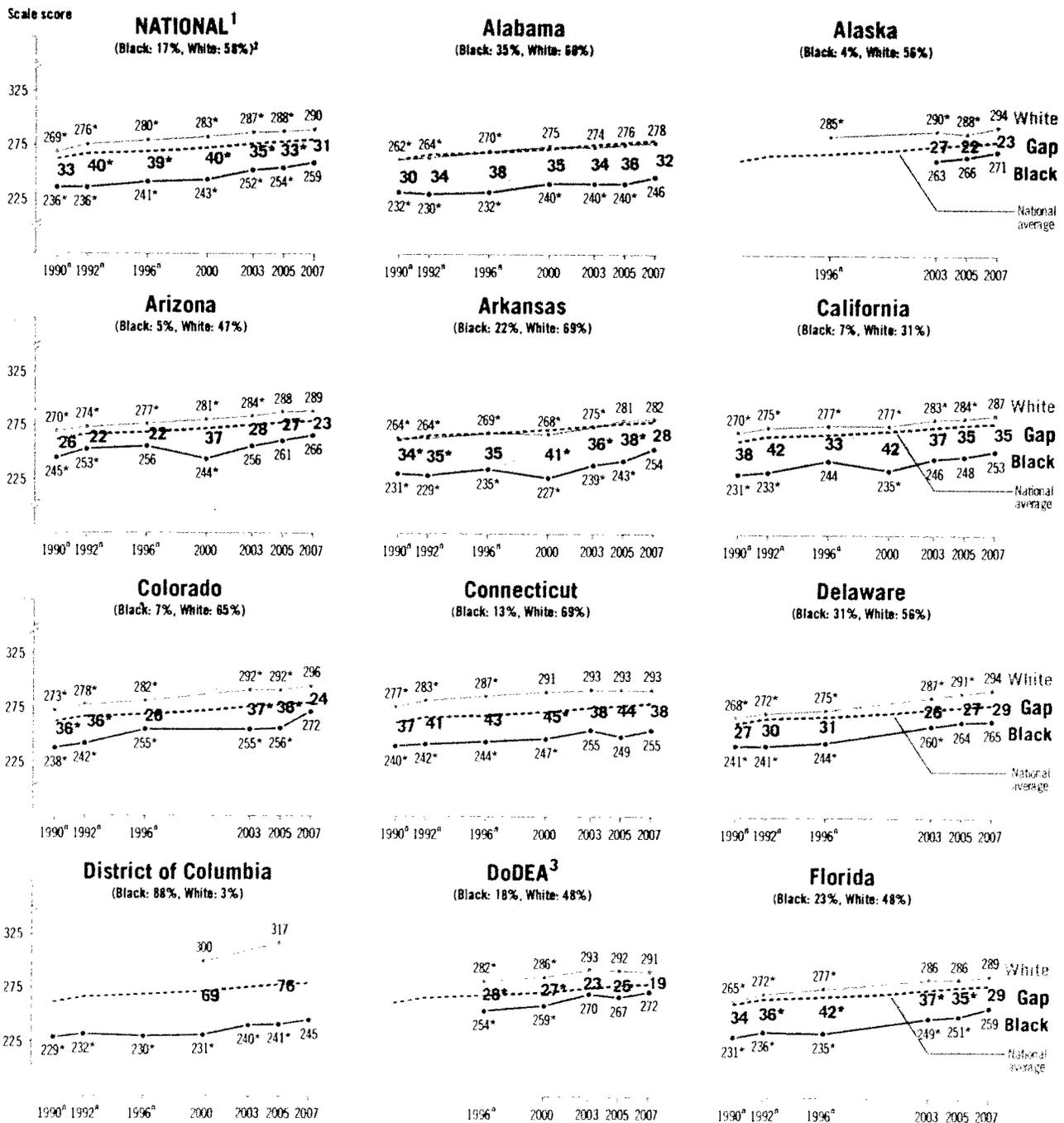
Arkansas
Colorado

Oklahoma
Texas

In **Colorado**, the gap narrowed between **2005 and 2007** as Black students' scores showed greater increases than those of their White peers.

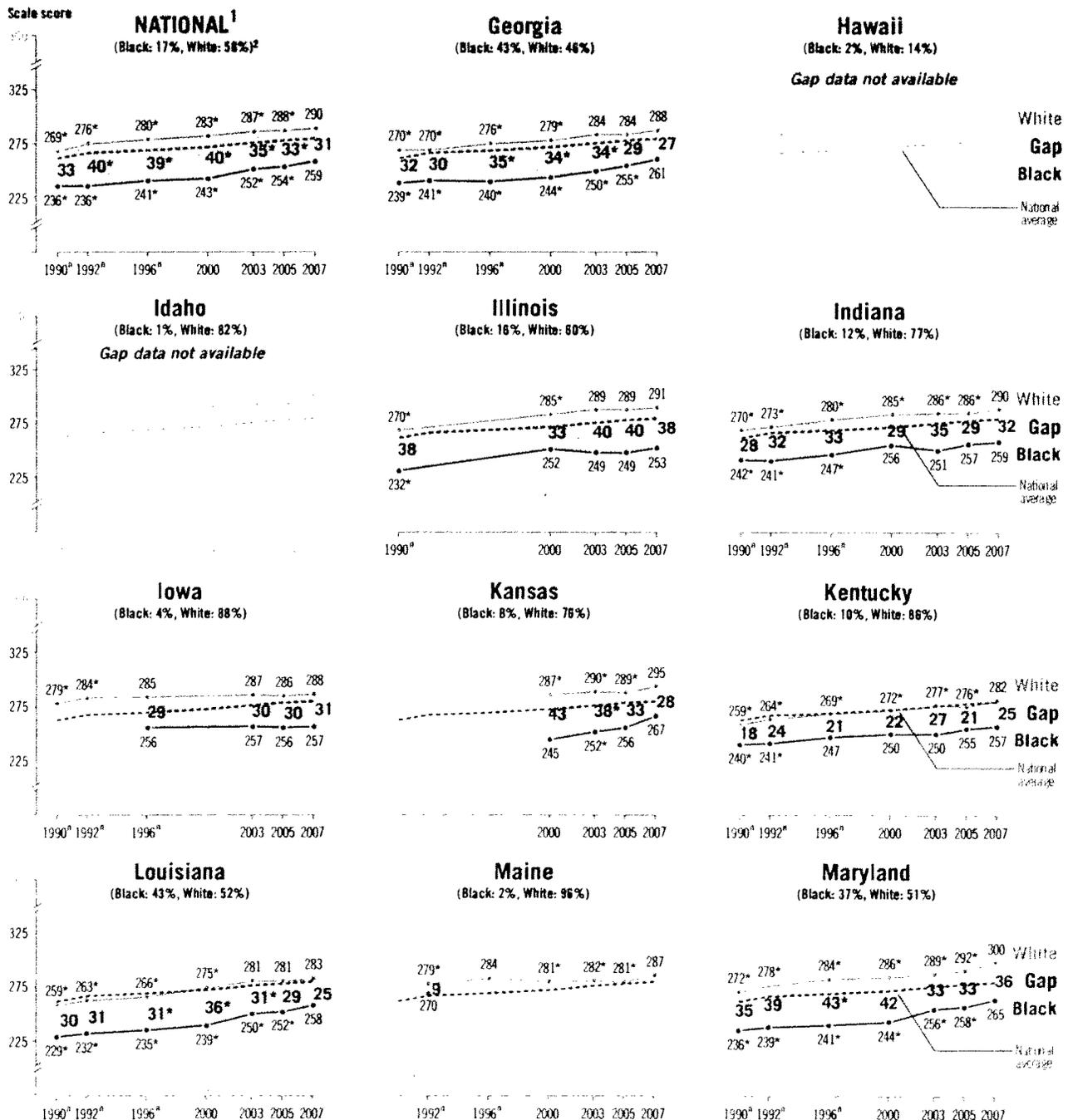
In **Arkansas and Florida**, the gap narrowed between **2005 and 2007** as Black students' scores increased while those of White students did not change significantly.

Figure 12. Gaps in average mathematics scores between Black and White public school students at grade 8, by state: Various years, 1990–2007



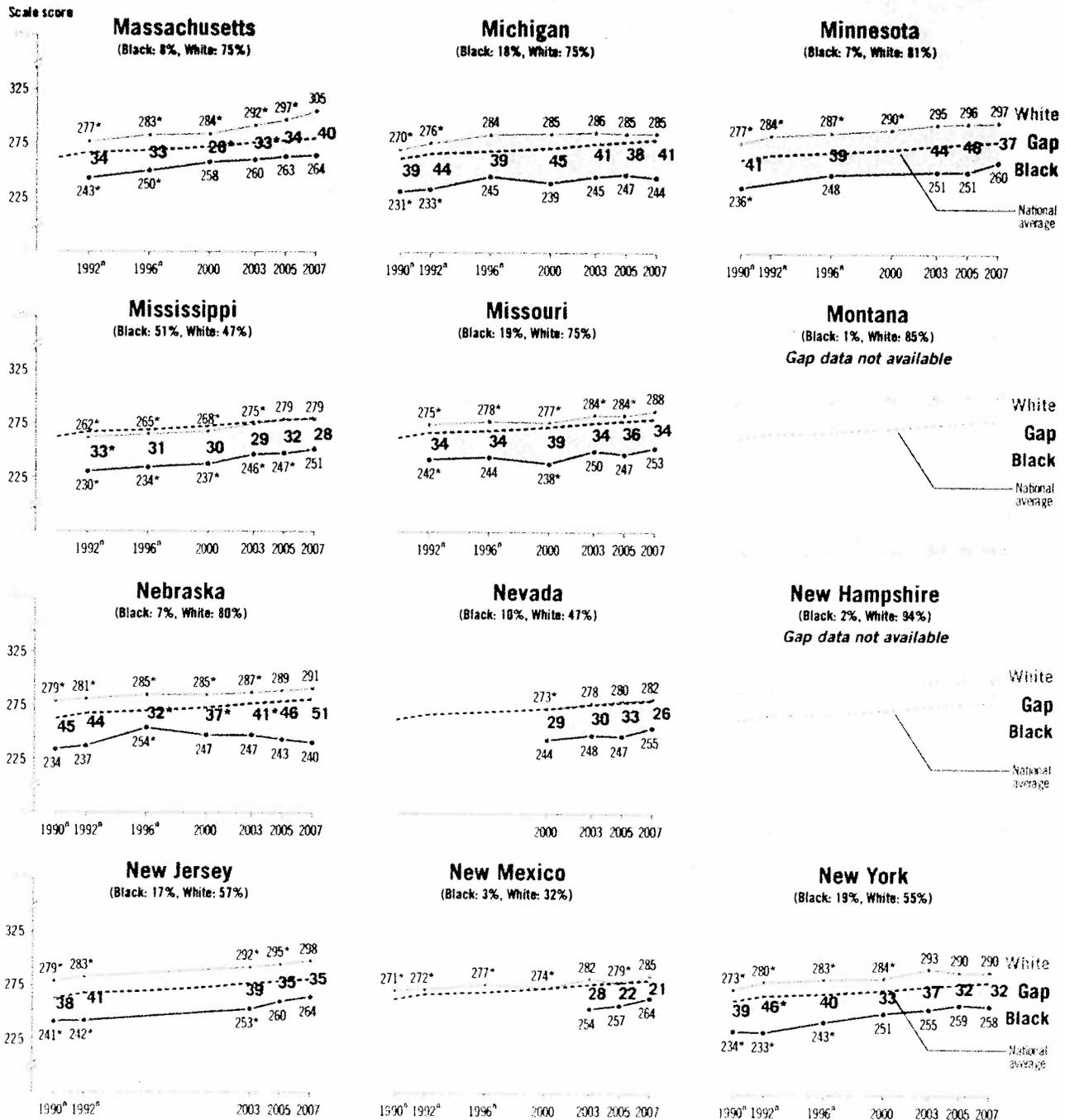
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Figure 12. Gaps in average mathematics scores between Black and White public school students at grade 8, by state: Various years, 1990–2007—Continued



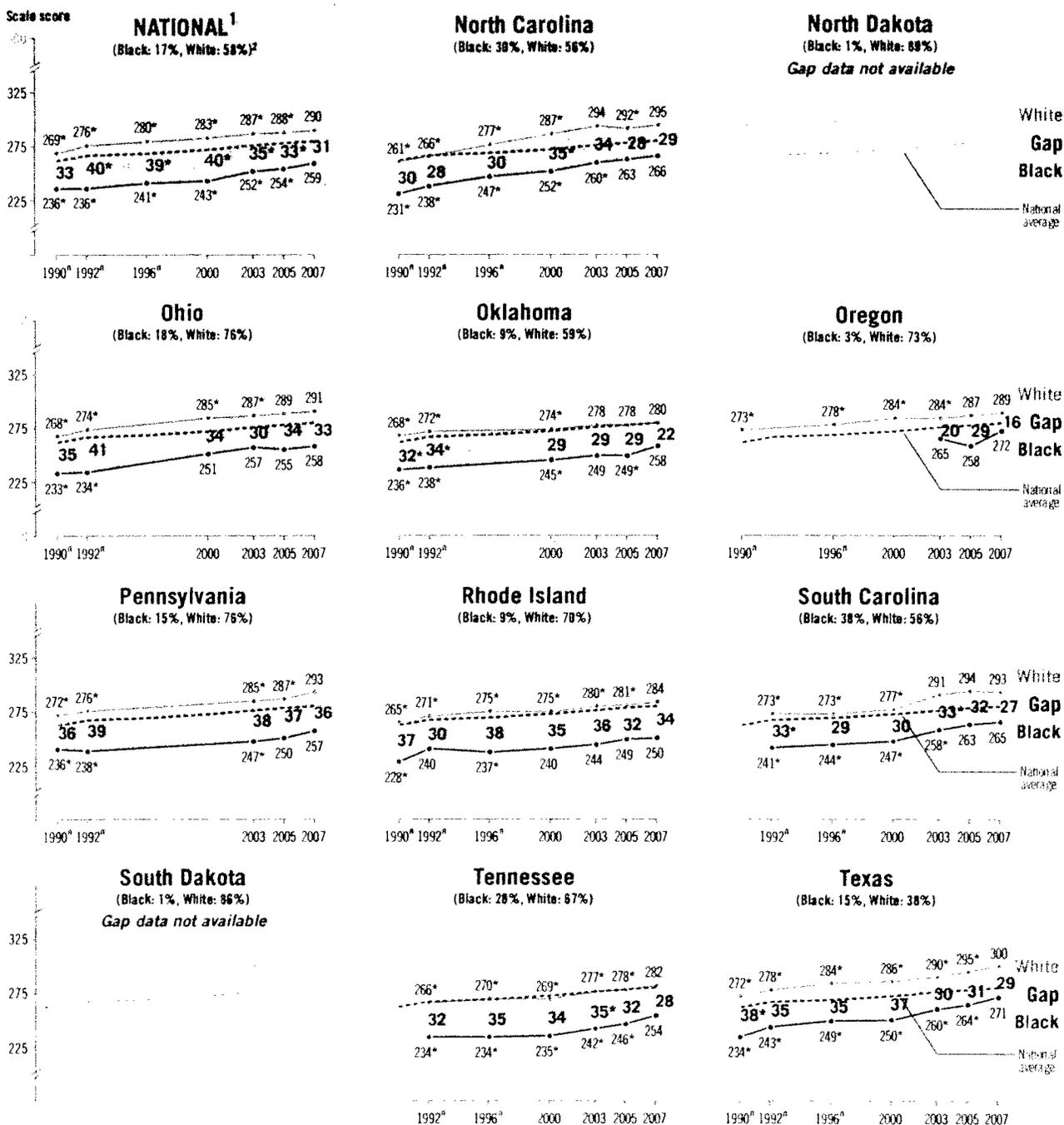
See notes at end of figure.

Figure 12. Gaps in average mathematics scores between Black and White public school students at grade 8, by state: Various years, 1990–2007—Continued



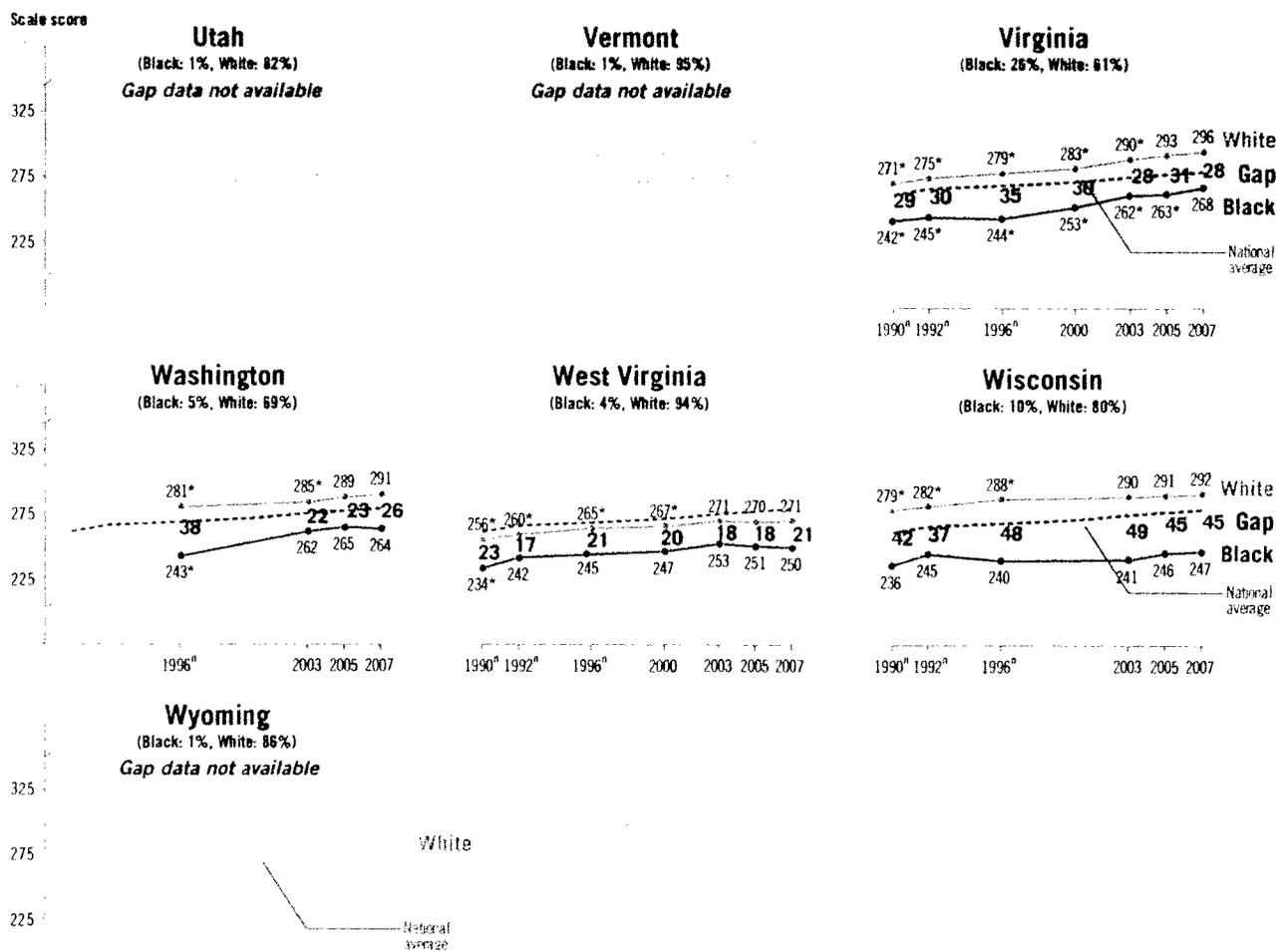
See notes at end of figure.

Figure 12. Gaps in average mathematics scores between Black and White public school students at grade 8, by state: Various years, 1990–2007—Continued



See notes at end of figure.

Figure 12. Gaps in average mathematics scores between Black and White public school students at grade 8, by state: Various years, 1990–2007—Continued



^a Accommodations were not permitted for this assessment.
^{*} Significantly different ($p < .05$) from 2007.
^b National results for assessments prior to 2002 are based on the national sample, not on aggregated state samples.
^c Black and White percentages are based on students tested in 2007.
^d Department of Defense Education Activity (overseas and domestic schools). Before 2005, DoDEA overseas and domestic schools were separate jurisdictions in NAEP. Pre-2005 data presented here were recalculated for comparability.
 NOTE: Detail may not sum to totals due to rounding. Where data are not present, the jurisdiction did not participate or did not meet the minimum participation guidelines for reporting. Comparative performance results may be affected by changes in exclusion rates for students with disabilities and English language learners in the NAEP samples.
 SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics, National Assessment of Educational Progress (NAEP), various years, 1990–2007 Mathematics Assessments.

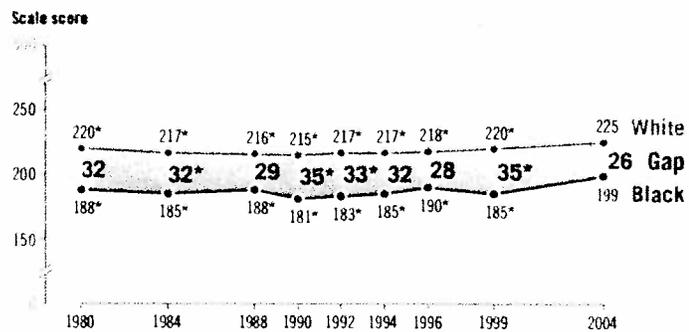
Long-Term Trend Results for Black and White 9- and 13-Year-Olds

Trends in reading scores and achievement gaps, 1980–2004

Reading scores for both Black and White 9-year-old students were higher in 2004 than on any previous long-term trend assessment (figure 13). The score gap in 2004 did not differ significantly from the gap in 1980, but was narrower than the gap in 1999, due to a greater increase in Black students' scores as compared to White students.

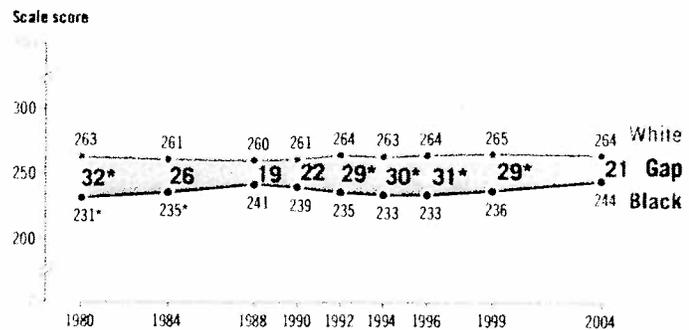
At age 13, reading scores for White students were not significantly different in 2004 than in 1980 (figure 14). For Black students, scores were higher in 2004 than in 1980, resulting in a narrowing of the gap. Scores did not change significantly for either Black or White students from 1999 to 2004, but the gap narrowed for that time period as well. A statistically significant change can occur over time in the gap between two scores even though the scores themselves do not change significantly because changes in gaps are calculated separately from changes in scores.

Figure 13. Trends in average reading scale scores and score gaps for White students and Black students at age 9: Various years, 1980–2004



* Significantly different ($p < .05$) from 2004.
 SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics, National Assessment of Educational Progress (NAEP), various years, 1980–2004 Long-Term Trend Reading Assessments.

Figure 14. Trends in average reading scale scores and score gaps for White students and Black students at age 13: Various years, 1980–2004



* Significantly different ($p < .05$) from 2004.
 SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics, National Assessment of Educational Progress (NAEP), various years, 1980–2004 Long-Term Trend Reading Assessments.

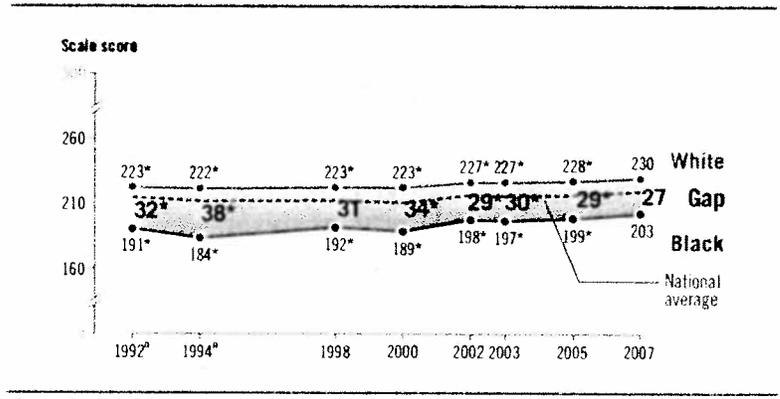
Main NAEP National Results for Black and White Fourth- and Eighth-Graders

Trends in reading scores and achievement gaps, 1992–2007

In main NAEP, the reading gap for Black and White fourth-graders narrowed in 2007 in comparison to both 1992 and 2005 (figure 15). Although scores for both Black and White students were higher in 2007 than in either comparison year, a greater increase in scores for Black students caused the gap to narrow. The 27-point gap in 2007 was narrower than in any previous assessment year except 1998.

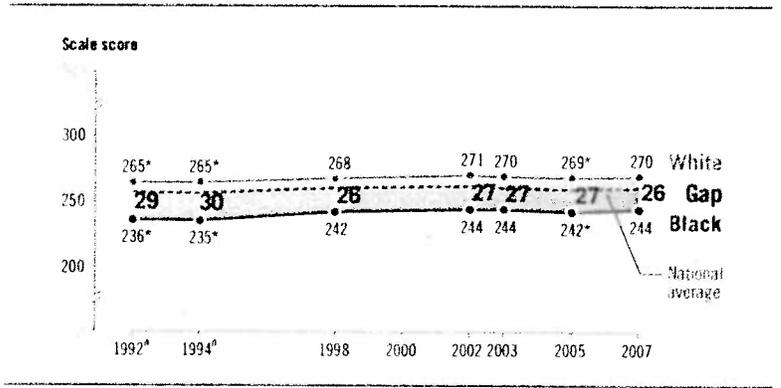
Eighth-grade reading scores for both Black and White students were higher in 2007 than in either 1992 or 2005, but the gap in 2007 was not significantly different from either prior year (figure 16).

Figure 15. Reading achievement score gaps between Black and White public school students at grade 4: Various years, 1992–2007



^a Accommodations were not permitted for this assessment.
 * Significantly different (p < .05) from 2007.
 SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics, National Assessment of Educational Progress (NAEP), various years, 1992–2007 Reading Assessments.

Figure 16. Reading achievement score gaps between Black and White public school students at grade 8: Various years, 1992–2007



^a Accommodations were not permitted for this assessment.
 * Significantly different (p < .05) from 2007.
 NOTE: Data were not collected at grade 8 in 2000.
 SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics, National Assessment of Educational Progress (NAEP), various years, 1992–2007 Reading Assessments.

Reading scores and achievement gaps by gender, 1992–2007

Average reading scores were higher in 2007 than in 1992 for Black and for White fourth-graders, regardless of gender (figure 17). Among males, the gap narrowed as the scores of Black males increased more than those of their White peers. Among fourth-grade females, the Black-White gap did not change significantly.

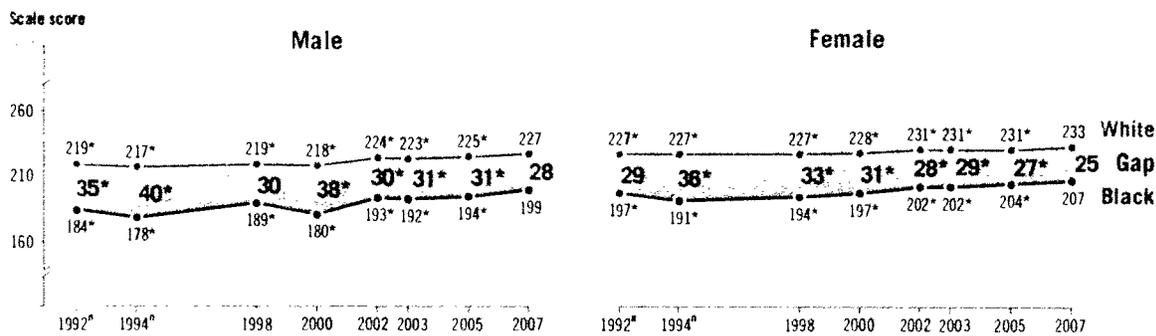
Fourth-grade reading scores were higher in 2007 than in 2005 for both Black and White males and females, and the achievement gaps narrowed for both groups during this period, as the scores of Black fourth-graders increased more than those of their White peers.

Average reading scores for eighth-graders were higher in 2007 than in 1992 for Black and for White students, regardless of gender (figure 18). However, the 2007 gaps in eighth-grade reading achievement showed no significant differences from the 1992 gaps for either males or females.

From 2005 to 2007, average reading scores for eighth-graders increased for both Black and White males. Scores increased for Black females but not for White females. However, the Black-White gap did not change significantly for either gender during this period.



Figure 17. Gaps in average reading scores between Black and White public school students at grade 4, by gender: Various years, 1992–2007

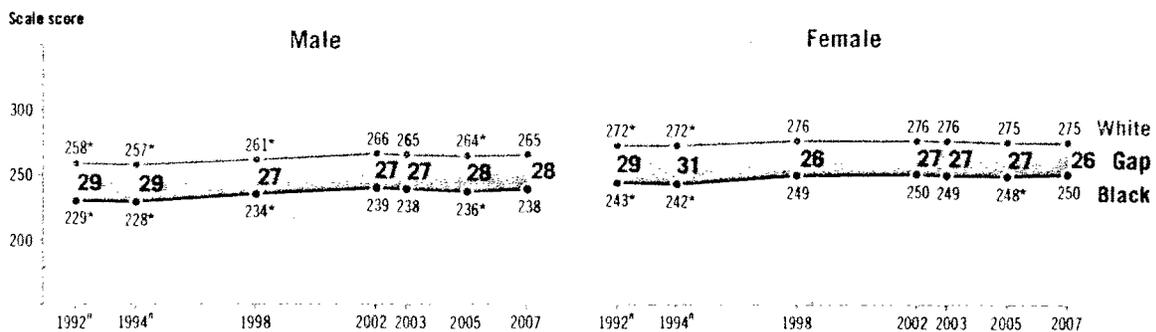


† Accommodations were not permitted for this assessment.

* Significantly different (p < .05) from 2007.

SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics, National Assessment of Educational Progress (NAEP), various years, 1992–2007 Reading Assessments.

Figure 18. Gaps in average reading scores between Black and White public school students at grade 8, by gender: Various years, 1992–2007



† Accommodations were not permitted for this assessment.

* Significantly different (p < .05) from 2007.

NOTE: Data were not collected at grade 8 in 2000.

SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics, National Assessment of Educational Progress (NAEP), various years, 1992–2007 Reading Assessments.

Reading scores and achievement gaps by family income, 2003–2007

NAEP uses student eligibility for free or reduced-price school lunch as an indicator of family income. At grade 4, reading scores were higher in 2007 than in 2003 for both Black and White public school students, regardless of school-lunch eligibility (figure 19). The gap in 2007 for not-eligible students was narrower than in 2003, while the gap for students eligible for free lunch was narrower than in either previous assessment.

At grade 8, scores were higher for Black and White not-eligible students only, comparing 2007 with 2005 (figure 20). There were no statistically significant changes in the sizes of the gaps.

Table 2. Percentage of public school students assessed in NAEP reading by eligibility for free or reduced-price school lunch, race/ethnicity and grade: 2003, 2005, and 2007

	Not eligible		Eligible for reduced-price lunch		Eligible for free lunch	
	Black	White	Black	White	Black	White
Grade 4						
2007	26	73	7	6	66	21
2005	25	72	8	7	66	20
2003	24	72	9	8	65	18
Grade 8						
2007	32	76	7	5	59	18
2005	32	75	9	6	57	17
2003	32	76	9	6	56	14

NOTE: Detail may not sum to totals due to rounding.
SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 2003, 2005, and 2007 Reading Assessments.

Eligibility for free and reduced-price lunch

NAEP collects data on students' eligibility for the National School Lunch Program (NSLP)—sometimes referred to as the free and reduced-price school lunch program—as an indicator of family economic status. Eligibility for free and reduced-price lunches is based on students' family income in relation to the federally established poverty level.

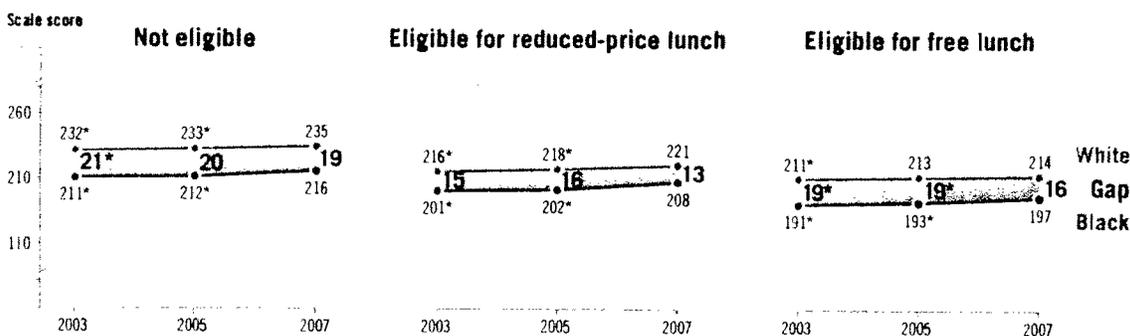
Not eligible: Students who are not eligible for the program because their family's income is above 185 percent of the poverty level.

Eligible for reduced-price lunch: Students who are eligible for reduced-price lunch because their family's income is between 130 percent and 185 percent of the poverty level.

Eligible for free lunch: Students who are eligible for free lunch because their family's income is below 130 percent of the poverty level.

As a result of improvements in the quality of the data on students' eligibility for NSLP, the percentage of students for whom information was not available has decreased in comparison to the percentages reported prior to the 2003 assessment. Therefore, trend comparisons are only made back to 2003 in this report.

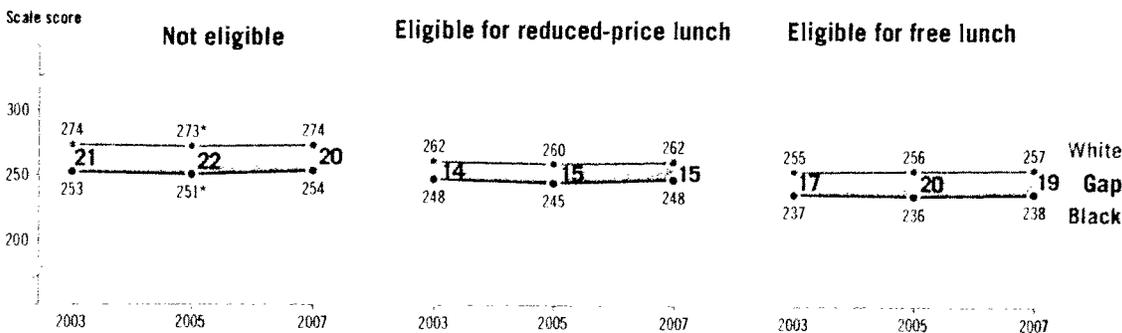
Figure 19. Gaps in average reading scores between Black and White public school students at grade 4, by eligibility for free or reduced-price school lunch: 2003, 2005, and 2007



* Significantly different ($p < .05$) from 2007

SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 2003, 2005, and 2007 Reading Assessments.

Figure 20. Gaps in average reading scores between Black and White public school students at grade 8, by eligibility for free or reduced-price school lunch: 2003, 2005, and 2007



* Significantly different ($p < .05$) from 2007

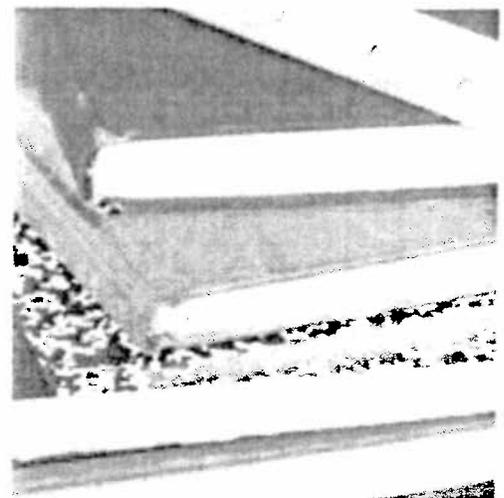
SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 2003, 2005, and 2007 Reading Assessments.

Main NAEP State Results for Black and White Fourth- and Eighth-Graders

The NAEP state reading assessments were administered to public school students in fourth grade in 1992, 1994, 1998, 2002, 2003, 2005, and 2007 and in eighth grade in 1998, 2002, 2003, 2005, and 2007. Before 2003, states were not required to participate in NAEP in order to qualify for Title I education funds. Typically, 40 or more states participated in each assessment prior to 2003. In 2003, 2005, and 2007, all 50 states, the District of Columbia, and the DoDEA schools participated.

State results are presented in two ways. Comparisons of fourth-grade reading gaps in 2007 between each state and the nation are presented in figure 21.

Comparisons of the reading gaps within a state over time are presented in a series of small graphs in figure 22. At the top left of each two-page spread, the reading scores and gaps for the nation are presented for reference. Each state figure, as well as the national figure, also contains a dotted red line representing the national average for public school students. The data for the national averages are located in appendix B in table B-4.

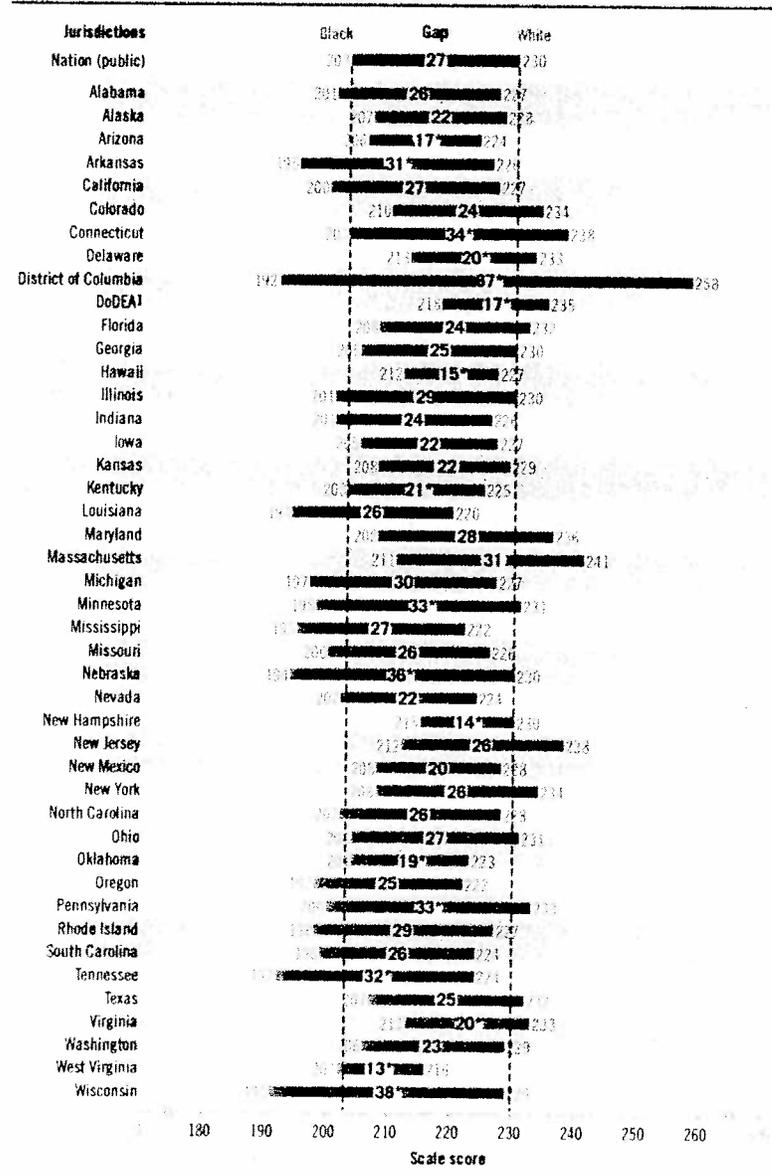


State and national reading achievement gaps at grade 4, 2007

Nine states had a Black-White gap that was smaller than the nation's 27-point gap in 2007 (Arizona, Delaware, DoDEA, Hawaii, Kentucky, New Hampshire, Oklahoma, Virginia, and West Virginia) and eight had a gap that was larger (Arkansas, Connecticut, District of Columbia, Minnesota, Nebraska, Pennsylvania, Tennessee, and Wisconsin). In 27 states, the gap was not different from the national gap. Gaps that are different from the national gap are indicated with an asterisk (figure 21).

The Black-White grade 4 reading gap in 2007 was significant in all 44 states for which data could be reported. The gaps ranged from 13 points in West Virginia to 67 points in the District of Columbia.

Figure 21. The Black-White achievement score gap in reading for public school students at grade 4, by state or jurisdiction: 2007



* Significantly different ($p < .05$) from the nation (public) when comparing one state to the nation at a time.
¹ Department of Defense Education Activity (overseas and domestic schools).
 NOTE: States whose Black student population size was insufficient for comparison are omitted. Reporting standards not met for Idaho, Maine, Montana, North Dakota, South Dakota, Utah, Vermont, and Wyoming.
 SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 2007 Reading Assessment.

Trends in state reading achievement gaps at grade 4, 1992–2007

The Black-White reading gap among the nation's public school fourth-graders was narrower in 2007 than in 1992 as average scores for Black students demonstrated a larger increase than average scores for White students (figure 22, National results).

In 13 states, both Black and White fourth-graders achieved higher average scores in reading during this period. In three states—Delaware, Florida, and New Jersey—the gap was narrower in 2007 than in 1992 as Black students' scores increased more than those of White students.

In addition, gaps narrowed from 2005 to 2007 in Alabama, Arizona, and Virginia.

Narrowing of the Gap

In the following three states, the reading gap was narrower in **2007 than in 1992**, as Black students' scores increased more than those of their White peers.

Delaware
Florida

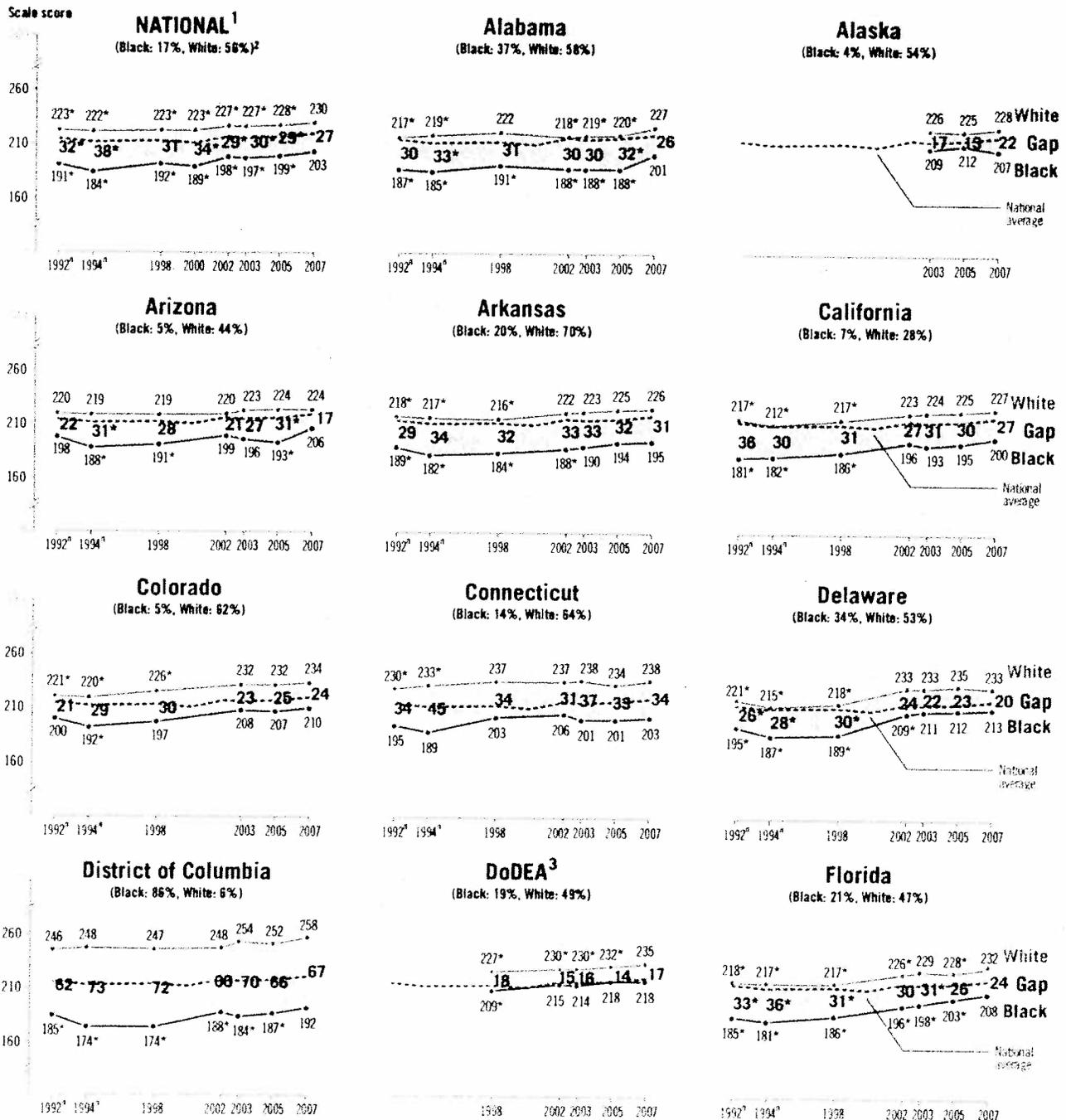
New Jersey

In **Alabama**, the reading gap narrowed between **2005 and 2007** as Black students' scores increased more than White students' scores.

In **Arizona and Virginia**, the reading gap narrowed between **2005 and 2007** as Black students' scores increased while those of White students did not change significantly.

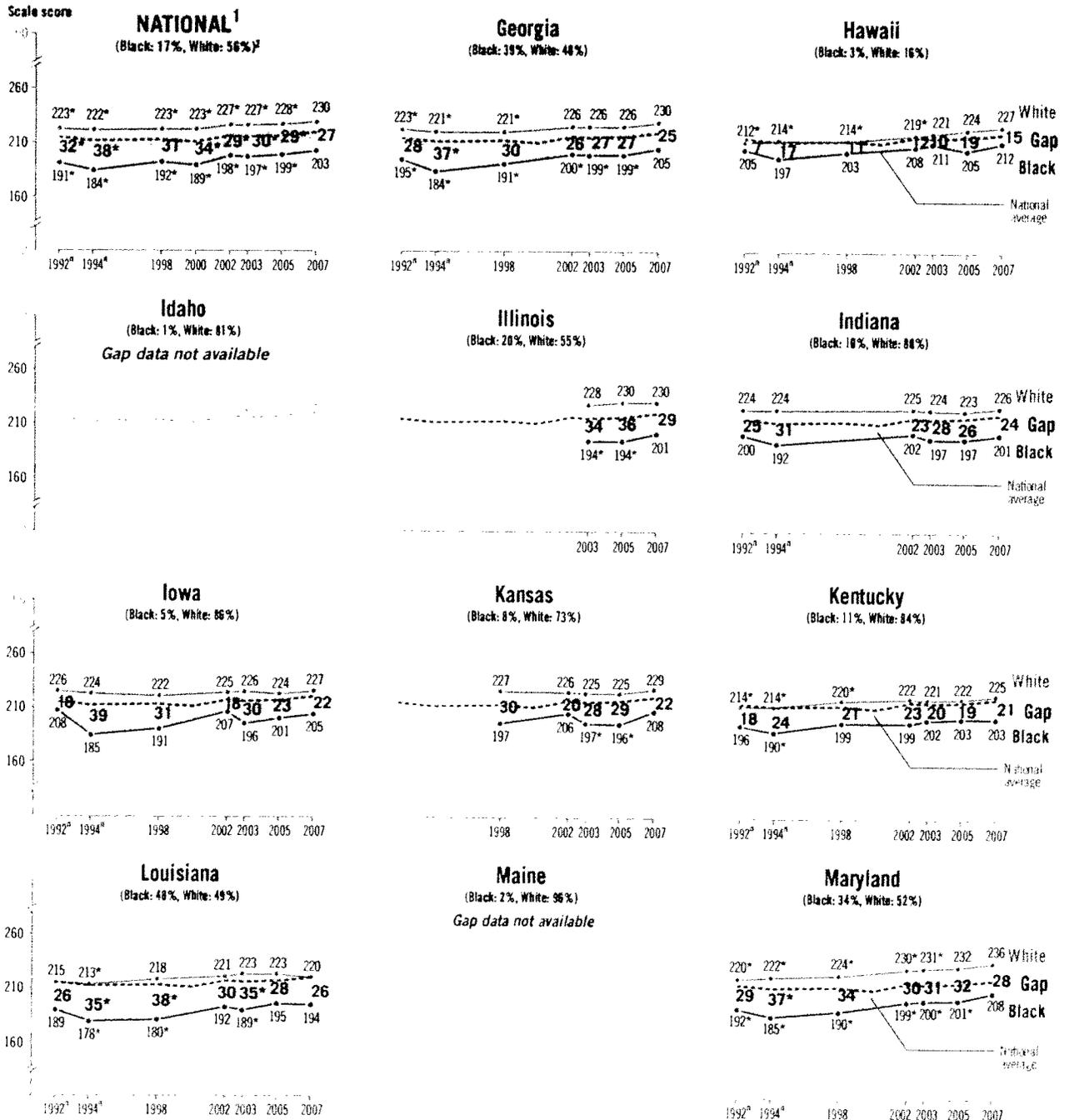


Figure 22. Gaps in average reading scores between Black and White public school students at grade 4, by state: Various years, 1992–2007



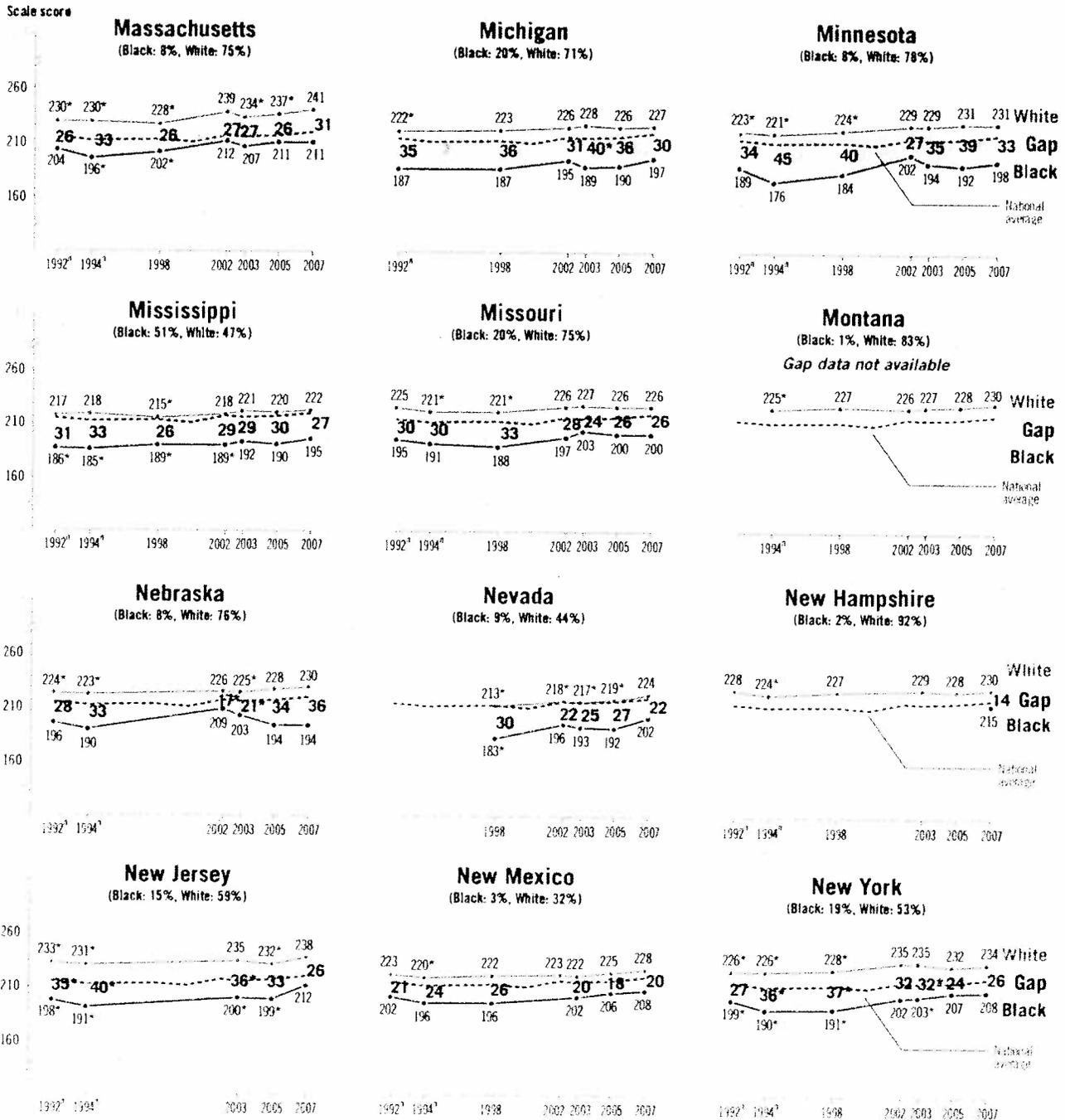
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Figure 22. Gaps in average reading scores between Black and White public school students at grade 4, by state: Various years, 1992–2007—Continued



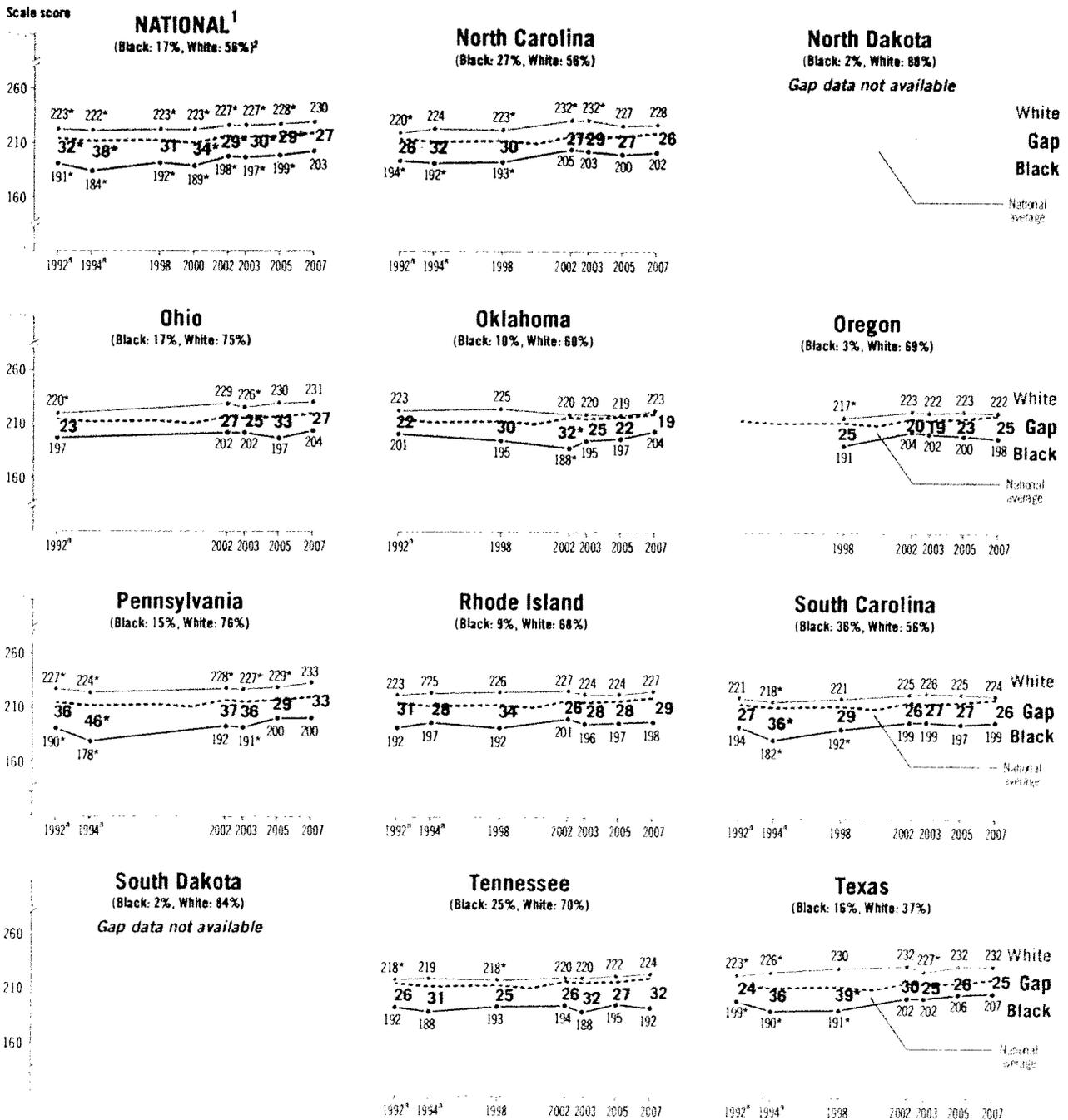
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Figure 22. Gaps in average reading scores between Black and White public school students at grade 4, by state: Various years, 1992–2007—Continued



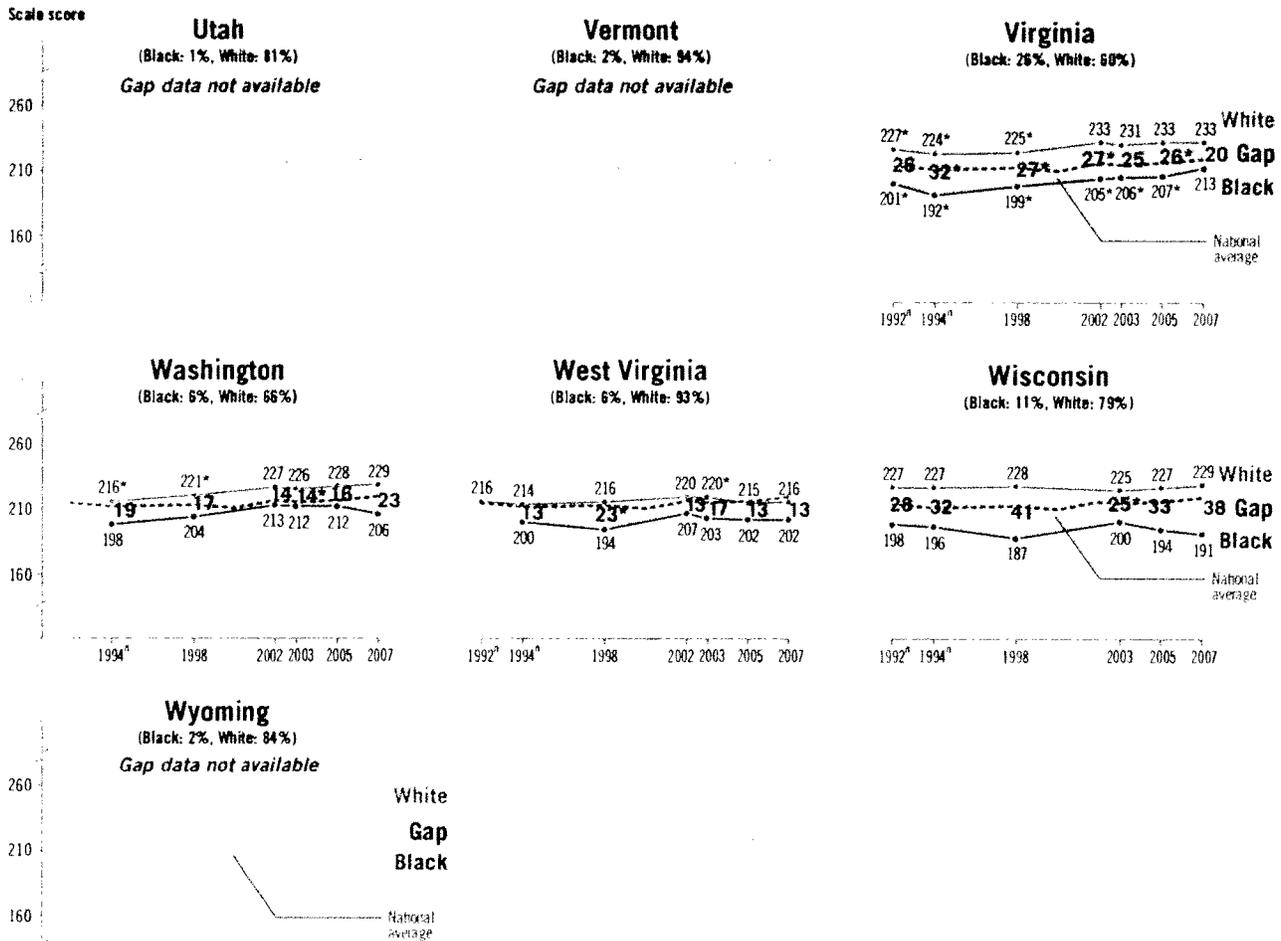
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Figure 22. Gaps in average reading scores between Black and White public school students at grade 4, by state: Various years, 1992–2007—Continued



See notes at end of figure

Figure 22. Gaps in average reading scores between Black and White public school students at grade 4, by state: Various years, 1992–2007—Continued



* Accommodations were not permitted for this assessment.
 * Significantly different (p < .05) from 2007.
ⁿ National results for assessments prior to 2002 are based on the national sample, not on aggregated state samples.
 † Black and White percentages are based on students tested in 2007.
 ‡ Department of Defense Education Activity (overseas and domestic schools) Before 2005, DoDEA overseas and domestic schools were separate jurisdictions in NAEP. Pre-2005 data presented here were recalculated for comparability.
 NOTE: Detail may not sum to totals due to rounding. Where data are not present, the jurisdiction did not participate or did not meet the minimum participation guidelines for reporting. State-level data were not collected in 2000. Comparative performance results may be affected by changes in exclusion rates for students with disabilities and English language learners in the NAEP samples.
 SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics, National Assessment of Educational Progress (NAEP), various years, 1992–2007 Reading Assessments.

