National Assessment of Educational Progress

# The Nation's Report Card"' <br> Student Achievement <br> in Private Schools 

## Results From NAEP 2000-2005



## What is The Nation's Report Card ${ }^{\text {TM }}$ ?

The Nation's Report Card ${ }^{\mathrm{TM}}$, the National Assessment of Educational Progress (NAEP), is a nationally representative and continuing assessment of what America's students know and can do in various subject areas. For over three decades, assessments have been conducted periodically in reading, mathematics, science, writing, history, geography, and other subjects.

By making objective information on student performance available to policymakers at the national, state, and local levels, NAEP is an integral part of our nation's evaluation of the condition and progress of education. Only information related to academic achievement and relevant variables is collected under this program. The privacy of individual students and their families is protected, and the identities of participating schools are not released.

NAEP is a congressionally mandated project of the National Center for Education Statistics within the Institute of Education Sciences of the U.S. Department
of Education. The Commissioner of Education Statistics is responsible, by law, for carrying out the NAEP project through competitive awards to qualified organizations.

In 1988, Congress established the National Assessment Governing Board (NAGB) to oversee and set policy for NAEP. The Board is responsible for selecting the subject areas to be assessed; setting appropriate student achievement levels; developing assessment objectives and test specifications; developing a process for the review of the assessment; designing the assessment methodology; developing guidelines for reporting and disseminating NAEP results; developing standards and procedures for interstate, regional, and national comparisons; determining the appropriateness of all assessment items and ensuring the assessment items are free from bias and are secular, neutral, and nonideological; taking actions to improve the form, content, use, and reporting of results of the National Assessment; and planning and executing the initial public release of NAEP reports.

## U.S. Department of Education

Margaret Spellings
Secretary

## Institute of Education Sciences

## Grover J. Whitehurst

Director
National Center for Education Statistics

Mark Schneider
Commissioner

December 2005

## The National Assessment Governing Board

Darvin M. Winick, Chair
President
Winick \& Associates Dickinson, Texas
Sheila M. Ford, Vice Chair
Former Principal
Horace Mann Elementary School
Washington, D.C.

## Francie Alexander

Chief Academic Officer, Scholastic, Inc.
Senior Vice President, Scholastic Education New York, New York
David J. Alukonis
Chairman
Hudson School Board Hudson, New Hampshire

## Amanda P. Avallone

Assistant Principal and
Eighth-Grade Teacher Summit Middle School Boulder, Colorado

## Honorable Jeb Bush

Governor of Florida Tallahassee, Florida

## Barbara Byrd-Bennett

Chief Executive Officer
Cleveland Municipal School District
Cleveland, Ohio

Carl A. Cohn
Superintendent
San Diego City Schools
San Diego, California

## Shirley V. Dickson

Educational Consultant Laguna Niguel, California

## John Q. Easton

Executive Director
Consortium on Chicago
School Research
Chicago, Illinois
David W. Gordon
Sacramento County
Superintendent of Schools Sacramento County Office of Education
Sacramento, California

## Kathi M. King

Twelfth-Grade Teacher
Messalonskee High School Oakland, Maine

## Honorable Keith King

Member
Colorado House of
Representatives
Colorado Springs, Colorado

## Kim Kozbial-Hess

Fourth-Grade Teacher
Fall-Meyer Elementary School
Toledo, Ohio

## Andrew C. Porter

Director
Learning Sciences Institute
Peabody College
Vanderbilt University
Nashville, Tennessee

## Luis A. Ramos

Community Relations
Manager
PPL Susquehanna
Berwick, Pennsylvania

## Mark D. Reckase

Professor
Measurement and
Quantitative Methods
Michigan State University
East Lansing, Michigan

## John H. Stevens

Executive Director
Texas Business and Education Coalition Austin, Texas
Mary Frances Taymans, SND
Executive Director
National Catholic
Educational Association Washington, D.C.

## Oscar A. Troncoso

Principal
Socorro High School
Socorro Independent School
District
El Paso, Texas

Honorable Thomas J. Vilsack
Governor of Iowa
Des Moines, Iowa

## Michael E. Ward

Former State Superintendent of Public Instruction
North Carolina Public Schools
Jackson, Mississippi
Eileen L. Weiser
Member, State Board of Education
Michigan Department of Education
Lansing, Michigan
Grover J. Whitehurst
(Ex officio)
Director
Institute of Education Sciences
U.S. Department of Education
Washington, D.C.

## Charles E. Smith

Executive Director,
NAGB
Washington, D.C.


## Executive Summary

This report is the first to focus on private school students' performance on NAEP assessments. It provides results in reading, mathematics, science, and writing in 2000, 2002, 2003, and 2005. Specifically, it focuses on the three private school types that combined enroll the greatest proportion of private school students (Catholic, Lutheran, and Conservative Christian) as well as private schools overall. It also compares the performance of students in these schools to that of public school students to provide additional perspective.

Comparing student performance among the three types of private schools highlights several differences at grades 4 and 8 and a few at grade 12 . Among the three types of private schools, few significant differences in performance were


Students in Lutheran schools outperformed students in Conservative Christian schools in some instances in grades 4 and 8. found at grade 12. The exceptions were that in 2000, the average score in science for grade 12 students in Catholic schools was 6 points higher than for students in Lutheran schools, and that in the 2000 mathematics assessment, a higher percentage of twelfth-graders in Catholic schools performed at or above Proficient than twelfth-graders in Conservative Christian schools. Where differences existed at grades 4 and 8, students in Lutheran schools generally outperformed those in Conservative Christian schools. In some grade/subject
combinations, Lutheran school students outperformed Catholic school students, and Catholic school students outperformed Conservative Christian school students.
Students at grades 4, 8, and 12 in all categories of private schools had higher average scores in reading, mathematics, science, and writing than their counterparts in public schools. In addition, higher percentages of students in private schools performed at or above Proficient compared to those in public schools.
Average scores in mathematics at grades 4 and 8 increased between 2000 and 2003 for both public and private schools overall. Students in Catholic schools also had higher average mathematics scores in 2003 than in 2000 in both grades.
The three types of private schools have few differences in their student demographics, except that Catholic schools generally enroll a greater proportion of Hispanic students than Lutheran schools. In general, private schools enroll a higher proportion of White students than public schools, while


Private schools generally enroll a smaller proportion of Black and Hispanic students than public schools. public schools have a higher proportion of Black and Hispanic students. Private schools also enroll a smaller proportion of students with disabilities, English language learners, and students eligible for free or reduced-price school lunch.

Black and Hispanic fourth-graders in all private schools combined had higher average mathematics scores in 2003 than in 2000. However, no significant differences in scores were found across the same time period for Black and Hispanic private school students in grade 4 reading or grade 8 mathematics.

A word of caution is needed: The data in this report provide a summary of the performance of students in public and private schools. The number of assessed students in some types of private schools is small, so it is not always feasible to make statistically meaningful comparisons between the performance of public school students and students in particular types of private schools. Factors not reported here, such as admission policies and parental involvement, can also influence student achievement.

## Introduction

The National Assessment of Educational Progress (NAEP) measures the knowledge of students in grades 4, 8 , and 12 in a variety of subject areas. About 10 percent of the entire U.S. school population, almost 5.3 million students, attended private schools during the 2001-02 school year (Broughman and Pugh 2004). This report provides NAEP results for private schools in 2000, 2002, 2003, and some in 2005. The subjects addressed in this report are reading and writing at grades 4 and 8 , and mathematics and science at grades 4,8 , and 12 .

## What Information Is Available From NAEP About Private

 Schools?In the 1970s and 1980s, the NAEP long-term trend assessment reported data separately for public school students and for all private school students, without distinguishing among types of private schools. Beginning in 1990, main NAEP also has reported performance data separately for private school students in Catholic and in non-Catholic schools. NAEP further increased the number of reporting categories for private schools for the 2000 assessments to include Catholic, Lutheran, Conservative Christian, Other Religious, and Nonsectarian. Different reporting categories for pri-
vate schools were used in 2002 and 2003. In 2005, data were available only for Catholic and Lutheran schools. Table 1 shows the types of private schools for which NAEP collected reportable data in each subject and assessment year.

## What Findings Are Discussed in This Report?

For the past 30 years, NAEP has reported that students in private schools outperform students in public schools. This report confirms that point, but also looks more closely at NAEP results for three types of private schools: Catholic, Lutheran, and Conservative Christian. Combined, these schools enroll the majority of private school students, and they participated in NAEP at most grades in 2000, 2002, and 2003. This is the first NAEP report to compare the performance of students in these three types of private schools.

In this report, results of the 2000, 2002, and 2003 NAEP assessments for Catholic, Lutheran, and Conservative Christian schools are compared with each other. Although all categories of private schools are included in the total for "overall" private, only these three categories are shown separately. An update on 2005 results for Catholic and Lutheran schools is also provided.


## For More Info...

The NAEP website (http://nces. ed.gov/nationsreportcard//) provides an array of information and results from the main NAEP assessments in 2000, 2002, 2003, and 2005, including PDF versions of all NAEP reports, a data tool for exploring the summary results and calculating statistical significance of differences, and a tool for examining released questions from the assessment.
Subject-area frameworks for the NAEP assessments are available on the NAGB website (http://www. nagb.org/pubs/pubs.html).

Comparisons to public schools are also provided as points of reference. Results are given for students overall, as well as for student groups defined by race/ethnicity and-at grades 8 and 12 only-by the highest level of education reached by the students' parents. ${ }^{1}$ Comparisons over time for the 2000-2003 mathematics and reading assessments are included whenever possible. Changes in the gaps between private and public school students' performance are also discussed. The comparisons discussed in this report between students in the different types of private schools, and between students in private schools and public schools, are statistically significant unless otherwise stated.

[^0]Table 1. Grades assessed with reportable data, by subject and type of private school: Various years, 2000-2005

| Type of school | Enrollment in private schools: Fall 2001 | Reading |  |  |  | Mathematics |  |  | Science | Writing |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | 2000 | 2002 | 2003 | 2005 | 2000 | 2003 | 2005 | 2000 | 2002 |
| Catholic | 2,515,524 (4.7\%) | 4 | 4/8/ $\ddagger$ | 4/8 | 4/8/† | 4/8/12 | 4/8 | 4/8/ $\ddagger$ | 4/8/12 | 4/8/ $\ddagger$ |
| Lutheran | 219,397 (0.4\%) | $\ddagger$ | 4/8/ $\ddagger$ | 4/8 | 4/8/ $\ddagger$ | 4/8/12 | 4/8 | 4/8/ $\ddagger$ | 4/8/12 | 4/8/ $\ddagger$ |
| Conservative Christian | 823,469 (1.6\%) | $\ddagger$ | $4 / \ddagger / \ddagger$ | $\ddagger / 8$ | $\ddagger / \ddagger / \ddagger$ | $4 / \ddagger / 12$ | $\ddagger / 8$ | $\ddagger / \ddagger / \ddagger$ | 4/8/ $\ddagger$ | 4/ $\ddagger$ / $\ddagger$ |
| Other Religious | 882,009 (1.7\%) | $\ddagger$ | - | - | - | 4/ $\ddagger$ / $\ddagger$ | - | - | $\ddagger / \ddagger / \ddagger$ | - |
| Nonsectarian | 901,114 (1.7\%) | $\ddagger$ | - | - | - | $\ddagger / \ddagger / \ddagger$ | - | - | $\ddagger / \ddagger / \ddagger$ | - |
| Other Private | - (-) | - | $\ddagger / \ddagger / \ddagger$ | $\ddagger / \ddagger$ | $\ddagger / \ddagger / \ddagger$ | - | $\ddagger / \ddagger$ | $\ddagger / \ddagger / \ddagger$ | - | $\ddagger / \ddagger / \ddagger$ |

- Not available because data were not collected.
$\ddagger$ Reporting standards not met. Data are not reported because participation rates failed to meet minimum NCES standards for reporting.
NOTE: The grade in each cell indicates that reportable data for the category are available at this grade in this subject and year. Percentages of all students enrolled in each type of private school are shown in parentheses. Enrollment numbers are for elementary and secondary schools combined.


## Private School Types

- Catholic schools included parochial, diocesan, and private order schools.
- Lutheran schools included all those that indicated an affiliation with any branch of the Lutheran Church.
- Conservative Christian schools included all those that indicated membership in Accelerated Christian Education, American Association of Christian Schools, Association of Christian Schools International, Association of Christian Teachers and Schools, or the Oral Roberts University Educational Fellowship.
- Other Religious included all other schools that indicated an affiliation with any other religious organization. This category was tabulated separately only in 2000.
- Nonsectarian schools included all private schools without an affiliation to any religious organization or institution. This category was tabulated separately only in 2000.
- Other Private schools included the combined data for "Nonsectarian" and "Other Religious" schools, when data in those categories were too few to report separately. This category was created in 2002.


## How Are Results Reported?

Results are reported in two ways: as average scale scores and as percentages of students attaining NAEP achievement levels. Average scale scores in NAEP measure what students know and can do, and are reported on $0-500$ scales in mathematics and reading, with all three grades on the same scale; science and writing are reported on $0-300$ scales with each of the three grades on a separate scale.

Three achievement levels-Basic, Proficient, and Advanced-have been developed by the National Assessment Governing Board (NAGB) to provide a context for interpreting student performance on NAEP assessments. These achievement levels state what students should know and be able to do in each subject area and at each grade assessed. Further information on achievement levels and sample questions associated with these achievement levels can be found in previous NAEP reports (see, for example, Braswell et al. 2005; Donahue, Daane, and Jin 2005) or online at http://nces.ed.gov/ nationsreportcard/itemmaps/ or http://www.nagb.org/pubs/pubs.html.
As provided by law, the National Center for Education Statistics (NCES), upon review of congressionally mandated evaluations of NAEP, has determined that achievement levels are to be used on a trial basis and should be interpreted and used with caution. However, NCES and NAGB have affirmed that these performance standards are useful for understanding trends in achievement. NAEP achievement levels have been widely used by national and state officials for over a decade.

## Cautions in Interpretation

It is important to note that a relationship between a variable and measures of educational achievement, like the ones presented in this report, does not imply that a difference in the variable causes differences in educational achievement. Higher performance scores in private schools do not imply that the private schools are better than public schools, as they often serve different populations of students. In addition, the results are cross-sectional, rather than longitudinal, so they only provide a snapshot for any given point in time. Comparing students of a particular demographic group may provide more information; however, only one characteristic is compared at a time. For example, this report compares the performance of Black students in different types of schools, but it does not compare the performance of Black students who are eligible for free school lunch across school types, because of limitations of the sample. There are many reasons why the performance of one group of students differs from another, including factors that are not measured in NAEP.
Some key results are presented in the body of the report. Additional data for reading and mathematics are found in the Technical and Data Appendix. As indicated in the appendix tables, some of the data presented in the appendix should be interpreted with caution due to the uncertainty of the variability of the estimates. Also, estimates based on smaller student groups are likely to have relatively large standard errors. These large standard errors mean that some differences that seem large may not be statistically significant. Because private school results are based on smaller samples, they are less likely to show significant differences than the results from public schools. Standard errors, as well as additional data on science and writing, can be found using the NAEP data tool at http://nces.ed.gov/nations reportcard/ndel. Further explanation is provided in the Technical and Data Appendix.

## What Are NAEP Achievement Levels?

Achievement levels are performance standards set by the National Assessment Governing Board (NAGB) to help interpret student performance on NAEP. The three NAEP achievement levels, from lowest to highest, are

Basic-denotes partial mastery of the knowledge and skills that are fundamental for proficient work at each grade.
Proficient-represents solid academic performance. Students reaching this level have demonstrated competency over challenging subject matter.
Advanced-signifies superior performance.
Detailed descriptions of the NAEP achievement levels for each subject can be found on the NAGB website
(http://www.nagb.org/pubs/pubs.html).

## Characteristics of Students in Private Schools

Comparison of the characteristics of students in different types of private schools can indicate the extent to which they are serving different student populations. Characteristics of public school students are also shown for comparison. The student groups highlighted here include those defined by students' race/ethnicity, by the level of their parents' education, by their eligibility to receive free or reduced-price school lunch, and by whether they have been identified as having a disability or as English language learners. The figures on these pages display the data from the 2003 grade 8 reading assessment, and are representative of findings across the subjects and grades. For student demographics in other grades and subjects, see the data appendix and the NAEP data tool, http://nces.ed.gov/ nationsreportcard/nde/.

## Race/Ethnicity

At all grades and in all subject assessments included in this report, private schools overall had a higher percentage of White students than public schools, and public schools had higher percentages of Black and Hispanic students than private schools. Within the different types of private schools, Lutheran schools generally enrolled a higher percentage of White students than Catholic schools, and Catholic schools enrolled a higher percentage of Hispanic students than Lutheran schools. Figure 1 shows the racial/ethnic distributions for the 2003 grade 8 reading assessment. The racial/ethnic categories shown-White, Black, Hispanic, and Asian/Pacific Islander-are mutually exclusive. Pacific Islander includes Native Hawaiian, and Hispanic includes Latino. Race
categories exclude Hispanic origin unless specified. Data for American Indian/Alaska Native students are included in the total but are not broken out separately due to small sample sizes.

## Parents' Highest Level of Education

When eighth-grade students were asked to report their parents' highest level of education, a greater percentage of students in private schools compared to public schools reported that at least one parent had graduated from college. No statistically significant differences in the highest level of education reported for at least one parent were found for any school category among the three types of private schools. Figure 2 provides data at grade 8 from the 2003 reading assessment.

Figure 1. Percentage distribution of students who participated in reading assessment, by race/ethnicity and type of school, grade 8: 2003

a Significantly different from Catholic schools.
${ }^{\mathrm{b}}$ Significantly different from Lutheran schools.
d Significantly different from public schools.
NOTE: At each grade, approximately 1 percent of public school students were classified as American Indian/Alaska Native, while the proportion of students of the same race/ethnicity in private schools rounds to zero. Results are not shown for students whose race/ethnicity was "other." Data for Other Private schools are included in the overall Private data but not reported separately. SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 2003 Reading Assessment.

Figure 2. Percentage distribution of students who participated in reading assessment, by student-reported parents' highest level of education and type of school, grade 8: 2003


[^1]
## KEY FINDINGS

- Private schools enrolled a higher percentage of White students and a lower percentage of Black and Hispanic students than public schools.
- On average, Lutheran schools enrolled a higher percentage of White students than Catholic schools, and Catholic schools enrolled a higher percentage of Hispanic students than Lutheran schools.

For all the assessments discussed in this report, at each grade, students in all types of private schools scored higher on average than public school students.

- Where differences existed at grades 4 and 8, students in Lutheran schools generally outperformed those in Conservative Christian schools.


## Free and Reduced-Price School Lunch

A student's eligibility for free or reduced-price school lunch, which depends on family income, is often used as a proxy for a measure of socioeconomic status. In the 2003 reading assessment, 6 percent of students in all private schools combined were reported as eligible for free or reduced-price lunch at grade 4 , and 11 percent at grade 8. Approximately 9 percent of fourth-graders in both Catholic and Lutheran schools were eligible. In contrast, public schools reported that 44 percent of their fourthgraders were eligible for free or reduced-price lunch.

However, these data should be interpreted with caution because of the high percentages of students in private schools for whom information was not available. Information was not available for about half of the fourth-grade students in Catholic and Lutheran schools. As seen in figure 3, the percentages of private school students for whom lunch-eligibility information was not available are also high for grade 8. In contrast, information was not available for only 6 percent of the eighth-grade students in public schools. As a result, this report does not present performance data by groups defined by eligibility for free and reduced-price school lunch.

Figure 3. Percentage distribution of students in reading, by students' eligibility for free/reduced-price school lunch and type of school, grade 8: 2003


[^2]
## Students With Disabilities (SD) and English Language Learners (ELL)

Two other demographic variables that were analyzed for this report are the percentage of students with disabilities and the percentage of students identified as English language learners in the different types of schools. Figure 4 shows these percentages for eighth-graders participating in the reading assessment in 2003. Overall, less than 3 percent of grade 8 students enrolled in any private school were identified as SD or ELL. No significant differences in this percentage were found among the three private school types discussed here. Public schools enroll a larger percentage of students who are SD, ELL, or both- 15 percent.

Figure 4. Percentage distribution of students in reading, by students with disabilities and English language learners, and by type of school, grade 8: 2003


[^3]

## Performance of Students in Private Schools

Few differences in performance were found among the three types of private schools. Where differences were found, students in Lutheran schools generally outperformed their counterparts in Conservative Christian schools. With some exceptions, no significant differences were found between the performance of students in Lutheran schools and Catholic schools. Students in Catholic schools outperformed students in Conservative Christian schools in three of the grade/subject combinations.

For each assessment discussed in this report at each grade, students as a whole in every category of private schools had a higher average score than their counterparts in public schools. In addition, higher percentages of students in most categories of private schools performed at or above Proficient and Basic compared to the percentages of public school students.

## Reading Performance

As shown in figure 5, among the three types of private schools, there were no significant differences in reading performance at grade 4 in 2003. The average scale scores in 2003 for students at grade 8 in
both Catholic and Lutheran schools were higher than the average score for those in Conservative Christian schools.

Students in all types of private schools at both grades 4 and 8 had higher average reading scores in 2003 than students at the same grade in public schools. Also, higher percentages of students at grades 4 and 8 performed at or above Proficient and at or above Basic in reading in all private schools combined, as well as in all the subcategories of private schools, than in public schools. No significant differences in these percentages were found among the three types of private schools at either grade.

Figure 5. Average scale scores and achievement-level results in reading, by type of school, grades 4 and 8: 2003


[^4]
## Mathematics Performance

Figure 6 shows that at grade 4 there were no significant differences in mathematics performance between students in Catholic and Lutheran schools in 2003. At grade 8, students in Lutheran schools scored higher on average than students in Catholic and Conservative Christian schools in 2003. A greater percentage of eighth-graders in Lutheran schools also performed at or above Proficient in 2003 than their counterparts in Catholic and Conservative Christian schools. There were no significant differences in average scores among the three types of private schools at grade 12 in 2000 .

In 2003, students at grades 4 and 8 in private schools overall, and in all types of private schools with reportable data, had higher average scores in mathematics than students
in public schools. Similar results were seen for grade 12 in 2000 (the most recent mathematics assessment for that grade). Also, higher percentages of students at all three grades in private schools overall, and in Catholic and Lutheran schools, performed at or above Proficient and at or above Basic, compared to their counterparts in public schools.

## Science Performance

Figure 7 shows results from the most recent science assessment in 2000. Fourth-graders in Lutheran schools scored 8 points higher, on average, than their counterparts in Conservative Christian schools. No significant differences were seen among eighth-grade students in the three private school types. The average score of twelfth-graders in Catholic schools was 6 points higher than the average score of twelfthgraders in Lutheran schools. Also,
a greater percentage of Catholic school students at grade 12 than their peers in Lutheran schools performed at or above Basic. These twelfth-grade science results are the only overall results in which students in Catholic schools outperformed their Lutheran school counterparts.
In 2000, students at grades 4, 8, and 12 in all categories of private schools with reportable data had higher average scores in science than students in public schools. Higher percentages of students at grades 4 and 8 in all private school categories performed at or above Proficient in comparison to their counterparts in public schools. At grade 12, higher percentages of students in private schools overall and in Catholic schools than students in public schools performed at or above Proficient.

Figure 6. Average scale scores and achievement-level results in mathematics, by type of school, grades 4, 8, and 12: 2000 and 2003


[^5]${ }^{\text {b }}$ Significantly different from Lutheran schools.
c Significantly different from Conservative Christian schools.
d Significantly different from public schools.
NOTE: The NAEP mathematics scale ranges from 0 to 500. Data for Nonsectarian and Other Religious schools for 2000 and data for Other Private schools for 2003 are included in the overall Private data for those years but not reported separately. 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.

## Writing Performance

Figure 8 shows results from the most recent writing assessment in 2002. Average scores for fourth-graders in Catholic and Lutheran schools were higher than the average score for fourth-graders in Conservative Christian schools. The percentages of students at grade 4 who scored at or above Proficient were higher in

Catholic and Lutheran schools than in Conservative Christian schools. There were no significant differences in performance among the three private school types at grade 8 .
In 2002, students at grades 4 and 8 in private schools overall, and in Catholic and Lutheran schools, had higher average scores in writing than students in the same grades in
public schools. Students at grade 4 in Conservative Christian schools scored higher on average than their counterparts in public schools. Higher percentages of fourth- and eighth-grade students in private schools overall, in Catholic, and in Lutheran schools performed at or above Proficient in writing in comparison to their counterparts in public schools.

Figure 7. Average scale scores and achievement-level results in science, by type of school, grades 4, 8, and 12: 2000

${ }^{\text {a }}$ Significantly different from Catholic schools.
${ }^{\mathrm{b}}$ Significantly different from Lutheran schools.
${ }^{\text {c }}$ Significantly different from Conservative Christian schools.
${ }^{\text {d }}$ Significantly different from public schools.
NOTE: The NAEP science scale ranges from 0 to 300. Data for Nonsectarian and Other Religious schools are included in the overall Private data but not reported separately.
SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 2000 Science Assessment.

Figure 8. Average scale scores and achievement-level results in writing, by type of school, grades 4 and 8: 2002


[^6]
## Changes in Scores for Public and Private Schools

Changes in performance between 2000 and 2003 can be examined for reading at grade 4 and mathematics at grades 4 and 8 . Studying changes over time will help to determine which types of schools are making strides in improving student achievement as well as provide an indicator of changing demographics. Changes in overall average scale scores are shown in this section. Additional results, including changes in achieve-ment-level performance and changes for particular student groups, can be found in the data appendix.

## Grade 4 Reading Changes

As shown in figure 9, the apparent increase between 2000 and 2003 in the average reading score for private school students was not statistically significant. Catholic schools were the only private school type with reliable data in both 2000 and 2003. The apparent increase of 6 points
between those two years was also not statistically significant. Public school students showed an improvement of 5 points in the average reading score during the same time. There was no statistically significant change in the reading score gap between public and private school fourth-graders from 2000 , when it was 20 points, to 2003, when it was 18 points.

## Grade 4 Mathematics

 ChangesAt grade 4, improvements in average mathematics scores between 2000 and 2003 were seen in almost all types of schools, including private overall, Catholic, Lutheran, and public schools (see figure 10). Average scores in Catholic and Lutheran schools increased by 7 and 4 points, respectively, while average scores for all private schools combined increased 6 points. Average scores in
public schools increased by 10 points in this same time period. The publicprivate score gap decreased from 14 points in 2000 to 10 points in 2003.

## Grade 8 Mathematics Changes

As shown in figure 11, average mathematics scores increased between 2000 and 2003 for eighth-grade students in all private schools combined, in Catholic schools, and in public schools. The average score for Catholic schools increased by 6 points between 2000 and 2003. The apparent increase during that same time in average score for Lutheran schools was not statistically significant. The difference between average mathematics scores of eighth-grade students in public and private schools did not change significantly between 2000, when it was 15 points, and 2003, when it was 16 points.

## 2005 Private School Results

The 2005 results for private school students overall are not presented because the participation rates for this group were too low to produce valid and reliable estimates. Results are, however, available for students who attended two types of private schools: Catholic and Lutheran. Only these two private school types had sufficient participation rates to produce valid and reliable results.

In reading, the average scores for Catholic and Lutheran students were not significantly different in 2005 than in any previous assessment year in both grades 4 and 8 . Likewise, the average mathematics scores for both types of schools did not differ significantly from those in previous years in either grade. No differences between 2005 and previous assessment years were seen in the percentage of
students performing at or above Proficient or at or above Basic at either grade 4 or 8 in either subject. No differences were seen in 2005 between the two types of private schools on any measure.

These data and other 2005 data are available through the NAEP data tool (http://nces.ed.gov/nations reportcard/ndel.)

| Type of school | Reading |  |  | Mathematics |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Average scale score | Percentage of students |  | Average scale score | Percentage of students |  |
|  |  | At or above Basic | At or above Proficient |  | At or above Basic | At or above Proficient |
| Grade 4 |  |  |  |  |  |  |
| Catholic | 234 | 80 | 46 | 244 | 88 | 43 |
| Lutheran | 231 | 77 | 44 | 245 | 89 | 47 |
| Grade 8 |  |  |  |  |  |  |
| Catholic | 280 | 90 | 49 | 290 | 81 | 40 |
| Lutheran | 280 | 89 | 49 | 293 | 84 | 44 |

Figure 9. Average reading scale scores, by type of school, grade 4: 2000 and 2003


* Significantly different from 2003.

NOTE: The NAEP reading scale ranges from 0 to 500. Data for Nonsectarian and Other Religious schools for 2000 and data for Other Private schools for 2003 are included in the overall Private data for those years but not reported separately. SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 2000 and 2003 Reading Assessments.

Figure 10. Average mathematics scale scores, by type of school, grade 4: 2000 and 2003


* Significantly different from 2003.

NOTE: The NAEP mathematics scale ranges from 0 to 500. Data for Nonsectarian and Other Religious schools for 2000 and data for Other Private schools for 2003 are included in the overall Private data for those years but not reported separately.
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 11. Average mathematics scale scores, by type of school, grade 8: 2000 and 2003


* Significantly different from 2003.

NOTE: The NAEP mathematics scale ranges from 0 to 500. Data for Nonsectarian and Other Religious schools for 2000 and data for Other Private schools for 2003 are included in the overall Private data for those years but not reported separately. 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.

## Average Performance for Various Student Groups

NAEP gathers information related to academic achievement from school records and from questionnaires administered to the students it assesses. The groups highlighted in this report include those defined by students' race/ethnicity and by level of parents' education. Further results for these groups, and information on results by gender, can be found in the data appendix for reading and mathematics and in the data tool for writing and science (http://nces. ed.gov/nationsreportcard/nde/.)

## Race/Ethnicity

No significant differences were found in the performance of Black students or Hispanic students in the three types of private schools. In several instances, White students in Catholic and Lutheran schools had higher average scores than White students at the same grade in Conservative Christian schools. For instance, at grade 4, White students in Catholic schools had higher average scores on the 2002 writing assessment than White students in Conservative Christian schools. At grade 8, White students in Catholic schools scored higher, on average, on the 2003 reading assessment than White students in Conservative Christian schools. White eighthgrade students in Lutheran schools also had higher average mathematics scores in 2003 than their counterparts in Conservative Christian schools.

In private schools overall, in every case but one, students from each racial/ethnic category had higher average scores than their counterparts in public schools in the most
recent assessment year. The one exception was in grade 4 mathematics (shown in figure 12), where there was no statistically significant difference between the average scores of Asian/Pacific Islander students in public schools (246) and in private schools overall (249) in 2003.

White students and Hispanic students in Catholic schools scored higher on average than public school students of the same race/ethnicity in every subject and grade where the sample size was sufficient to produce a reliable estimate. Black students in Catholic schools had higher average scores than Black students in public schools in all subjects and grades, except in grade 4 mathematics and grade 4 writing, where the apparent differences were not statistically significant.

Again, as with the average scores, generally a greater percentage of students in private schools performed at or above Proficient than their counterparts in public schools, regardless of their racial/ethnic background. However, there were some exceptions. For example, there was no statistically significant difference between the percentages of Asian/ Pacific Islander students performing at or above Proficient in mathematics and writing in private schools overall compared to public schools at grade 4.

## Parents' Highest Level of Education

Within each level of parents' highest educational attainment, there were almost no differences in the performance of students among
the three types of private schools. Figure 13 illustrates these findings with grade 8 data from the 2003 reading assessment. Additional data are provided in the data appendix. The exceptions were in grade 8 mathematics and grade 12 science. In 2003, the average mathematics score of eighth-graders in Lutheran schools who reported that at least one parent graduated from college was higher than the average scores of their counterparts in Catholic and Conservative Christian schools. In 2000, the average science score of twelfth-graders in Catholic schools who reported that one parent received some education after high school was higher than the average score of students in Lutheran schools reporting the same parental education level.

In almost all cases, the average scores of students in all types of private schools were higher than those of their counterparts in public schools for each reported level of their parents' education. Exceptions to this pattern occurred in mathematics and science at grades 8 and 12 , where there were no significant differences between the average scores of students in public and private schools for certain categories of parents' education.

In both eighth and twelfth grades and in all subjects included in this report, a greater percentage of students reporting that at least one parent graduated from college than their counterparts in public schools performed at or above Proficient.

Figure 12. Average scale scores and achievement-level results in mathematics, by race/ethnicity and type of school, grade 4: 2003

! Interpret data with caution. The nature of the sample does not allow accurate determination of the variability of the statistic.
${ }^{\text {d }}$ Significantly different from public schools.
1 Data for Hispanic and Asian/Pacific Islander students attending Lutheran schools are not shown because sample size is insufficient to permit a reliable estimate. NOTE: The NAEP mathematics scale ranges from 0 to 500. Data for Other Private schools are included in the overall Private data but not reported separately. SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 2003 Mathematics Assessment.

Figure 13. Average scale scores and achievement-level results in reading, by student-reported parents' highest level of education and type of school, grade 8: 2003


[^7]
## Changes in Average Scores for Racial/Ethnic Groups

Because of the strong national emphasis on reducing the achievement gaps between minority and nonminority students, it is informative to examine the changes in average scores by race/ethnicity (see tables 2 and 3 ). This section examines the White - Black and White - Hispanic score gaps in private schools. Because the sample sizes for Black and Hispanic students in private schools were small, resulting in large standard errors, tests of statistical significance may show no difference in cases where the differences appear large.

## Grade 4 Reading

No significant improvements in average reading scores for any racial/ethnic group were detected for any type of private school between 2000 and 2003. For public school students, average reading scores increased between 2000 and 2003 at grade 4 for Whites (by 4 points), Blacks (by 9 points), and Hispanics (by 11 points).

Comparing the White - Black and White - Hispanic reading score gaps between 2000 and 2003 showed no statistically significant change in any type of school, with one exception. The White - Hispanic score gap decreased by 7 points between 2000 and 2003 for public school students.

## Grade 4 Mathematics

The average mathematics scores in private schools overall increased for White, Black, and Hispanic fourth-graders between 2000 and 2003. Average scores for White and Hispanic fourth-graders in Catholic schools also increased between 2000 and 2003. In Lutheran schools, the average score for White students increased by 6 points from 2000 to 2003. The apparent changes in the White - Black and White - Hispanic score gaps between 2000 and 2003 were not statistically significant in any of the types of private schools. In contrast, the score gaps between White and Black students and between White and Hispanic students in public schools decreased between 2000 and 2003.

## Grade 8 Mathematics

Average scores for White eighthgraders increased between 2000 and 2003 in private schools overall and in Catholic schools. In public schools, average mathematics scores for White, Black, and Hispanic eighth-graders increased between 2000 and 2003, by 4,8 , and 6 points, respectively. The White - Black score gap decreased between 2000 and 2003 in public schools only. No statistically significant changes in the score gaps between White and Hispanic students were detected for any type of school.

Table 2. Average scale scores and score gaps for White and Black students in reading and mathematics, by type of school, grades 4 and 8: 2000 and 2003

| Grade, subject, and type of school | Average scale score |  |  |  |  |  | White average score minus Black average score |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | White |  |  | Black |  |  |  |  |  |
|  | 2000 | 2003 | Difference | 2000 | 2003 | Difference | 2000 | 2003 | Difference |
| Grade 4 |  |  |  |  |  |  |  |  |  |
| Reading |  |  |  |  |  |  |  |  |  |
| Public | 223 | 227 | 4 * | 189 | 197 | 9 * | 34 | 30 | -4 |
| Private | 236 | 239 | 3 | 213 ! | 210 | -3 | 24 | 29 | 6 |
| Catholic | 236 | 240 | 4 | 209 ! | 211 | 1 | 27 | 29 | 3 |
| Mathematics |  |  |  |  |  |  |  |  |  |
| Public | 233 | 243 | 9 * | 203 | 216 | 13 * | 30 | 27 | -4 * |
| Private | 241 | 248 | 7 * | 213 | 221 | 8 * | 29 | 27 | -2 |
| Catholic | 241 | 248 | 7 * | 210 | 222 | 12 | 31 | 26 | -5 |
| Grade 8 |  |  |  |  |  |  |  |  |  |
| Mathematics |  |  |  |  |  |  |  |  |  |
| Public | 283 | 287 | 4 * | 243 | 252 | 8 * | 40 | 35 | -5 * |
| Private | 291 | 297 | 6 * | 258 | 260 | 2 | 33 | 37 | 4 |
| Catholic | 289 | 296 | 7 * | 254 ! | 260 | 6 | 35 | 36 | 1 |

! Interpret data with caution. The nature of the sample does not allow accurate determination of the variability of the statistic.

* Statistically significant change.

NOTE: The NAEP reading and mathematics scales each range from 0 to 500. Score differences are calculated based on differences between unrounded average scale scores. Data for Nonsectarian and Other Religious schools for 2000 and data for Other Private schools for 2003 are included in the overall Private data for those years but not reported separately.
SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 2000 and 2003 Reading and Mathematics Assessments.

Table 3. Average scale scores and score gaps for White and Hispanic students in reading and mathematics, by type of school, grades 4 and 8: 2000 and 2003

| Grade, subject, and type of school | Average scale score |  |  |  |  |  | White average score minus Hispanic average score |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | White |  |  | Hispanic |  |  |  |  |  |
|  | 2000 | 2003 | Difference | 2000 | 2003 | Difference | 2000 | 2003 | Difference |
| Grade 4 |  |  |  |  |  |  |  |  |  |
| Reading |  |  |  |  |  |  |  |  |  |
| Public | 223 | 227 | 4 * | 188 | 199 | 11 * | 35 | 28 | -7 * |
| Private | 236 | 239 | 3 | 215 | 220 | 5 | 21 | 19 | -2 |
| Catholic | 236 | 240 | 4 | 211 ! | 219 | 8 | 25 | 21 | -4 |
| Mathematics |  |  |  |  |  |  |  |  |  |
| Public | 233 | 243 | 9 * | 207 | 221 | 14 * | 26 | 21 | -5 * |
| Private | 241 | 248 | 7 * | 220 | 231 | 11 * | 21 | 17 | -4 |
| Catholic | 241 | 248 | 7 * | 217 | 229 | 11 * | 24 | 20 | -4 |
| Grade 8 |  |  |  |  |  |  |  |  |  |
| Mathematics |  |  |  |  |  |  |  |  |  |
| Public | 283 | 287 | 4 * | 252 | 258 | 6 * | 31 | 28 | -3 |
| Private | 291 | 297 | 6 * | 273 | 274 | 1 | 18 | 23 | 5 |
| Catholic | 289 | 296 | 7 * | 271 | 272 | 1 | 18 | 24 | 6 |

! Interpret data with caution. The nature of the sample does not allow accurate determination of the variability of the statistic.

* Statistically significant change.

NOTE: The NAEP reading and mathematics scales each range from 0 to 500 . Score differences are calculated based on differences between unrounded average scale scores. Data for Nonsectarian and Other Religious schools for 2000 and data for Other Private schools for 2003 are included in the overall Private data for those years but not reported separately.
SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 2000 and 2003 Reading and Mathematics Assessments.

## Technical and Data Appendix

## NAEP Sampling Procedures

The schools and students participating in NAEP assessments are chosen to be nationally representative. The results from the assessed students are combined and weighted to provide accurate estimates of overall public and private school performance. The sampling weights are also used to adjust for nonresponse and in estimating percentages of students in various student groups. To obtain reliable data on the private school students, private schools were oversampled beginning with the 2000 assessment. Scores were then weighted appropriately to provide national estimates.

## School Participation Rates

In order to ensure unbiased samples, NCES and NAGB standards require that the weighted school participation rate before substitution of replacement schools be 70 percent or higher. All data presented in this report are based on samples meeting this standard. Sample sizes and participation rates are shown in tables A-1 through A-4. Samples for Conservative Christian schools did not meet the participation rate standard in the following assessments, and therefore their results are not reported for these assessments: grade 8 mathematics and grade 12 science in 2000; grades 8 and 12 reading and writing in 2002; grade 4 reading and mathematics in 2003; and grades 4 and 8 reading and mathematics in 2005.

In 2003, the participation rates of private schools overall were below 85 percent at grades 4 and 8 , so nonresponse bias analyses were conducted. The nonresponse bias analyses showed significant differences between responding and nonresponding private schools in terms of reporting group, census region, and racial/ethnic composition of the schools at both grades. Nonresponse weighting adjustments have completely accounted for the differences in reporting group, and largely accounted for the differences in census region. These adjustments are unlikely to have fully accounted for differences in race/ethnicity. In

2005, the participation rates of private schools overall did not meet the participation rate standard, and therefore their results are not reported. See http://nces.ed.gov/nationsreportcard/nrcl reading_math_2005/s0089.asp for information on 2005 participation rates.

## Assessed Students

Every effort is made to ensure that all sampled students who are capable of participating in the assessment are assessed. A sampled student who is identified by the school as a student with a disability or as an English language learner may be tested with accommodations allowed by NAEP; students so identified may be excluded from the assessment if they do not meet criteria for inclusion established by NAEP.
Tables A-1 through A-4 display the participation and exclusion rates for all four subjects. At grade 4, public schools in the national sample excluded 4 percent of students in mathematics and 6 percent in reading in 2003. At grade 8, the exclusion rates in public schools were 4 percent in mathematics and 5 percent in reading in 2003. The comparable exclusion rates in private schools were less than 1 percent in both subjects at both grades.

## Definitions of Variables

Information on race/ethnicity is presented for White, Black, Hispanic, and Asian/Pacific Islander students based on school records. Results for other races or ethnicities are not presented in the body of the report because sample sizes were too small to meet reporting standards. Data on American Indian/Alaska Native students are presented in the data appendix when available.

Parents' highest level of education is defined by the highest level reported by eighth-graders and twelfthgraders for either parent. Fourth-graders' replies to this question were not reported because their responses in previous studies were highly variable, and a large percentage of them chose the "I don't know" option.

## Interpreting Statistical Significance

The differences between statistics-such as average scale scores and percentages-that are discussed in this report are calculated using statistical measures known as standard errors. Standard errors for the NAEP scores and percentages presented in this report are available on the NAEP website (http://nces.ed.gov/nationsreportcard/nde/). Comparisons are based on statistical tests that consider both the size of the differences and the standard errors of the two statistics being compared. Estimates based on smaller student groups are likely to have relatively larger standard errors than estimates based on larger student groups, all other things being equal. As a consequence, a numerical difference that seems large may not be statistically significant. Furthermore, differences of the same magnitude may or may not be statistically significant, depending upon the size of the standard errors of the statistics. For example, a 5-point difference between male and female students may be statistically significant, while a 5 -point difference between White and Hispanic students may not
be. The differences described in this report have been determined to be statistically significant at the .05 level with appropriate adjustments for multiple comparisons. The .05 level of significance means that one can say with 95 percent certainty that the difference is not due to chance.

In the tables and charts of this report, the symbols $\left.{ }^{(\mathrm{a}}\right),\left({ }^{\mathrm{b}}\right),\left({ }^{\mathrm{c}}\right),\left({ }^{\mathrm{d}}\right)$, and $\left({ }^{*}\right)$ are used to indicate that a score or percentage is significantly different from another. The symbol (!) is used to indicate that the nature of the sample-its size or its variance-does not allow accurate determination of the variability of the statistics, and that any significance tests involving these statistics should be interpreted cautiously. Data on the percentage of students reaching Advanced are not shown in most tables because the small sample sizes limit what can be reported. More information on these data can be found using the data tool at http://nces.ed.gov/nationsreportcard/nde/.

## Reference List

Braswell, J.S., Dion, G.S., Daane, M.C., and Jin, Y. (2005). The Nation's Report Card: Mathematics 2003 (NCES 2005-451). U.S. Department of Education, National Center for Education Statistics. Washington, DC: U.S. Government Printing Office.

Broughman, S.P., and Pugh, K.W. (2004). Characteristics of Private Schools in the United States: Results From the 2001-2002 Private School Universe Survey (NCES 2005-305). U.S. Department of Education. Washington, DC: National Center for Education Statistics.

Donahue, P.D., Daane, M.C., and Jin, Y. (2005). The Nation's Report Card: Reading 2003. (NCES 2005-453). U.S. Department of Education, National Center for Education Statistics. Washington, DC: U.S. Government Printing Office.

Table A-1. School and student participation information and student sample size in reading, by type of school, grades 4 and 8: 2003

| Type of school | School participation |  | Student participation |  |  |  | Student sample size |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Weighted percent before substitution | Weighted percent after substitution | Weighted student participation rate | $\begin{array}{r} \text { Weighted } \\ \text { percent of } \\ \text { students } \\ \text { identified as SD } \\ \text { and/or ELL } \end{array}$ | Weighted percent of students assessed with accommodation | Weighted student exclusion rate |  |
| Grade 4 |  |  |  |  |  |  |  |
| Public | 99.7 | 99.8 | 94.2 | 21.9 | 5.4 | 6.3 | 191,400 |
| Private | 78.6 | 80.1 | 94.6 | 3.7 | 1.7 | 0.7 | 7,500 |
| Catholic | 90.5 | 91.1 | 94.6 | 3.9 | 1.9 | 0.9 | 3,700 |
| Lutheran | 89.2 | 90.4 | 96.1 | 2.4 | 0.5 | 0.4 | 900 |
| Conservative Christian | 68.5 | 69.4 | 94.4 | 2.3 | 0.8 | 0.1 | 1,000 |
| Grade 8 |  |  |  |  |  |  |  |
| Public | 99.6 | 99.6 | 91.5 | 18.5 | 5.3 | 5.2 | 155,000 |
| Private | 73.9 | 76.3 | 93.9 | 3.2 | 1.7 | 0.4 | 8,300 |
| Catholic | 85.1 | 87.5 | 94.1 | 2.7 | 1.5 | 0.2 | 4,000 |
| Lutheran | 93.8 | 93.8 | 95.1 | 2.4 | 0.6 | 0.3 | 1,000 |
| Conservative Christian | 74.6 | 75.8 | 93.2 | 3.7 | 1.3 | 0.6 | 1,100 |

${ }^{1}$ Students with disabilities.
2 English language learners.
NOTE: Data for Other Private schools are included in the overall Private data but not reported separately. The student sample size is rounded to the nearest hundred. SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 2003 Reading Assessment.

Table A-2. School and student participation information and student sample size in mathematics, by type of school, grades 4 and 8: 2003

| Type of school | School participation |  | Student participation |  |  |  | Student sample size |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Weighted percent before substitution | Weighted percent after substitution | Weighted student participation rate | $\begin{array}{r} \text { Weighted } \\ \text { percent of } \\ \text { students } \\ \text { identified as SD } \\ \text { and/or ELL }{ }^{2} \end{array}$ | Weighted percent of students assessed with accommodation | Weighted student exclusion rate |  |
| Grade 4 |  |  |  |  |  |  |  |
| Public | 99.7 | 99.8 | 94.3 | 22.3 | 8.3 | 3.9 | 191,400 |
| Private | 78.6 | 80.1 | 94.6 | 3.9 | 2.3 | 0.2 | 4,700 |
| Catholic | 90.5 | 91.1 | 94.2 | 3.9 | 2.6 | 0.1 | 2,300 |
| Lutheran | 89.2 | 90.4 | 95.1 | 2.3 | 0.5 | 0.1 | 600 |
| Conservative Christian | 68.5 | 69.4 | 96.7 | 4.1 | 1.6 | 0.2 | 700 |
| Grade 8 |  |  |  |  |  |  |  |
| Public | 99.6 | 99.6 | 91.4 | 18.5 | 6.8 | 3.8 | 153,500 |
| Private | 73.9 | 76.3 | 94.8 | 3.3 | 2.0 | 0.3 | 5,100 |
| Catholic | 85.1 | 87.5 | 95.1 | 3.2 | 2.1 | \# | 2,500 |
| Lutheran | 93.8 | 93.8 | 95.6 | 2.6 | 1.1 | 0.3 | 600 |
| Conservative Christian | 74.6 | 75.8 | 94.5 | 2.4 | 0.9 | 0.4 | 700 |

[^8]Table A-3. School and student participation information and student sample size in science, by type of school, grades 4, 8, and 12: 2000

| Type of school | School participation |  | Student participation |  |  |  | Student sample size |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Weighted percent before substitution | Weighted percent after substitution | Weighted student participation rate | Weighted percent of students identified as SD $^{1}$ and/or ELL² | Weighted percent of students assessed with accommodation | Weighted student exclusion rate |  |
| Grade 4 |  |  |  |  |  |  |  |
| Public | 84.7 | 88.5 | 95.5 | 17.8 | 3.8 | 4.7 | 9,900 |
| Private | 85.3 | 88.4 | 96.4 | 3.0 | 1.1 | 0.3 | 6,600 |
| Catholic | 93.9 | 97.4 | 96.5 | 2.2 | 0.6 | 0.3 | 3,000 |
| Lutheran | 94.5 | 94.5 | 97.5 | 3.5 | 0.9 | 0.2 | 1,000 |
| Conservative Christian | 82.3 | 83.5 | 97.8 | 3.8 | 2.3 | 0.8 | 800 |
| Grade 8 |  |  |  |  |  |  |  |
| Public | 82.5 | 85.2 | 91.5 | 13.5 | 2.6 | 3.6 | 10,000 |
| Private | 80.8 | 84.3 | 95.9 | 2.8 | 0.7 | 0.7 | 6,300 |
| Catholic | 91.7 | 94.7 | 96.2 | 1.9 | 0.7 | 0.1 | 2,900 |
| Lutheran | 97.6 | 97.6 | 96.5 | 2.5 | 1.5 | \# | 900 |
| Conservative Christian | 72.2 | 76.2 | 95.1 | 2.9 | \# | 0.9 | 700 |
| Grade 12 |  |  |  |  |  |  |  |
| Public | 77.8 | 82.1 | 74.7 | 9.1 | 1.8 | 2.1 | 9,000 |
| Private | 72.9 | 79.9 | 88.7 | 4.0 | 1.5 | 0.4 | 6,600 |
| Catholic | 85.1 | 92.7 | 87.6 | 2.9 | 1.1 | 0.1 | 2,900 |
| Lutheran | 87.0 | 87.0 | 92.7 | 2.0 | 0.2 | 0.1 | 1,000 |
| Conservative Christian | 67.5 | 69.7 | 92.6 | 2.3 | 0.5 | 1.0 | 900 |

\# The estimate rounds to zero.
${ }^{1}$ Students with disabilities.
2 English language learners.
NOTE: Data for Nonsectarian and Other Religious schools are included in the overall Private data but not reported separately. The student sample size is rounded to the nearest hundred. SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 2000 Science Assessment.
Table A-4. School and student participation information and student sample size in writing, by type of school, grades 4 and 8: 2002

| Type of school | School participation |  | Student participation |  |  |  | Student sample size |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Weighted percent before substitution | Weighted percent after substitution | Weighted student participation rate | $\begin{array}{r} \text { Weighted } \\ \text { percent of } \\ \text { students } \\ \text { identified as SD } \\ \text { and/or ELL }{ }^{2} \end{array}$ | $\begin{array}{r} \text { Weighted } \\ \text { percent of } \\ \text { students } \\ \text { assessed with } \\ \text { accommodation } \end{array}$ | Weighted student exclusion rate |  |
| Grade 4 |  |  |  |  |  |  |  |
| Public | 84.5 | 85.0 | 94.4 | 20.4 | 5.5 | 5.4 | 140,300 |
| Private | 74.3 | 80.9 | 95.1 | 3.3 | 1.6 | 0.3 | 5,400 |
| Catholic | 84.4 | 89.5 | 95.0 | 3.0 | 1.5 | 0.2 | 2,800 |
| Lutheran | 82.5 | 89.4 | 95.2 | 3.1 | 1.7 | 0.6 | 600 |
| Conservative Christian | 73.5 | 77.3 | 95.4 | 2.1 | 0.9 | 0.3 | 600 |
| Grade 8 |  |  |  |  |  |  |  |
| Public | 83.4 | 83.7 | 91.3 | 18.0 | 5.4 | 4.2 | 117,500 |
| Private | 67.8 | 76.1 | 95.2 | 3.8 | 1.9 | 0.3 | 5,500 |
| Catholic | 79.4 | 87.9 | 95.3 | 3.0 | 1.5 | 0.4 | 2,900 |
| Lutheran | 74.0 | 89.1 | 95.1 | 1.8 | 0.3 | 0.2 | 700 |
| Conservative Christian | 64.4 | 72.1 | 94.6 | 0.7 | 0.7 | \# | 800 |

\# The estimate rounds to zero.
${ }^{1}$ Students with disabilities.
2 English language learners.
NOTE: Data for Other Private schools are included in the overall Private data but not reported separately. The student sample size is rounded to the nearest hundred. SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics, National Assessment of Educational Progress (NAEP),

## Reading Data

Table B-1. Average scale scores and achievement-level results in reading, by type of school, grade 4: Various years, 2000-2003

| Type of school | Average scale score |  |  | Percent at or above Basic |  |  | Percent at or above Proficient |  |  | Percent at Advanced |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 2000 | 2002 | 2003 | 2000 | 2002 | 2003 | 2000 | 2002 | 2003 | 2000 | 2002 | 2003 |
| Public | 211 | 217 | 216 | 57 | 62 | 62 | 28 | 30 | 30 | 6 | 6 | 7 |
| Private | 231 d | 234 d | 235 d | 78 d | 80 d | 80 d | 45 d | 48 d | 48 d | 12 d | 13 d | 14 d |
| Catholic | 229 d | 234 d | 235 d | 75 d | 80 d | 81 d | 41 d | 47 d | 48 d | 10 | 13 d | 14 d |
| Lutheran | $\ddagger$ | 236 d | 232 d | $\ddagger$ | 83 d | 79 d | $\ddagger$ | 50 d | 44 d | $\ddagger$ | 12 d | 12 d |
| Conservative Christian | $\ddagger$ | 229 d | $\ddagger$ | $\ddagger$ | 77 d | $\ddagger$ | $\ddagger$ | 41 d | $\ddagger$ | $\ddagger$ | 10 | $\ddagger$ |

$\ddagger$ Reporting standards not met. Sample size is insufficient to permit a reliable estimate, or the minimum participation guidelines for reporting were not met.
d Significantly different from public schools.
NOTE: The NAEP reading scale ranges from 0 to 500. Data for Nonsectarian and Other Religious schools for 2000 and data for Other Private schools for 2002 and 2003 are included in the overall Private data for those years but not reported separately.
SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics, National Assessment of Educational Progress (NAEP), various years, 2000-2003 Reading Assessments.

Table B-2. Average scale scores and achievement-level results in reading, by type of school, grade 8: 2002 and 2003

| Type of school | Average scale score |  | Percent at or above Basic |  | Percent at or above Proficient |  | Percent at Advanced |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 2002 | 2003 | 2002 | 2003 | 2002 | 2003 | 2002 | 2003 |
| Public | 263 | 261 | 74 | 72 | 31 | 30 | 2 | 3 |
| Private | 281 d | 282 d | 90 d | 90 d | 51 d | 53 d | 7 d | $8{ }^{\text {d }}$ |
| Catholic | 281 d | 281 c,d | 90 d | 90 d | 51 d | 51 d | $6{ }^{\text {d }}$ | 7 d |
| Lutheran | 281 d | 281 c,d | 91 d | 90 d | 50 d | 52 d | $6{ }^{\text {d }}$ | $8{ }^{\text {d }}$ |
| Conservative Christian | $\ddagger$ | 276 a,b,d | $\ddagger$ | 86 d | $\ddagger$ | 46 d | $\ddagger$ | 6 d |

[^9]Table B-3. Percentage of students, average scale scores, and achievement-level results in reading, by gender and type of school, grade 4: Various years, 2000-2003

| Gender and type of school | Percent of students assessed |  |  | Average scale score |  |  | Percent at or above Basic |  |  | Percent at or above Proficient |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 2000 | 2002 | 2003 | 2000 | 2002 | 2003 | 2000 | 2002 | 2003 | 2000 | 2002 | 2003 |
| Male |  |  |  |  |  |  |  |  |  |  |  |  |
| Public | 50 | 51 | 51 | 206 | 214 | 213 | 53 | 59 | 58 | 24 | 26 | 26 |
| Private | 50 | 50 | 51 | 225 d | 231 d | 232 d | 72 d | 78 d | 78 d | 37 d | 44 d | 44 d |
| Catholic | 49 | 49 | 50 | 224 d | 231 d | 232 d | 71 d | 78 d | 79 d | 36 d | 44 d | 45 d |
| Lutheran | $\ddagger$ | 51 | 51 | $\ddagger$ | 234 d | 229 d | $\ddagger$ | 83 d | 75 d | $\ddagger$ | 47 d | 40 d |
| Conservative Christian | $\ddagger$ | 53 | $\ddagger$ | $\ddagger$ | 226 d | $\ddagger$ | $\ddagger$ | 73 d | $\ddagger$ | $\ddagger$ | 39 d | $\ddagger$ |
| Female |  |  |  |  |  |  |  |  |  |  |  |  |
| Public | 50 | 49 | 49 | 217 | 220 | 220 | 62 | 65 | 65 | 32 | 33 | 33 |
| Private | 50 | 50 | 49 | 238 d | 237 d | 237 d | 83 d | 83 d | 83 d | 53 d | 51 d | 52 d |
| Catholic | 51 | 51 | 50 | 233 d | 236 d | 237 d | 79 d | 82 d | 82 d | 46 d | 50 d | 51 d |
| Lutheran | $\ddagger$ | 49 | 49 | $\ddagger$ | 238 d | 234 d | $\ddagger$ | 84 d | 82 d | $\ddagger$ | 53 d | 48 d |
| Conservative Christian | $\ddagger$ | 47 | $\ddagger$ | $\ddagger$ | 233 d | $\ddagger$ | $\ddagger$ | 82 d | $\ddagger$ | $\ddagger$ | 45 d | $\ddagger$ |

$\ddagger$ Reporting standards not met. Sample size is insufficient to permit a reliable estimate, or the minimum participation guidelines for reporting were not met.
d Significantly different from public schools.
NOTE: The NAEP reading scale ranges from 0 to 500. Detail may not sum to totals because of rounding. Data for Nonsectarian and Other Religious schools for 2000 and data for Other Private schools for 2002 and 2003 are included in the overall Private data for those years but not reported separately.
SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics, National Assessment of Educational Progress (NAEP), various years, 2000-2003 Reading Assessments.

Table B-4. Percentage of students, average scale scores, and achievement-level results in reading, by gender and type of school, grade 8: 2002 and 2003

| Gender and type of school | Percent of students assessed |  | Average scale score |  | Percent at or above Basic |  | Percent at or above Proficient |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 2002 | 2003 | 2002 | 2003 | 2002 | 2003 | 2002 | 2003 |
| Male |  |  |  |  |  |  |  |  |
| Public | 50 | 50 | 258 | 256 | 70 | 67 | 26 | 25 |
| Private | 49 | 50 | 276 d | 278 d | 87 d | 87 d | 45 d | 47 d |
| Catholic | 47 | 49 | 276 d | 277 d | 87 d | 87 d | 45 d | 46 d |
| Lutheran | 49 | 49 | 278 d | 275 d | 90 d | 86 d | 47 d | 44 d |
| Conservative Christian | $\ddagger$ | 49 | $\ddagger$ | 271 d | $\ddagger$ | 83 d | $\ddagger$ | 38 d |
| Female |  |  |  |  |  |  |  |  |
| Public | 50 | 50 | 267 | 267 | 79 | 77 | 36 | 35 |
| Private | 51 | 50 | 285 d | 287 d | 93 d | 93 d | 57 d | 60 d |
| Catholic | 53 | 51 | 285 d | 285 d | 93 d | 93 d | 56 d | 57 d |
| Lutheran | 51 | 51 | 284 d | 288 d | 93 d | 93 d | 54 d | 61 d |
| Conservative Christian | $\ddagger$ | 51 | $\ddagger$ | 282 d | $\ddagger$ | 89 d | $\ddagger$ | 54 d |

[^10]Table B-5. Percentage of students, average scale scores, and achievement-level results in reading, by race/ethnicity and type of school, grade 4: Various years, 2000-2003

| Race/ethnicity and type of school | Percent of students assessed |  |  | Average scale score |  |  | Percent at or above Basic |  |  | Percent at or above Proficient |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 2000 | 2002 | 2003 | 2000 | 2002 | 2003 | 2000 | 2002 | 2003 | 2000 | 2002 | 2003 |
| White |  |  |  |  |  |  |  |  |  |  |  |  |
| Public | 62 | 60 | 59 | 223 | 227 | 227 | 69 | 74 | 74 | 36 | 39 | 39 |
| Private | 74 d | 73 d | 75 d | 236 d | 239 d | 239 d | 83 d | 86 d | 85 d | 51 d | 54 d | 53 d |
| Catholic | 67 | $72 \mathrm{b,d}$ | 75 d | 236 d | 239 d | 240 d | 84 d | 86 d | 86 d | 50 d | 53 d | 54 d |
| Lutheran | $\ddagger$ | $84 \mathrm{a,c,d}$ | 80 d | $\ddagger$ | $238{ }^{\text {d }}$ | 236 d | $\ddagger$ | 86 d | 84 d | $\ddagger$ | 52 d | 48 d |
| Conservative Christian | $\ddagger$ | $71{ }^{\text {b }}$ | $\ddagger$ | $\ddagger$ | 234 | $\ddagger$ | $\ddagger$ | 82 | $\ddagger$ | $\ddagger$ | 48 | $\ddagger$ |
| Black |  |  |  |  |  |  |  |  |  |  |  |  |
| Public | 18 | 18 | 17 | 189 | 198 | 197 | 34 | 39 | 39 | 9 | 12 | 12 |
| Private | 11 | 11 d | 9 d | 213 ! d | 212 d | 210 d | 54 ! d | 55 d | 54 d | $22!$ d | 21 d | 22 d |
| Catholic | 13 | 9 d | 6 d | 209 ! d | 212 d | 211 d | 50 ! d | 55 d | 54 d | 18 ! | 23 d | 21 |
| Lutheran | $\ddagger$ | 6 d | 12 | $\ddagger$ | $\ddagger$ | $206!$ | $\ddagger$ | $\ddagger$ | 48 ! | $\ddagger$ | $\ddagger$ | 20 ! |
| Conservative Christian | $\ddagger$ | 14 | $\ddagger$ | $\ddagger$ | $216{ }^{\text {d }}$ | $\ddagger$ | $\ddagger$ | $63!{ }^{\text {d }}$ | $\ddagger$ | $\ddagger$ | 22 ! | $\ddagger$ |
| Hispanic |  |  |  |  |  |  |  |  |  |  |  |  |
| Public | 15 | 17 | 18 | 188 | 199 | 199 | 36 | 43 | 43 | 12 | 14 | 14 |
| Private | $8{ }^{\text {d }}$ | 10 d | 9 d | 215 d | 223 d | 220 d | 63 d | 69 d | 66 d | 26 d | 34 d | 29 d |
| Catholic | 11 | $13^{\text {b }}$ | 12 b , d | $211{ }^{\text {d }}$ | 222 d | 219 d | 58 ! d | 67 d | 64 d | 23 ! | 33 d | 27 d |
| Lutheran | $\ddagger$ | $5^{\text {a,d }}$ | $4 \mathrm{a}, \mathrm{d}$ | $\ddagger$ | $\ddagger$ | $\ddagger$ | $\ddagger$ | $\ddagger$ | $\ddagger$ | $\ddagger$ | $\ddagger$ | $\ddagger$ |
| Conservative Christian | $\ddagger$ | $8{ }^{\text {d }}$ | $\ddagger$ | $\ddagger$ | $\ddagger$ | $\ddagger$ | $\ddagger$ | $\ddagger$ | $\ddagger$ | $\ddagger$ | $\ddagger$ | $\ddagger$ |
| Asian/Pacific Islander |  |  |  |  |  |  |  |  |  |  |  |  |
| Public | 4 | 4 | 4 | 223 | 223 | 225 | 69 | 69 | 69 | 39 | 36 | 37 |
| Private | 4 | 4 | 5 | 236 ! | 231 d | 236 d | $84!$ | 76 | 82 d | 49 ! | 42 | 49 d |
| Catholic | 5 | $4^{\text {b }}$ | 5 | $\ddagger$ | 229 | 231 | $\ddagger$ | 75 | 77 | $\ddagger$ | 38 | 44 |
| Lutheran | $\ddagger$ | $1 \mathrm{a,d}$ | 2 | $\ddagger$ | $\ddagger$ | $\ddagger$ | $\ddagger$ | $\ddagger$ | $\ddagger$ | $\ddagger$ | $\ddagger$ | $\ddagger$ |
| Conservative Christian | $\ddagger$ | 4 | $\ddagger$ | $\ddagger$ | $\ddagger$ | $\ddagger$ | $\ddagger$ | $\ddagger$ | $\ddagger$ | $\ddagger$ | $\ddagger$ | $\ddagger$ |
| American Indian/Alaska Native |  |  |  |  |  |  |  |  |  |  |  |  |
| Public | 1 | 1 | 1 | $\ddagger$ | 207 | 202 | $\ddagger$ | 51 | 47 | $\ddagger$ | 22 | 16 |
| Private | 2 | \# ${ }^{\text {d }}$ | \# d | $\ddagger$ | $\ddagger$ | $\ddagger$ | $\ddagger$ | $\ddagger$ | $\ddagger$ | $\ddagger$ | $\ddagger$ | $\ddagger$ |
| Catholic | 3 | \# ${ }^{\text {d }}$ | \# d | $\ddagger$ | $\ddagger$ | $\ddagger$ | $\ddagger$ | $\ddagger$ | $\ddagger$ | $\ddagger$ | $\ddagger$ | $\ddagger$ |
| Lutheran | $\ddagger$ | 2 | \# | $\ddagger$ | $\ddagger$ | $\ddagger$ | $\ddagger$ | $\ddagger$ | $\ddagger$ | $\ddagger$ | $\ddagger$ | $\ddagger$ |
| Conservative Christian | $\ddagger$ | 1 | $\ddagger$ | $\ddagger$ | $\ddagger$ | $\ddagger$ | $\ddagger$ | $\ddagger$ | $\ddagger$ | $\ddagger$ | $\ddagger$ | $\ddagger$ |

\# The estimate rounds to zero.
! Interpret data with caution. The nature of the sample does not allow accurate determination of the variability of the statistic.
$\ddagger$ Reporting standards not met. Sample size is insufficient to permit a reliable estimate, or the minimum participation guidelines for reporting were not met.
${ }^{\text {a }}$ Significantly different from Catholic schools.
b Significantly different from Lutheran schools.
C Significantly different from Conservative Christian schools.
d Significantly different from public schools.
NOTE: The NAEP reading scale ranges from 0 to 500. Detail may not sum to totals because of rounding. Because of insufficient sample size, results are not shown for students whose race/ethnicity based on school records was "other." Data for Nonsectarian and Other Religious schools for 2000 and data for Other Private schools for 2002 and 2003 are included in the overall Private data for those years but not reported separately.
SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics, National Assessment of Educational Progress (NAEP), various years, 2000-2003 Reading Assessments.

Table B-6. Percentage of students, average scale scores, and achievement-level results in reading, by race/ethnicity and type of school, grade 8: 2002 and 2003

| Race/ethnicity and type of school | Percent of students assessed |  | Average scale score |  | Percent at or above Basic |  | Percent at or above Proficient |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 2002 | 2003 | 2002 | 2003 | 2002 | 2003 | 2002 | 2003 |
| White |  |  |  |  |  |  |  |  |
| Public | 64 | 61 | 271 | 270 | 83 | 82 | 39 | 39 |
| Private | 75 d | 76 d | 285 d | 286 d | 93 d | 93 d | 57 d | 59 d |
| Catholic | $72 \mathrm{b,d}$ | 72 b,d | 285 d | 286 c, d | 94 d | 94 d | 56 d | 58 d |
| Lutheran | $88^{\text {a,d }}$ | $83 \mathrm{a,d}$ | 283 d | 284 d | 92 d | 92 d | 53 d | 56 d |
| Conservative Christian | $\ddagger$ | 77 d | $\ddagger$ | 280 a,d | $\ddagger$ | 89 d | $\ddagger$ | 49 d |
| Black |  |  |  |  |  |  |  |  |
| Public | 15 | 17 | 244 | 244 | 54 | 53 | 13 | 12 |
| Private | 9 d | 9 d | 263 d | 261 d | 77 d | 72 d | 28 d | 27 d |
| Catholic | $10^{\text {d }}$ | 9 d | $261{ }^{\text {d }}$ | 260 d | 74 d | 71 d | 25 d | 25 d |
| Lutheran | 6 d | 8 d | $\ddagger$ | 260 ! ${ }^{\text {d }}$ | $\ddagger$ | $69!{ }^{\text {d }}$ | $\ddagger$ | 24 ! |
| Conservative Christian | $\ddagger$ | 11 | $\ddagger$ | 261 ! | $\ddagger$ | 72! | $\ddagger$ | 29 ! |
| Hispanic |  |  |  |  |  |  |  |  |
| Public | 15 | 15 | 245 | 244 | 56 | 54 | 14 | 14 |
| Private | 10 d | 9 d | 266 d | 269 d | 78 d | 82 d | 32 d | 35 d |
| Catholic | 12 b | 13 b | 271 d | 270 d | 83 d | 83 d | 38 d | 34 d |
| Lutheran | $4^{\text {a,d }}$ | $5^{\text {a,d }}$ | $\ddagger$ | $\ddagger$ | $\ddagger$ | $\ddagger$ | $\ddagger$ | $\ddagger$ |
| Conservative Christian | $\ddagger$ | 7 d | $\ddagger$ | 267 ! d | $\ddagger$ | $76!$ | $\ddagger$ | $34!$ |
| Asian/Pacific Islander |  |  |  |  |  |  |  |  |
| Public | 4 | 4 | 265 | 268 | 75 | 78 | 34 | 38 |
| Private | 4 | 5 | 285 d | 286 d | 91 d | 93 d | 55 d | 58 d |
| Catholic | $4{ }^{\text {b }}$ | 4 | 282 d | 280 d | 92 d | 92 d | 50 d | 50 |
| Lutheran | $1 \mathrm{a,d}$ | 2 d | $\ddagger$ | $\ddagger$ | $\ddagger$ | $\ddagger$ | $\ddagger$ | $\ddagger$ |
| Conservative Christian | $\ddagger$ | 3 | $\ddagger$ | $\ddagger$ | $\ddagger$ | $\ddagger$ | $\ddagger$ | $\ddagger$ |
| American Indian/Alaska Native |  |  |  |  |  |  |  |  |
| Public | 1 | 1 | 252 | 248 | 64 | 59 | 18 | 18 |
| Private | \# d | \# d | $\ddagger$ | $\ddagger$ | $\ddagger$ | $\ddagger$ | $\ddagger$ | $\ddagger$ |
| Catholic | \# d | \# d | $\ddagger$ | $\ddagger$ | $\ddagger$ | $\ddagger$ | $\ddagger$ | $\ddagger$ |
| Lutheran | \# | 1 | $\ddagger$ | $\ddagger$ | $\ddagger$ | $\ddagger$ | $\ddagger$ | $\ddagger$ |
| Conservative Christian | $\ddagger$ | \# d | $\ddagger$ | $\ddagger$ | $\ddagger$ | $\ddagger$ | $\ddagger$ | $\ddagger$ |

\# The estimate rounds to zero.
! Interpret data with caution. The nature of the sample does not allow accurate determination of the variability of the statistic.
$\ddagger$ Reporting standards not met. Sample size is insufficient to permit a reliable estimate, or the minimum participation guidelines for reporting were not met.
a Significantly different from Catholic schools.
b Significantly different from Lutheran schools.
${ }^{\text {c }}$ Significantly different from Conservative Christian schools.
${ }^{d}$ Significantly different from public schools.
NOTE: The NAEP reading scale ranges from 0 to 500. Detail may not sum to totals because of rounding. Because of insufficient sample size, results are not shown for students whose race/ethnicity based on school records was "other." Data for Other Private schools are included in the overall Private data but not reported separately. SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 2002 and 2003 Reading Assessments.

Table B-7. Percentage of students, average scale scores, and achievement-level results in reading, by student-reported parents' highest level of education and type of school, grade 8: 2002 and 2003

| Education level and type of school | Percent of students assessed |  | Average scale score |  | Percent at or above Basic |  | Percent at or above Proficient |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 2002 | 2003 | 2002 | 2003 | 2002 | 2003 | 2002 | 2003 |
| Less than high school |  |  |  |  |  |  |  |  |
| Public | 7 | 7 | 247 | 245 | 58 | 55 | 14 | 13 |
| Private | 2 d | 1 d | 264 ! d | 263 d | 74 ! | 74 d | 32 ! | 34 d |
| Catholic | 1 d | 1 d | $\ddagger$ | $\ddagger$ | $\ddagger$ | $\ddagger$ | $\ddagger$ | $\ddagger$ |
| Lutheran | $1{ }^{\text {d }}$ | $1{ }^{\text {d }}$ | $\ddagger$ | $\ddagger$ | $\ddagger$ | $\ddagger$ | $\ddagger$ | $\ddagger$ |
| Conservative Christian | $\ddagger$ | 2 d | $\ddagger$ | $\ddagger$ | $\ddagger$ | $\ddagger$ | $\ddagger$ | $\ddagger$ |
| Graduated from high school |  |  |  |  |  |  |  |  |
| Public | 18 | 18 | 256 | 253 | 69 | 65 | 21 | 19 |
| Private | 10 d | 9 d | 270 d | 268 d | 84 d | 81 d | 34 d | 34 d |
| Catholic | 12 d | 9 d | 272 d | 269 d | $86{ }^{\text {d }}$ | 82 d | $35^{\text {d }}$ | 34 d |
| Lutheran | 12 d | 11 d | 271 d | 271 d | 86 d | 84 d | 31 | 37 |
| Conservative Christian | $\ddagger$ | 11 d | $\ddagger$ | 263 d | $\ddagger$ | 77 | $\ddagger$ | 26 |
| Some education after high school |  |  |  |  |  |  |  |  |
| Public | 20 | 18 | 267 | 266 | 81 | 79 | 33 | 32 |
| Private | 15 d | 13 d | 279 d | 277 d | 91 d | 88 d | 47 d | 46 d |
| Catholic | 16 d | 15 d | 278 d | 277 d | 91 d | 88 d | 46 d | 45 d |
| Lutheran | 17 | 15 | 284 d | 276 d | 93 d | 89 d | 53 d | 47 |
| Conservative Christian | $\ddagger$ | 16 | $\ddagger$ | 275 d | $\ddagger$ | 86 | $\ddagger$ | 43 |
| Graduated from college |  |  |  |  |  |  |  |  |
| Public | 46 | 46 | 273 | 271 | 83 | 81 | 42 | 41 |
| Private | 69 d | 72 d | 285 d | 287 d | 93 d | 93 d | 58 d | 60 d |
| Catholic | 66 d | 70 d | 285 d | 285 d | 93 d | 93 d | 57 d | 57 d |
| Lutheran | 66 d | 68 d | 284 d | 286 d | 94 d | 92 d | 55 d | 59 d |
| Conservative Christian | $\ddagger$ | 65 d | $\ddagger$ | 282 d | $\ddagger$ | 90 d | $\ddagger$ | 52 d |
| Unknown |  |  |  |  |  |  |  |  |
| Public | 9 | 11 | 246 | 242 | 56 | 52 | 14 | 13 |
| Private | 5 d | 5 d | 265 d | 264 d | 76 d | 77 d | 33 d | 29 d |
| Catholic | 4 d | 5 d | $266{ }^{\text {d }}$ | 265 d | 79 d | 78 d | 34 d | 31 d |
| Lutheran | 4 d | 6 d | $\ddagger$ | $\ddagger$ | $\ddagger$ | $\ddagger$ | $\ddagger$ | $\ddagger$ |
| Conservative Christian | $\ddagger$ | 7 d | $\ddagger$ | 258 d | $\ddagger$ | 71 | $\ddagger$ | 22 |

! Interpret data with caution. The nature of the sample does not allow accurate determination of the variability of the statistic.
$\ddagger$ Reporting standards not met. Sample size is insufficient to permit a reliable estimate, or the minimum participation guidelines for reporting were not met.
d Significantly different from public schools.
NOTE: The NAEP reading scale ranges from 0 to 500. Detail may not sum to totals because of rounding. Data for Other Private schools are included in the overall Private data but not reported separately.
SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 2002 and 2003 Reading Assessments.

## Mathematics Data

Table B-8. Average scale scores and achievement-level results in mathematics, by type of school, grade 4: 2000 and 2003

| Type of school | Average scale score |  | Percent at or above Basic |  | Percent at or above Proficient |  | Percent at Advanced |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 2000 | 2003 | 2000 | 2003 | 2000 | 2003 | 2000 | 2003 |
| Public | 224 | 234 | 64 | 76 | 22 | 31 | 2 | 4 |
| Private | 238 d | 244 d | 82 d | 88 d | 35 d | 44 d | 4 d | 6 d |
| Catholic | 237 b,d | 244 d | 81 d | $88{ }^{\text {d }}$ | 33 d | 43 d | 3 | 5 |
| Lutheran | 241 a,c,d | 245 d | $88^{\text {c,d }}$ | 90 d | 38 d | 46 d | 3 | 5 |
| Conservative Christian | 234 b,d | $\ddagger$ | 78 b,d | $\ddagger$ | 31 d | $\ddagger$ | 3 | $\ddagger$ |

$\ddagger$ Reporting standards not met. Sample size is insufficient to permit a reliable estimate, or the minimum participation guidelines for reporting were not met.
a Significantly different from Catholic schools.
b Significantly different from Lutheran schools.
${ }^{\text {c }}$ Significantly different from Conservative Christian schools.
${ }^{\text {d }}$ Significantly different from public schools.
NOTE: The NAEP mathematics scale ranges from 0 to 500. Data for Nonsectarian and Other Religious schools for 2000 and data for Other Private schools for 2003 are included in the overall Private data for those years but not reported separately.
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.

Table B-9. Average scale scores and achievement-level results in mathematics, by type of school, grade 8: 2000 and 2003

| Type of school | Average scale score |  | Percent at or above Basic |  | Percent at or above Proficient |  | Percent at Advanced |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 2000 | 2003 | 2000 | 2003 | 2000 | 2003 | 2000 | 2003 |
| Public | 272 | 276 | 62 | 67 | 25 | 27 | 5 | 5 |
| Private | 286 d | 292 d | 79 d | 82 d | 36 d | 43 d | $6{ }^{\text {d }}$ | 10 d |
| Catholic | 284 b,d | 289 b,d | 77 b,d | 81 d | 32 b , d | $39 \mathrm{~b}, \mathrm{~d}$ | $5^{\text {b }}$ | 8 d |
| Lutheran | 292 a,d | 296 a,c,d | 84 a,d | 86 d | $43 \mathrm{a,d}$ | $48 \mathrm{a,c,d}$ | $8^{\text {a,d }}$ | 11 d |
| Conservative Christian | $\ddagger$ | 286 b,d | $\ddagger$ | 78 d | $\ddagger$ | 37 b , d | $\ddagger$ | 7 |

[^11]Table B-10. Average scale scores and achievement-level results in mathematics, by type of school, grade 12: 2000

| Type of school | Average <br> scale score | Percent at or <br> above Basic | Percent at or <br> above Proficient | Percent at <br> Advanced |
| :--- | ---: | ---: | ---: | ---: |
| Public | 299 | 62 | 16 | 2 |
| Private | 315 d | 81 d | 26 d | 3 |
| Catholic | 314 d | 80 d | $25 \mathrm{c}, \mathrm{d}$ | 3 |
| Lutheran | 312 d | 78 d | 23 d | 3 |
| Conservative Christian | 310 d | 79 d | 17 a | 2 |

a Significantly different from Catholic schools.
${ }^{\text {c }}$ Significantly different from Conservative Christian schools.
d Significantly different from public schools.
NOTE: The NAEP mathematics scale ranges from 0 to 500. Data for Nonsectarian and Other Religious schools are included in the overall Private data but not reported separately.
SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics, National
Assessment of Educational Progress (NAEP), 2000 Mathematics Assessment.

Table B-11. Percentage of students, average scale scores, and achievement-level results in mathematics, by gender and type of school, grade 4: 2000 and 2003

| Gender and type of school | Percent of students assessed |  | Average scale score |  | Percent at or above Basic |  | Percent at or above Proficient |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 2000 | 2003 | 2000 | 2003 | 2000 | 2003 | 2000 | 2003 |
| Male |  |  |  |  |  |  |  |  |
| Public | 51 | 51 | 225 | 235 | 65 | 77 | 25 | 34 |
| Private | 50 | 52 | 239 d | 247 d | 82 d | 89 d | 38 d | 48 d |
| Catholic | 49 | 52 | 239 d | 246 d | 83 d | 89 d | 37 d | 47 d |
| Lutheran | 53 | 45 | 243 d | 249 d | 88 d | 92 d | 42 d | 52 d |
| Conservative Christian | 52 | $\ddagger$ | $236{ }^{\text {d }}$ | $\ddagger$ | 80 d | $\ddagger$ | 35 d | $\ddagger$ |
| Female |  |  |  |  |  |  |  |  |
| Public | 49 | 49 | 223 | 233 | 62 | 75 | 20 | 29 |
| Private | 50 | 48 | 236 d | 242 d | 81 d | 86 d | 32 d | 41 d |
| Catholic | 51 | 48 | 235 d | 241 d | 79 d | 86 d | 30 d | 40 d |
| Lutheran | 47 | 55 | 239 d | 242 d | 87 d | 88 d | 33 d | 41 d |
| Conservative Christian | 48 | $\ddagger$ | 232 d | $\ddagger$ | 76 d | $\ddagger$ | 28 | $\ddagger$ |

$\ddagger$ Reporting standards not met. Sample size is insufficient to permit a reliable estimate, or the minimum participation guidelines for reporting were not met.
d Significantly different from public schools.
NOTE: The NAEP mathematics scale ranges from 0 to 500. Detail may not sum to totals because of rounding. Data for Nonsectarian and Other Religious schools for 2000 and data for Other Private schools for 2003 are included in the overall Private data for those years but not reported separately.
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.

Table B-12. Percentage of students, average scale scores, and achievement-level results in mathematics, by gender and type of school, grade 8: 2000 and 2003

| Gender and type of school | Percent of students assessed |  | Average scale score |  | Percent at or above Basic |  | Percent at or above Proficient |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 2000 | 2003 | 2000 | 2003 | 2000 | 2003 | 2000 | 2003 |
| Male |  |  |  |  |  |  |  |  |
| Public | 50 | 50 | 273 | 277 | 62 | 67 | 26 | 29 |
| Private | 50 | 48 d | 288 d | 293 d | 80 d | 83 d | 38 d | 45 d |
| Catholic | $48^{\text {b }}$ | 47 d | 285 b,d | 292 b,d | 78 b,d | 83 d | $33^{\text {b,d }}$ | 42 d |
| Lutheran | 53 a | 48 | 295 a,d | 298 a,c,d | $86 \mathrm{a,d}$ | 88 d | $46 \mathrm{a,d}$ | 50 d |
| Conservative Christian | $\ddagger$ | 50 | $\ddagger$ | 289 b,d | $\ddagger$ | 79 d | $\ddagger$ | 40 d |
| Female |  |  |  |  |  |  |  |  |
| Public | 50 | 50 | 271 | 275 | 62 | 66 | 23 | 26 |
| Private | 50 | 52 d | 285 d | 290 d | 78 d | 81 d | 34 d | 40 d |
| Catholic | 52 b | 53 d | 282 d | 288 b,d | 75 d | 80 d | $31 \mathrm{b,d}$ | 37 d |
| Lutheran | 47 a | 52 | 288 d | 294 a,c,d | 82 d | 85 d | 38 a,d | 45 d |
| Conservative Christian | $\ddagger$ | 50 | $\ddagger$ | 284 b,d | $\ddagger$ | 76 | $\ddagger$ | 34 d |

[^12]Table B-13. Percentage of students, average scale scores, and achievement-level results in mathematics, by gender and type of school, grade 12: 2000

| Gender and type of school | Percent of students assessed | Average scale score | Percent at or above Basic | Percent at or above Proficient |
| :---: | :---: | :---: | :---: | :---: |
| Male |  |  |  |  |
| Public | 50 | 301 | 64 | 18 |
| Private | 51 | 316 d | 80 d | 28 d |
| Catholic | 53 | 315 d | 80 d | 28 d |
| Lutheran | 52 | 315 d | 79 d | 28 |
| Conservative Christian | 53 | 313 d | 80 d | 21 |
| Female |  |  |  |  |
| Public | 50 | 297 | 61 | 13 |
| Private | 49 | 314 d | 81 d | 24 d |
| Catholic | 47 | 313 d | 80 d | $22 \mathrm{c}, \mathrm{d}$ |
| Lutheran | 48 | 310 d | 78 d | 18 |
| Conservative Christian | 47 | 307 d | 77 d | $13{ }^{\text {a }}$ |

a Significantly different from Catholic schools.
${ }^{\text {C }}$ Significantly different from Conservative Christian schools.
d Significantly different from public schools.
NOTE: The NAEP mathematics scale ranges from 0 to 500. Detail may not sum to totals because of rounding. Data for Nonsectarian and Other Religious schools are included in the overall Private data but not reported separately.
SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 2000 Mathematics Assessment.

Table B-14. Percentage of students, average scale scores, and achievement-level results in mathematics, by race/ethnicity and type of school, grade 4: 2000 and 2003

| Race/ethnicity and type of school | Percent of students assessed |  | Average scale score |  | Percent at or above Basic |  | Percent at or above Proficient |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 2000 | 2003 | 2000 | 2003 | 2000 | 2003 | 2000 | 2003 |
| White |  |  |  |  |  |  |  |  |
| Public | 62 | 58 | 233 | 243 | 76 | 87 | 30 | 42 |
| Private | 81 d | 76 d | 241 d | 248 d | 87 d | 92 d | 39 d | 50 d |
| Catholic | 81 d | 75 d | 241 d | 248 d | 87 d | 93 d | 38 d | 50 d |
| Lutheran | 87 d | 83 d | 242 d | 248 d | 89 d | 93 d | 38 d | 50 |
| Conservative Christian | 78 d | $\ddagger$ | 238 | $\ddagger$ | 83 | $\ddagger$ | 35 | $\ddagger$ |
| Black |  |  |  |  |  |  |  |  |
| Public | 17 | 17 | 203 | 216 | 35 | 54 | 4 | 10 |
| Private | $8{ }^{\text {d }}$ | 9 d | 213 d | 221 d | 49 d | 62 d | 9 | 13 |
| Catholic | 7 d | 7 d | 210 ! | 222 | 45 ! | 64 | $7!$ | 13 |
| Lutheran | $6{ }^{\text {d }}$ | 12 | $\ddagger$ | 227 ! d | $\ddagger$ | 72 ! | $\ddagger$ | 16 ! |
| Conservative Christian | 11 | $\ddagger$ | 211 ! | $\ddagger$ | $51!$ | $\ddagger$ | $5!$ | $\ddagger$ |
| Hispanic |  |  |  |  |  |  |  |  |
| Public | 16 | 19 | 207 | 221 | 41 | 62 | 7 | 15 |
| Private | 7 d | 9 d | 220 d | 231 d | 58 d | 76 d | 15 d | 24 d |
| Catholic | $9 \mathrm{~b}, \mathrm{~d}$ | 12 b , d | 217 d | 229 d | 54 | 72 d | 14 | 22 |
| Lutheran | 3 a ,d | $3^{\text {a,d }}$ | $\ddagger$ | $\ddagger$ | $\ddagger$ | $\ddagger$ | $\ddagger$ | $\ddagger$ |
| Conservative Christian | 4 d | $\ddagger$ | $\ddagger$ | $\ddagger$ | $\ddagger$ | $\ddagger$ | $\ddagger$ | $\ddagger$ |
| Asian/Pacific Islander |  |  |  |  |  |  |  |  |
| Public | $\ddagger$ | 4 | $\ddagger$ | 246 | $\ddagger$ | 87 | $\ddagger$ | 48 |
| Private | $\ddagger$ | 4 | $\ddagger$ | 249 | $\ddagger$ | 93 | $\ddagger$ | 49 |
| Catholic | $\ddagger$ | $3{ }^{\text {b }}$ | $\ddagger$ | 242 | $\ddagger$ | 89 | $\ddagger$ | 36 |
| Lutheran | $\ddagger$ | 1 a ,d | $\ddagger$ | $\ddagger$ | $\ddagger$ | $\ddagger$ | $\ddagger$ | $\ddagger$ |
| Conservative Christian | $\ddagger$ | $\ddagger$ | $\ddagger$ | $\ddagger$ | $\ddagger$ | $\ddagger$ | $\ddagger$ | $\ddagger$ |
| American Indian/Alaska Native |  |  |  |  |  |  |  |  |
| Public | 1 | 1 | 207 ! | 224 | 39 ! | 65 | $8!$ | 18 |
| Private | \# d | \# d | $\ddagger$ | $\ddagger$ | $\ddagger$ | $\ddagger$ | $\ddagger$ | $\ddagger$ |
| Catholic | \# d | \# d | $\ddagger$ | $\ddagger$ | $\ddagger$ | $\ddagger$ | $\ddagger$ | $\ddagger$ |
| Lutheran | \# | \# | $\ddagger$ | $\ddagger$ | $\ddagger$ | $\ddagger$ | $\ddagger$ | $\ddagger$ |
| Conservative Christian | 1 | $\ddagger$ | $\ddagger$ | $\ddagger$ | $\ddagger$ | $\ddagger$ | $\ddagger$ | $\ddagger$ |

\# The estimate rounds to zero.
! Interpret data with caution. The nature of the sample does not allow accurate determination of the variability of the statistic.
$\ddagger$ Reporting standards not met. Sample size is insufficient to permit a reliable estimate, or the minimum participation guidelines for reporting were not met.
a Significantly different from Catholic schools.
b Significantly different from Lutheran schools.
d Significantly different from public schools.
NOTE: The NAEP mathematics scale ranges from 0 to 500. Detail may not sum to totals because of rounding. Because of insufficient sample size, results are not shown for students whose race/ethnicity based on school records was "other." Data for Nonsectarian and Other Religious schools for 2000 and data for Other Private schools for 2003 are included in the overall Private data for those years but not reported separately.
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.

Table B-15. Percentage of students, average scale scores, and achievement-level results in mathematics, by race/ethnicity and type of school, grade 8: 2000 and 2003

| Race/ethnicity and type of school | Percent of students assessed |  | Average scale score |  | Percent at or above Basic |  | Percent at or above Proficient |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 2000 | 2003 | 2000 | 2003 | 2000 | 2003 | 2000 | 2003 |
| White |  |  |  |  |  |  |  |  |
| Public | 63 | 62 | 283 | 287 | 75 | 79 | 33 | 36 |
| Private | 77 d | 75 d | 291 d | 297 d | 84 d | 88 d | $41^{\text {d }}$ | 48 d |
| Catholic | 75 b, d | 72 b,d | 289 b,d | 296 d | 83 d | 88 d | 37 b | 46 d |
| Lutheran | $86^{\text {a,d }}$ | 81 a,d | 295 a,d | $300 \mathrm{c,d}$ | 88 d | 91 d | $46 \mathrm{a,d}$ | 53 d |
| Conservative Christian | $\ddagger$ | 78 d | $\ddagger$ | 293 b,d | $\ddagger$ | 86 d | $\ddagger$ | 43 |
| Black |  |  |  |  |  |  |  |  |
| Public | 17 | 17 | 243 | 252 | 30 | 39 | 5 | 7 |
| Private | 10 d | 10 d | 258 d | 260 d | 45 d | 47 d | 10 d | 11 d |
| Catholic | 10 d | $10^{\text {d }}$ | 254 ! d | 260 d | 40 ! d | 46 | $7!$ | 8 |
| Lutheran | 7 d | $8{ }^{\text {d }}$ | 264 ! d | $\ddagger$ | 56 ! d | $\ddagger$ | 13 ! | $\ddagger$ |
| Conservative Christian | $\ddagger$ | 13 | $\ddagger$ | 254 ! | $\ddagger$ | 41 ! | $\ddagger$ | 11! |
| Hispanic |  |  |  |  |  |  |  |  |
| Public | 14 | 15 | 252 | 258 | 40 | 47 | 8 | 11 |
| Private | 7 d | 8 d | 273 d | 274 d | 66 d | 65 d | 18 d | 21 d |
| Catholic | $10^{\text {b,d }}$ | $12 \mathrm{~b}, \mathrm{c}$ | 271 d | 272 d | 64 d | 63 d | 17 d | 19 |
| Lutheran | 4 a ,d | $5 \mathrm{a,d}$ | $\ddagger$ | $\ddagger$ | $\ddagger$ | $\ddagger$ | $\ddagger$ | $\ddagger$ |
| Conservative Christian | $\ddagger$ | 4 a,d | $\ddagger$ | $\ddagger$ | $\ddagger$ | $\ddagger$ | $\ddagger$ | $\ddagger$ |
| Asian/Pacific Islander |  |  |  |  |  |  |  |  |
| Public | 4 | 4 | 287 | 289 | 73 | 77 | 40 | 42 |
| Private | 3 | 5 | 300 d | 303 d | 90 d | 90 d | 53 d | 56 d |
| Catholic | $3{ }^{\text {b }}$ | 5 | 296 | 298 d | 88 d | 89 d | 47 | 51 |
| Lutheran | 2 a , d | 3 | $\ddagger$ | $\ddagger$ | $\ddagger$ | $\ddagger$ | $\ddagger$ | $\ddagger$ |
| Conservative Christian | $\ddagger$ | 3 | $\ddagger$ | $\ddagger$ | $\ddagger$ | $\ddagger$ | $\ddagger$ | $\ddagger$ |
| American Indian/Alaska Native |  |  |  |  |  |  |  |  |
| Public | 1 | 1 | 263 ! | 265 | $53!$ | 54 | 13 ! | 16 |
| Private | 1 | \# d | $\ddagger$ | $\ddagger$ | $\ddagger$ | $\ddagger$ | $\ddagger$ | $\ddagger$ |
| Catholic | 1 | \# d | $\ddagger$ | $\ddagger$ | $\ddagger$ | $\ddagger$ | $\ddagger$ | $\ddagger$ |
| Lutheran | 1 | 1 | $\ddagger$ | $\ddagger$ | $\ddagger$ | $\ddagger$ | $\ddagger$ | $\ddagger$ |
| Conservative Christian | $\ddagger$ | 1 | $\ddagger$ | $\ddagger$ | $\ddagger$ | $\ddagger$ | $\ddagger$ | $\ddagger$ |

\# The estimate rounds to zero.
! Interpret data with caution. The nature of the sample does not allow accurate determination of the variability of the statistic.
$\ddagger$ Reporting standards not met. Sample size is insufficient to permit a reliable estimate, or the minimum participation guidelines for reporting were not met.
a Significantly different from Catholic schools.
b Significantly different from Lutheran schools.
c Significantly different from Conservative Christian schools.
d Significantly different from public schools.
NOTE: The NAEP mathematics scale ranges from 0 to 500. Detail may not sum to totals because of rounding. Because of insufficient sample size, results are not shown for students whose race/ethnicity based on school records was "other." Data for Nonsectarian and Other Religious schools for 2000 and data for Other Private schools for 2003 are included in the overall Private data for those years but not reported separately.
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.

Table B-16. Percentage of students, average scale scores, and achievement-level results in mathematics, by race/ethnicity and type of school, grade 12: 2000

| Race/ethnicity and type of school | Percent of students assessed | Average scale score | Percent at or above Basic | Percent at or above Proficient |
| :---: | :---: | :---: | :---: | :---: |
| White |  |  |  |  |
| Public | 71 | 306 | 71 | 19 |
| Private | 83 d | 317 d | 83 d | 28 d |
| Catholic | 82 d | 317 d | 84 d | $27^{\text {c,d }}$ |
| Lutheran | 83 d | 316 d | 84 d | 27 |
| Conservative Christian | 89 d | 312 d | 81 d | $18{ }^{\text {a }}$ |
| Black |  |  |  |  |
| Public | 14 | 272 | 30 | 2 |
| Private | 6 d | 292 d | 56 d | 8 d |
| Catholic | 6 d | 290 d | 54 d | 5 |
| Lutheran | 11 | 288 d | 46 d | 6 |
| Conservative Christian | 5 d | $\ddagger$ | $\ddagger$ | $\ddagger$ |
| Hispanic |  |  |  |  |
| Public | 9 | 281 | 42 | 4 |
| Private | 6 d | 300 d | 65 d | 12 d |
| Catholic | 8 | 299 d | 65 d | 11 |
| Lutheran | 3 d | $\ddagger$ | $\ddagger$ | $\ddagger$ |
| Conservative Christian | 4 | $\ddagger$ | $\ddagger$ | $\ddagger$ |
| Asian/Pacific Islander |  |  |  |  |
| Public | 4 | 314 | 74 | 31 |
| Private | 3 d | 328 d | 93 d | 42 |
| Catholic | 3 | 326 ! | 91! ${ }^{\text {d }}$ | 38 ! |
| Lutheran | 2 d | $\ddagger$ | $\ddagger$ | $\ddagger$ |
| Conservative Christian | 1 d | $\ddagger$ | $\ddagger$ | $\ddagger$ |
| American Indian/Alaska Native |  |  |  |  |
| Public | 1 | 293 ! | $54!$ | $7!$ |
| Private | \# | $\ddagger$ | $\ddagger$ | $\ddagger$ |
| Catholic | \# | $\ddagger$ | $\ddagger$ | $\ddagger$ |
| Lutheran | \# | $\ddagger$ | $\ddagger$ | $\ddagger$ |
| Conservative Christian | \# | $\ddagger$ | $\ddagger$ | $\ddagger$ |

\# The estimate rounds to zero.
! Interpret data with caution. The nature of the sample does not allow accurate determination of the variability of the statistic. $\ddagger$ Reporting standards not met. Sample size is insufficient to permit a reliable estimate, or the minimum participation guidelines for reporting were not met.
a Significantly different from Catholic schools.
c Significantly different from Conservative Christian schools.
d Significantly different from public schools.
NOTE: The NAEP mathematics scale ranges from 0 to 500. Detail may not sum to totals because of rounding. Because of insufficient sample size, results are not shown for students whose race/ethnicity based on school records was "other." Data for Nonsectarian and Other Religious schools are included in the overall Private data but not reported separately.
SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 2000 Mathematics Assessment.

Table B-17. Percentage of students, average scale scores, and achievement-level results in mathematics, by student-reported parents' highest level of education and type of school, grade 8: 2000 and 2003

| Education level and type of school | Percent of students assessed |  | Average scale score |  | Percent at or above Basic |  | Percent at or above Proficient |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 2000 | 2003 | 2000 | 2003 | 2000 | 2003 | 2000 | 2003 |
| Less than high school |  |  |  |  |  |  |  |  |
| Public | 8 | 7 | 253 | 256 | 43 | 44 | 7 | 9 |
| Private | 2 d | 1 d | 264 d | 270 d | 51 | 64 d | 11 | 15 |
| Catholic | 2 d | $1{ }^{\text {d }}$ | $\ddagger$ | $\ddagger$ | $\ddagger$ | $\ddagger$ | $\ddagger$ | $\ddagger$ |
| Lutheran | 2 d | 1 d | $\ddagger$ | $\ddagger$ | $\ddagger$ | $\ddagger$ | $\ddagger$ | $\ddagger$ |
| Conservative Christian | $\ddagger$ | 2 d | $\ddagger$ | $\ddagger$ | $\ddagger$ | $\ddagger$ | $\ddagger$ | $\ddagger$ |
| Graduated from high school |  |  |  |  |  |  |  |  |
| Public | 21 | 18 | 260 | 267 | 51 | 58 | 15 | 16 |
| Private | 13 d | 9 d | 273 d | 277 d | $66^{\text {d }}$ | 71 d | 18 | 23 d |
| Catholic | $15^{\text {d }}$ | 10 d | 271 d | 276 d | 63 d | 71 d | 16 | 21 |
| Lutheran | 11 d | 11 d | 276 | 288 d | 71 d | 82 d | 25 | 37 |
| Conservative Christian | $\ddagger$ | 11 d | $\ddagger$ | 279 d | $\ddagger$ | 70 | $\ddagger$ | 27 |
| Some education after high school |  |  |  |  |  |  |  |  |
| Public | 18 | 18 | 277 | 280 | 70 | 73 | 26 | 28 |
| Private | 13 d | 13 d | 281 d | 285 d | 77 | 79 d | 26 | 33 d |
| Catholic | 14 d | 15 d | 279 b | 286 d | 75 | 80 d | 25 | 33 |
| Lutheran | 17 | 17 | 290 ! a,d | 290 d | $88{ }^{\text {d }}$ | 83 | 35 ! | 41 |
| Conservative Christian | $\ddagger$ | 12 d | $\ddagger$ | 280 | $\ddagger$ | 74 | $\ddagger$ | 31 |
| Graduated from college |  |  |  |  |  |  |  |  |
| Public | 41 | 45 | 285 | 287 | 75 | 77 | 38 | 39 |
| Private | $67^{\text {d }}$ | 71 d | 292 d | 297 d | 83 d | 87 d | 43 d | 49 d |
| Catholic | 63 d | 69 d | 289 b | 294 b,d | 82 d | 85 d | $38{ }^{\text {b }}$ | 45 |
| Lutheran | $64{ }^{\text {d }}$ | 67 d | 296 a,d | 301 a,c,d | 86 d | 89 d | 49 a | 54 d |
| Conservative Christian | $\ddagger$ | 69 d | $\ddagger$ | $291{ }^{\text {b }}$ | $\ddagger$ | 83 | $\ddagger$ | 42 |
| Unknown |  |  |  |  |  |  |  |  |
| Public | 12 | 11 | 253 | 258 | 41 | 47 | 9 | 12 |
| Private | 5 d | 5 d | 272 d | 269 d | $65^{\text {d }}$ | 57 d | 20 d | 20 d |
| Catholic | 6 d | 5 d | 276 d | 270 d | 68 d | 60 | 24 d | 19 |
| Lutheran | 7 d | 4 d | $\ddagger$ | $\ddagger$ | $\ddagger$ | $\ddagger$ | $\ddagger$ | $\ddagger$ |
| Conservative Christian | $\ddagger$ | $6{ }^{\text {d }}$ | $\ddagger$ | $\ddagger$ | $\ddagger$ | $\ddagger$ | $\ddagger$ | $\ddagger$ |

! Interpret data with caution. The nature of the sample does not allow accurate determination of the variability of the statistic.
$\ddagger$ Reporting standards not met. Sample size is insufficient to permit a reliable estimate, or the minimum participation guidelines for reporting were not met.
a Significantly different from Catholic schools.
b Significantly different from Lutheran schools.
${ }^{\text {c }}$ Significantly different from Conservative Christian schools.
d Significantly different from public schools.
NOTE: The NAEP mathematics scale ranges from 0 to 500. Detail may not sum to totals because of rounding. Data for Nonsectarian and Other Religious schools for 2000 and data for Other Private schools for 2003 are included in the overall Private data for those years but not reported separately.
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.

Table B-18. Percentage of students, average scale scores, and achievement-level results in mathematics, by student-reported parents' highest level of education and type of school, grade 12: 2000

| Education level and type of school | Percent of students assessed | Average scale score | Percent at or above Basic | Percent at or above Proficient |
| :---: | :---: | :---: | :---: | :---: |
| Less than high school |  |  |  |  |
| Public | 7 | 278 | 38 | 3 |
| Private | 2 d | 281 | 41 | 3 |
| Catholic | 2 d | $\ddagger$ | $\ddagger$ | $\ddagger$ |
| Lutheran | 1 d | $\ddagger$ | $\ddagger$ | $\ddagger$ |
| Conservative Christian | 1 d | $\ddagger$ | $\ddagger$ | $\ddagger$ |
| Graduated from high school |  |  |  |  |
| Public | 21 | 286 | 49 | 6 |
| Private | 11 d | 298 d | 63 d | 11 d |
| Catholic | 12 d | 300 d | 66 d | 11 |
| Lutheran | 9 d | 304 d | 74 d | 13 |
| Conservative Christian | 11 d | $294!$ | 57 ! | 10 ! |
| Some education after high school |  |  |  |  |
| Public | 25 | 298 | 63 | 12 |
| Private | 18 d | 309 d | 76 d | 17 d |
| Catholic | $19 \mathrm{c}, \mathrm{d}$ | 308 d | 75 d | 17 |
| Lutheran | 23 | 309 d | 77 d | 18 |
| Conservative Christian | $26^{\text {a }}$ | 309 d | 77 d | 14 |
| Graduated from college |  |  |  |  |
| Public | 44 | 311 | 75 | 25 |
| Private | 67 d | 321 d | 87 d | 32 d |
| Catholic | 66 d | 320 d | 86 d | 31 |
| Lutheran | 64 d | 316 | 81 | 28 |
| Conservative Christian | 59 d | 315 | 84 | 21 |
| Unknown |  |  |  |  |
| Public | 3 | 273 | 32 | 5 |
| Private | 2 d | 295 d | 59 d | 11 |
| Catholic | 2 d | $\ddagger$ | $\ddagger$ | $\ddagger$ |
| Lutheran | 2 | $\ddagger$ | $\ddagger$ | $\ddagger$ |
| Conservative Christian | 2 | $\ddagger$ | $\ddagger$ | $\ddagger$ |

! Interpret data with caution. The nature of the sample does not allow accurate determination of the variability of the statistic.
$\ddagger$ Reporting standards not met. Sample size is insufficient to permit a reliable estimate, or the minimum participation guidelines for reporting were not met.
${ }^{\text {a }}$ Significantly different from Catholic schools.
${ }^{\text {C }}$ Significantly different from Conservative Christian schools.
d Significantly different from public schools.
NOTE: The NAEP mathematics scale ranges from 0 to 500. Detail may not sum to totals because of rounding. Data for Nonsectarian and Other Religious schools are included in the overall Private data but not reported separately.
SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics, National
Assessment of Educational Progress (NAEP), 2000 Mathematics Assessment.

## National Assessment of Educational Progress

The Nation's Report Card ${ }^{\text {TM }}$

## Student Achievement in Private Schools

Results From NAEP 2000-2005
MORE INFORMATION:
The NCES World Wide Web Home Page is http://nces.ed.gov/
The NCES World Wide Web Electronic Catalog is http://nces.ed.gov/pubsearch/
For ordering information on this report, write: U.S. Department of Education

ED Pubs
P.O. Box 1398

Jessup, MD 20794-1398
Call toll free 1-877-4ED-Pubs;
Order online at http://www.edpubs.org

## SUGGESTED CITATION

Perie, M., Vanneman, A., and Goldstein, A. (2005). Student Achievement in Private Schools:

Results From NAEP 2000-2005 (NCES 2006-459). U.S. Department of Education, National Center for Education Statistics. Washington, D.C.: U.S. Government Printing Office.
CONTENT CONTACT
Arnold Goldstein
202-502-7344
Arnold.Goldstein@ed.gov


United States
Department of Education
ED Pubs
8242-B Sandy Court
Postage and Fees Paid U.S. Department of Education

Permit No. G-17
Jessup, MD 20794-1398
Official Business Only
Penalty for Private Use, $\$ 300$


[^0]:    ${ }^{1}$ Eighth- and twelfth-grade students reported the highest level of education attained by either parent. Parental education data from fourth-graders are not reported because research indicates that these students are less likely to report data accurately.

[^1]:    ${ }^{\text {d }}$ Significantly different from public schools.
    NOTE: Detail may not sum to totals because of rounding. Data for Other Private schools are included in the overall Private data but not reported separately. SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 2003 Reading Assessment.

[^2]:    a Significantly different from Catholic schools.
    b Significantly different from Lutheran schools.
    c Significantly different from Conservative Christian schools.
    ${ }^{d}$ Significantly different from public schools.
    ${ }^{1}$ For Conservative Christian schools, the percentage of students who were eligible for free/ reduced-price lunch rounds to zero. This percentage is significantly different from the percentages in Catholic, Lutheran, and public schools.
    NOTE: Detail may not sum to totals because of rounding. Data for Other Private schools are included in the overall Private data but not reported separately.
    SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 2003 Reading Assessment.

[^3]:    ${ }^{\text {d }}$ Significantly different from public schools.
    ${ }^{1}$ Students with disabilities.
    2 English language learners.
    ${ }^{3}$ The percentages of students who are English language learners round to zero in private schools overall and in Catholic and Lutheran schools. For private schools overall and for Catholic schools, these percentages are significantly different from those for public schools.
    NOTE: Detail may not sum to totals because of rounding. Data for Other Private schools are included in the overall Private data but not reported separately.
    SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 2003 Reading Assessment.

[^4]:    a Significantly different from Catholic schools.
    ${ }^{\mathrm{b}}$ Significantly different from Lutheran schools.
    ${ }^{\text {c }}$ Significantly different from Conservative Christian schools.
    d Significantly different from public schools.
    NOTE: The NAEP reading scale ranges from 0 to 500. Data for Other Private schools are included in the overall Private data but not reported separately.
    SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 2003 Reading Assessment.

[^5]:    ${ }^{\text {a }}$ Significantly different from Catholic schools.

[^6]:    a Significantly different from Catholic schools.
    ${ }^{\mathrm{b}}$ Significantly different from Lutheran schools.
    ${ }^{\text {c }}$ Significantly different from Conservative Christian schools.
    ${ }^{\text {d }}$ Significantly different from public schools.
    NOTE: The NAEP writing scale ranges from 0 to 300. Data for Other Private schools are included in the overall Private data but not reported separately.
    SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 2002 Writing Assessment.

[^7]:    d Significantly different from public schools.
    1 Data for Catholic, Lutheran, and Conservative Christian are not shown because sample sizes are insufficient to permit reliable estimates of these categories for students whose parents' reported education level is less than high school.
    NOTE: The NAEP reading scale ranges from 0 to 500. Data for Other Private schools are included in the overall Private data but not reported separately.
    SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 2003 Reading Assessment.

[^8]:    \# The estimate rounds to zero.
    ${ }^{1}$ Students with disabilities.
    2 English language learners.
    NOTE: Data for Other Private schools are included in the overall Private data but not reported separately. The student sample size is rounded to the nearest hundred. SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics, National Assessment of Educational Progress (NAEP),

[^9]:    $\ddagger$ Reporting standards not met. Sample size is insufficient to permit a reliable estimate, or the minimum participation guidelines for reporting were not met.
    ${ }^{\text {a }}$ Significantly different from Catholic schools.
    b Significantly different from Lutheran schools.
    ${ }^{\text {c }}$ Significantly different from Conservative Christian schools.
    d Significantly different from public schools.
    NOTE: The NAEP reading scale ranges from 0 to 500. Data for Other Private schools are included in the overall Private data but not reported separately.
    SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 2002 and 2003 Reading Assessments.

[^10]:    $\ddagger$ Reporting standards not met. Sample size is insufficient to permit a reliable estimate, or the minimum participation guidelines for reporting were not met.
    d Significantly different from public schools.
    NOTE: The NAEP reading scale ranges from 0 to 500. Detail may not sum to totals because of rounding. Data for Other Private schools are included in the overall Private data but not reported separately.
    SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 2002 and 2003 Reading Assessments.

[^11]:    $\ddagger$ Reporting standards not met. Sample size is insufficient to permit a reliable estimate, or the minimum participation guidelines for reporting were not met.
    a Significantly different from Catholic schools.
    b Significantly different from Lutheran schools.
    ${ }^{\text {c }}$ Significantly different from Conservative Christian schools.
    d Significantly different from public schools.
    NOTE: The NAEP mathematics scale ranges from 0 to 500. Data for Nonsectarian and Other Religious schools for 2000 and data for Other Private schools for 2003 are included in the overall Private data for those years but not reported separately.
    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.

[^12]:    $\ddagger$ Reporting standards not met. Sample size is insufficient to permit a reliable estimate, or the minimum participation guidelines for reporting were not met.
    a Significantly different from Catholic schools.
    b Significantly different from Lutheran schools.
    ${ }^{\text {c }}$ Significantly different from Conservative Christian schools.
    d Significantly different from public schools.
    NOTE: The NAEP mathematics scale ranges from 0 to 500. Detail may not sum to totals because of rounding. Data for Nonsectarian and Other Religious schools for 2000 and data for Other Private schools for 2003 are included in the overall Private data for those years but not reported separately.
    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.

