Appendix D

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Appendix D

Statistically Significant Differences in Subgroup Performance on NAEP

This section of the report provides additional information about the student subgroups profiled in Part 3 on each of the state pages. Part 3 shows the percentages of students in different subgroups who met the Goals Panel's performance standard (that is, a score at or above the Proficient level) on the most recent NAEP mathematics and science assessments.[1] Results are presented by sex, race/ethnicity, parents' highest level of education, school location, and eligibility for free/reduced-price lunch programs.

The summaries in this appendix indicate whether differences between subgroups were statistically significant. (See explanation of statistical significance on pp. 3-4.) Each list shows the number of states in which the percentage of students in one group who scored at or above Proficient was significantly higher than that of students in a second group. This is shortened to read, for example, males outperformed females nationally and in 9 states. If a state is not shown on a particular list, either differences between the subgroups in that state were not statistically significant, or sample sizes were too small to permit reliable estimates. The reader is cautioned to avoid interpreting these subgroup differences as causal relationships.

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Males outperformed females nationally and in 9 states
U.S.
Connecticut
District of Columbia
Minnesota
Montana
New Jersey
Rhode Island
Utah
Washington
Wisconsin
Subgroup differences were statistically significant nationally and in 9 out of 45 states.

Whites outperformed American Indians/Alaskan Natives nationally and in 14 states
U.S.
Alaska
Arizona
Arkansas
Colorado
Michigan
Minnesota
Montana
Nebraska
Nevada
North Dakota
Oregon
Utah
Washington
Wyoming
Subgroup differences were statistically significant nationally and in 14 out of 15 states.

Whites outperformed Asians/Pacific Islanders in 2 states
Alaska
Minnesota
Subgroup differences were statistically significant in 2 out of 15 states.

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[1] U.S. data include public and nonpublic school students, while state data include public school students only.

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Whites outperformed Blacks nationally and in 34 states

U.S.
Alabama
Alaska
Arkansas
Colorado
Connecticut
Delaware
District of Columbia
Florida
Georgia
Hawaii
Indiana
Iowa
Kentucky
Louisiana
Maryland
Massachusetts
Michigan
Mississippi
Missouri
Nebraska
Nevada
New Jersey
New Mexico
New York
North Carolina
Pennsylvania
Rhode Island
South Carolina
Tennessee
Texas
Virginia
Washington
West Virginia
Wisconsin

Subgroup differences were statistically significant nationally and in 34 out of 34 states.

Whites outperformed Hispanics nationally and in 43 states

U.S.
Alabama
Alaska
Arizona
Arkansas
California
Colorado
Connecticut
Delaware
District of Columbia
Florida
Georgia
Hawaii
Indiana
Iowa
Kentucky
Louisiana
Maine
Maryland
Massachusetts
Michigan
Minnesota
Mississippi
Missouri
Montana
Nebraska
Nevada
New Jersey
New Mexico
New York
North Carolina
Oregon
Pennsylvania
Rhode Island
South Carolina
Texas
Utah
Vermont
Virginia
Washington
West Virginia
Wisconsin
Wyoming
Guam

Subgroup differences were statistically significant nationally and in 43 out of 45 states.

Asians/Pacific Islanders outperformed American Indians/Alaskan Natives nationally and in 2 states

U.S.
Nevada
Oregon

Subgroup differences were statistically significant nationally and in 2 out of 7 states.

Asians/Pacific Islanders outperformed Blacks nationally and in 11 states

U.S.
Alaska
Colorado
Hawaii
Maryland
Massachusetts
Nevada
New Jersey
New York
Rhode Island
Virginia
Washington

Subgroup differences were statistically significant nationally and in 11 out of 11 states.

Asians/Pacific Islanders outperformed Hispanics nationally and in 10 states

U.S.
California
Colorado
Maryland
Massachusetts
Nevada
New Jersey
New York
Oregon
Virginia
Washington

Subgroup differences were statistically significant nationally and in 10 out of 12 states.

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Asians/Pacific Islanders outperformed Whites in 3 states

Maryland
New Jersey
Virginia

Subgroup differences were statistically significant in 3 out of 15 states.

Students whose parents *did* complete high school outperformed students whose parents *did not* complete high school, nationally and in 10 states

U.S.
Arkansas
Connecticut
Kentucky
Michigan
Nebraska
Nevada
Oregon
Tennessee
Texas
West Virginia

Subgroup differences were statistically significant nationally and in 10 out of 32 states.

Students whose parents had some education beyond high school outperformed students whose parents did not complete high school, nationally and in 30 states

U.S.
Alabama
Alaska
Arizona
Arkansas
Colorado
Connecticut
Florida
Georgia
Kentucky
Louisiana
Maine
Maryland
Massachusetts
Michigan
Mississippi
Missouri
Montana
Nebraska
Nevada
New Jersey
New Mexico
North Carolina
Oregon
Rhode Island
Tennessee
Texas
Virginia
Washington
West Virginia
Wyoming

Subgroup differences were statistically significant nationally and in 30 out of 32 states.

Students whose parents were college graduates outperformed students whose parents did not complete high school, nationally and in 32 states

U.S.
Alabama
Alaska
Arizona
Arkansas
Colorado
Connecticut
Florida
Georgia
Indiana
Kentucky
Louisiana
Maine
Maryland
Massachusetts
Michigan
Mississippi
Missouri
Montana
Nebraska
Nevada
New Jersey
New Mexico
North Carolina
Oregon
Rhode Island
South Carolina
Tennessee
Texas
Virginia
Washington
West Virginia
Wyoming

Subgroup differences were statistically significant nationally and in 32 out of 32 states.

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Students in central cities outperformed students in urban fringes/large towns in 1 state

Hawaii

Subgroup differences were statistically significant in 1 out of 39 states.

Students in central cities outperformed students in rural areas/small towns in 4 states

Arizona
Hawaii
North Carolina
South Carolina

Subgroup differences were statistically significant in 4 out of 41 states.

Students in urban fringes/large towns outperformed students in central cities nationally and in 15 states

U.S.
Connecticut
Georgia
Iowa
Maryland
Massachusetts
Michigan
Minnesota
Missouri
New Jersey
New York
Pennsylvania
Rhode Island
Texas
Virginia
Wisconsin

Subgroup differences were statistically significant nationally and in 15 out of 39 states.

Students in urban fringes/large towns outperformed students in rural areas/small towns in 10 states

Georgia
Louisiana
Maryland
Minnesota
Mississippi
Missouri
New York
Pennsylvania
South Carolina
Virginia

Subgroup differences were statistically significant in 10 out of 38 states.

Students in rural areas/small towns outperformed students in central cities in 5 states

Connecticut
Massachusetts
Michigan
Pennsylvania
Rhode Island

Subgroup differences were statistically significant in 5 out of 41 states.

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Students who *were not* eligible for the free/reduced-price school lunch program outperformed students who *were* eligible, nationally and in 45 states

U.S.	Missouri
Alabama	Montana
Alaska	Nebraska
Arizona	Nevada
Arkansas	New Jersey
California	New Mexico
Colorado	New York
Connecticut	North Carolina
Delaware	North Dakota
District of Columbia	Oregon
Florida	Pennsylvania
Georgia	Rhode Island
Hawaii	South Carolina
Indiana	Tennessee
Iowa	Texas
Kentucky	Utah
Louisiana	Vermont
Maine	Virginia
Maryland	Washington
Massachusetts	West Virginia
Michigan	Wisconsin
Minnesota	Wyoming
Mississippi	Guam

Subgroup differences were statistically significant nationally and in 45 out of 45 states.

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Males outperformed females in 7 states

Colorado
Nebraska
North Carolina
South Carolina
Utah
Virginia
Washington

Subgroup differences were statistically significant in 7 out of 43 states.

Whites outperformed Blacks nationally and in 27 states

U.S.
Alabama
Arizona
Arkansas
Colorado
Connecticut
Delaware
District of Columbia
Florida
Georgia
Indiana
Iowa
Louisiana
Maryland
Massachusetts
Michigan
Minnesota
Mississippi
Missouri
Nebraska
New York
North Carolina
Rhode Island
South Carolina
Tennessee
Texas
Virginia
Washington

Subgroup differences were statistically significant nationally and in 27 out of 27 states.

Whites outperformed Hispanics nationally and in 35 states

U.S.
Alabama
Alaska
Arizona
California
Colorado
Connecticut
Delaware
District of Columbia
Florida
Georgia
Hawaii
Indiana
Iowa
Maryland
Massachusetts
Michigan
Minnesota
Mississippi
Missouri
Montana
Nebraska
New Mexico
New York
North Carolina
North Dakota
Oregon
Rhode Island
South Carolina
Tennessee
Texas
Utah
Virginia
Washington
Wisconsin
Wyoming

Subgroup differences were statistically significant nationally and in 35 out of 36 states.

Asians/Pacific Islanders outperformed Blacks in 9 states

Colorado
Connecticut
Maryland
Massachusetts
Minnesota
New York
Texas
Virginia
Washington

Subgroup differences were statistically significant in 9 out of 10 states.

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Asians/Pacific Islanders outperformed American Indians/Alaskan Natives in 2 states

Oregon
Washington

Subgroup differences were statistically significant in 2 out of 3 states.

Asians/Pacific Islanders outperformed Hispanics in 14 states

California
Colorado
Connecticut
Hawaii
Maryland
Massachusetts
New York
Oregon
Rhode Island
Texas
Utah
Virginia
Washington
Guam

Subgroup differences were statistically significant in 14 out of 16 states.

Asians/Pacific Islanders outperformed Whites in 2 states

Maryland
Texas

Subgroup differences were statistically significant in 2 out of 15 states.

Students whose parents *did* complete high school outperformed students whose parents *did not* complete high school, nationally and in 18 states

U.S.
Arizona
Arkansas
California
Indiana
Kentucky
Maine
Maryland
Massachusetts
Michigan
Missouri
Montana
Nebraska
North Carolina
Rhode Island
Tennessee
Texas
West Virginia
Wisconsin

Subgroup differences were statistically significant nationally and in 18 out of 39 states.

Students whose parents had some education beyond high school outperformed students whose parents did not complete high school, nationally and in 38 states

U.S.
Alabama
Arizona
Arkansas
California
Colorado
Connecticut
Delaware
Georgia
Indiana
Iowa
Kentucky
Louisiana
Maine
Maryland
Massachusetts
Michigan
Minnesota
Mississippi
Missouri
Montana
Nebraska
New Mexico
New York
North Carolina
North Dakota
Oregon
Rhode Island
South Carolina
Tennessee
Texas
Utah
Vermont
Virginia
Washington
West Virginia
Wisconsin
Wyoming
Guam

Subgroup differences were statistically significant nationally and in 38 out of 39 states.

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Students whose parents were college graduates outperformed students whose parents did not complete high school, nationally and in 39 states

U.S.	Missouri
Alabama	Montana
Arizona	Nebraska
Arkansas	New Mexico
California	New York
Colorado	North Carolina
Connecticut	North Dakota
Delaware	Oregon
Georgia	Rhode Island
Hawaii	South Carolina
Indiana	Tennessee
Iowa	Texas
Kentucky	Utah
Louisiana	Vermont
Maine	Virginia
Maryland	Washington
Massachusetts	West Virginia
Michigan	Wisconsin
Minnesota	Wyoming
Mississippi	Guam

Subgroup differences were statistically significant nationally and in 39 out of 39 states.

Students in central cities outperformed students in urban fringes/large towns in 2 states

Hawaii
North Carolina

Subgroup differences were statistically significant in 2 out of 35 states.

Students in central cities outperformed students in rural areas/small towns in 8 states

Alaska
Arizona
Hawaii
Kentucky
North Carolina
Oregon
South Carolina
West Virginia

Subgroup differences were statistically significant in 8 out of 38 states.

Students in urban fringes/large towns outperformed students in central cities nationally and in 13 states

U.S.
California
Connecticut
Georgia
Maine
Maryland
Massachusetts
Michigan
Nebraska
New York
Rhode Island
Tennessee
Virginia
Wisconsin

Subgroup differences were statistically significant nationally and in 13 out of 35 states.

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Students in urban fringes/large towns outperformed students in rural areas/small towns in 13 states

Arkansas
Georgia
Maine
Maryland
Minnesota
Mississippi
Nebraska
New York
Oregon
South Carolina
Tennessee
Virginia
West Virginia

Subgroup differences were statistically significant in 13 out of 35 states.

Students in rural areas/small towns outperformed students in central cities nationally and in 7 states

U.S.
Connecticut
Massachusetts
Michigan
New York
Rhode Island
Wisconsin
Wyoming

Subgroup differences were statistically significant nationally and in 7 out of 38 states.

Students in rural areas/small towns outperformed students in urban fringes/large towns in 1 state

Rhode Island

Subgroup differences were statistically significant in 1 out of 35 states.

Students who *were not* eligible for the free/reduced-price school lunch program outperformed students who *were* eligible, nationally and in 41 states

U.S.
Alabama
Alaska
Arizona
Arkansas
California
Colorado
Connecticut
Delaware
District of Columbia
Florida
Georgia
Hawaii
Iowa
Indiana
Kentucky
Louisiana
Maine
Maryland
Massachusetts
Michigan
Missouri
Mississippi
Minnesota
Montana
Nebraska
New Mexico
New York
North Carolina
North Dakota
Oregon
Rhode Island
South Carolina
Tennessee
Texas
Utah
Vermont
Virginia
Washington
West Virginia
Wisconsin
Wyoming

Subgroup differences were statistically significant nationally and in 41 out of 41 states.

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Males outperformed females in 19 states

Alaska	Nebraska
Arkansas	New Mexico
Colorado	New York
Georgia	North Dakota
Louisiana	Oregon
Maine	Texas
Massachusetts	Utah
Michigan	Washington
Minnesota	Wisconsin
Missouri	

Subgroup differences were statistically significant in 19 out of 42 states.

Whites outperformed American Indians/Alaskan Natives nationally and in 9 states

U.S.
Alaska
Arizona
Colorado
Montana
New Mexico
North Carolina
North Dakota
Washington
Wyoming

Subgroup differences were statistically significant nationally and in 9 out of 10 states.

Whites outperformed Asians/Pacific Islanders in 3 states

Rhode Island
Utah
Guam

Subgroup differences were statistically significant nationally and in 3 out of 16 states.

Whites outperformed Blacks nationally and in 31 states

U.S.	Massachusetts
Alabama	Michigan
Arizona	Minnesota
Arkansas	Mississippi
California	Missouri
Colorado	Nebraska
Connecticut	New York
Delaware	North Carolina
Florida	Rhode Island
Georgia	South Carolina
Hawaii	Tennessee
Indiana	Texas
Iowa	Virginia
Kentucky	Washington
Louisiana	West Virginia
Maryland	Wisconsin

Subgroup differences were statistically significant nationally and in 31 out of 31 states.

Science, Grade 8 – 1996

Whites outperformed Hispanics nationally and in 39 states

U.S.	Minnesota
Alabama	Mississippi
Alaska	Missouri
Arizona	Montana
Arkansas	Nebraska
California	New Mexico
Colorado	New York
Connecticut	North Carolina
Delaware	North Dakota
Florida	Oregon
Georgia	Rhode Island
Hawaii	South Carolina
Indiana	Texas
Iowa	Utah
Kentucky	Vermont
Louisiana	Virginia
Maine	Washington
Maryland	Wisconsin
Massachusetts	Wyoming
Michigan	Guam

Subgroup differences were statistically significant nationally and in 39 out of 39 states.

Asians/Pacific Islanders outperformed American Indians/Alaskan Natives in 1 state

Alaska

Subgroup differences were statistically significant in 1 out of 4 states.

Asians/Pacific Islanders outperformed Blacks nationally and in 9 states

U.S.
California
Colorado
Connecticut
Maryland
Massachusetts
New York
Texas
Virginia
Washington

Subgroup differences were statistically significant nationally and in 9 out of 12 states.

Asians/Pacific Islanders outperformed Hispanics nationally and in 12 states

U.S.
Alaska
California
Colorado
Connecticut
Hawaii
Maryland
Massachusetts
New York
Oregon
Rhode Island
Texas
Virginia

Subgroup differences were statistically significant nationally and in 12 out of 16 states.

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Students whose parents *did* complete high school outperformed students whose parents *did not* complete high school, nationally and in 13 states

U.S.
Arizona
Arkansas
California
Kentucky
Michigan
Montana
Nebraska
North Carolina
Rhode Island
Tennessee
Utah
West Virginia
Wisconsin

Subgroup differences were statistically significant nationally and in 13 out of 39 states.

Students whose parents had some education beyond high school outperformed students whose parents did not complete high school, nationally and in 37 states

U.S.
Alabama
Arizona
Arkansas
California
Colorado
Connecticut
Delaware
Florida
Georgia
Indiana
Iowa
Kentucky
Louisiana
Maine
Maryland
Massachusetts
Michigan
Minnesota
Mississippi
Missouri
Montana
Nebraska
New Mexico
New York
North Carolina
Oregon
Rhode Island
South Carolina
Tennessee
Texas
Utah
Vermont
Virginia
Washington
West Virginia
Wisconsin
Wyoming

Subgroup differences were statistically significant nationally and in 37 out of 39 states.

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Students whose parents were college graduates outperformed students whose parents did not complete high school, nationally and in 39 states

U.S.	Mississippi
Alabama	Missouri
Arizona	Montana
Arkansas	Nebraska
California	New Mexico
Colorado	New York
Connecticut	North Carolina
Delaware	North Dakota
Florida	Oregon
Georgia	Rhode Island
Hawaii	South Carolina
Indiana	Tennessee
Iowa	Texas
Kentucky	Utah
Louisiana	Vermont
Maine	Virginia
Maryland	Washington
Massachusetts	West Virginia
Michigan	Wisconsin
Minnesota	Wyoming

Subgroup differences were statistically significant nationally and in 39 out of 39 states.

Students who *were not* eligible for the free/reduced-price school lunch program outperformed students who *were* eligible, nationally and in 41 states

U.S.	Minnesota
Alabama	Mississippi
Alaska	Missouri
Arizona	Montana
Arkansas	Nebraska
California	New Mexico
Colorado	New York
Connecticut	North Carolina
Delaware	North Dakota
District of Columbia	Oregon
Florida	Rhode Island
Georgia	South Carolina
Hawaii	Tennessee
Indiana	Texas
Iowa	Utah
Kentucky	Vermont
Louisiana	Virginia
Maine	Washington
Maryland	West Virginia
Massachusetts	Wisconsin
Michigan	Wyoming

Subgroup differences were statistically significant nationally and in 41 out of 41 states.

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