Subgroup Achievement and Gap Trends — Nebraska

K-12 enrollment — 290,767

The raw data used to develop these state profiles, including data for additional grade levels and years before 2002, can be found on the CEP Web site at www.cep-dc.org. Click on the link on the left for State Testing Data. Below the name of the report, click on the link for View State Profiles and Worksheets. Scroll down the page, and click on the Worksheet links for any state.

Subgroup Achievement Trends and Gap Trends — Key Findings

Summary

This year the Center on Education Policy analyzed data on the achievement of different groups of students in two distinct ways. First, we looked at grade 4 test results to determine whether the performance of various groups improved at three achievement levels—basic and above, proficient and above, and advanced. Second, we looked at gaps between these groups at the proficient level across three grades (grade 4, grade 8 in most cases, and a high school grade). These two types of analyses show whether elementary school achievement has generally gone up for different groups of students and whether achievement gaps at different grade levels have narrowed, widened, or stayed the same.

A clear trend of gains at the proficient level in reading and math was evident for all major student groups in Nebraska. (Data were not available at the basic-and-above or advanced levels.) A clear trend of narrowing gaps at the proficient level emerged for all major student groups at the three grades analyzed.

Subgroup trends by achievement level at grade 4

- General: The percentage of students scoring proficient increased at a moderate-to-large rate for all six subgroups in reading and math.
- Notable progress: Gains were particularly large for Latino students in grade 4 math.

Gap trends at three grade levels

- General: Gaps in percentages of students scoring proficient narrowed across the board. Gaps narrowed at all three grades analyzed in both reading and math, and for all four historically low-performing subgroups (African American, Latino, Native American, and low-income students).

Data notes

- Limited data: Trends are limited to 2003–2008 in reading. Data broken down by achievement level were not available, so trends at the basic-and-above and advanced levels could not be determined. In addition, recent data were not available to analyze achievement gaps using mean (average) scale scores, an alternative measure.

- Subgroups analyzed: Trends were analyzed for white, African American, Latino, Native American, Asian American, and low-income students. Trends for students with disabilities, English language learners, and male and female students have not been summarized because they will be discussed in separate reports.

- Grades analyzed: Analyses of subgroup trends by three achievement levels are limited to one elementary grade because of the massive amounts of data involved and because this is the pilot year of a process that CEP hopes to extend to the middle and high school levels in future years. Analyses of achievement gap trends cover three grade levels: grades 4, 8, and 11.

Data Limitations

Years of comparable percentage proficient data	2001 and 2003 through 2008 in reading 2002 through 2008 in math
Years of comparable mean scale score data	No mean scale scores or standard deviations available
Disaggregated data for all subgroups and comparison groups	No mean scale scores data available for student subgroups Limited percentage proficient data disaggregated by subgroups available for 2002 in math and 2007 in both subjects No disaggregated percentage proficient data available for high school students in 2006 or 2007 Percentage proficient data not available for comparison groups of students who are *not* low-income, *not* disabled, or *not* English language learners (ELLs), so the subgroups of low-income students, students with disabilities, and ELLs are compared with all tested students in the state
Numbers of test-takers by subgroup	Not available, so it cannot be determined which subgroups are small
Other data limitations	Data were not available to conduct analyses of achievement at the Basic and Advanced achievement levels

Test Characteristics

The characteristics highlighted below are for the state reading and mathematics tests used for accountability under the No Child Left Behind Act (NCLB).

Test(s) used for NCLB accountability	School-based Teacher-led Assessment and Reporting System (STARS); these are tests developed by school districts and submitted to the state for approval. No unified state assessment system is in place. STARS Alternate Assessment Statewide Writing Assessment
Grades tested for NCLB accountability	3–8, high school
State labels for achievement levels	NE uses four achievement levels: Beginning, Progressing, Proficient, and Advanced. We were not able to obtain achievement level data for NE. However, if we had, our analyses would have treated Progressing as Basic, Proficient as Proficient, and Advanced as Advanced.
High school NCLB test also used as an exit exam?	No
First year test used	2000–01 for reading, 2001–02 for math
Time of test administration	Throughout the year, reported to state by June 30 each year
Major changes in testing system (2002–present)	2002–03: Annual state reporting of math and reading results begins 2005–06: Assessment and AYP calculation expanded to include all students in grades 3–8 and one high school grade
Comments	Prior to 2003, NE alternated yearly testing between subjects. The state tested reading in 2001, math in 2002, then both subjects in 2003 and thereafter. So, percentage proficient data in reading is comparable between 2001 and 2003, but there is a gap in 2002

Achievement by Subgroup — Trends at the Elementary Level

Note: The tables in this profile of subgroup achievement and gap trends begin with table 7. Tables 1 through 6 can be found in the companion state profile of general achievement trends.

Table NE-7. Percentages of Grade 4 Students by Racial or Ethnic Subgroup Scoring at the Advanced, Proficient and Above, and Basic and Above Levels in Reading

Subgroup	Reporting Year							Average Yearly Percentage Point Gain[1]
	2002	2003	2004	2005	2006	2007	2008	
All tested students								
Advanced		NA	NA	NA	NA	NA	NA	NA
Proficient and Above		83%	85%	88%	87%	89%	91%	1.7
Basic and Above		NA	NA	NA	NA	NA	NA	NA
White								
Advanced		NA	NA	NA	NA	NA	NA	NA
Proficient and Above		86%	88%	91%	90%	NA	94%	1.6
Basic and Above		NA	NA	NA	NA	NA	NA	NA
African American								
Advanced		NA	NA	NA	NA	NA	NA	NA
Proficient and Above		66%	71%	75%	76%	NA	81%	3.1
Basic and Above		NA	NA	NA	NA	NA	NA	NA
Latino								
Advanced		NA	NA	NA	NA	NA	NA	NA
Proficient and Above		71%	74%	80%	80%	NA	86%	2.9
Basic and Above		NA	NA	NA	NA	NA	NA	NA
Asian								
Advanced		NA	NA	NA	NA	NA	NA	NA
Proficient and Above		84%	90%	90%	88%	NA	90%	1.3
Basic and Above		NA	NA	NA	NA	NA	NA	NA
Native American								
Advanced		NA	NA	NA	NA	NA	NA	NA
Proficient and Above		70%	72%	82%	78%	NA	85%	3.0
Basic and Above		NA	NA	NA	NA	NA	NA	NA

Table reads: The percentage of white 4th graders who scored at the proficient and above level on the state reading test increased from 86% in 2003 to 94% in 2008. During this period, the average yearly gain in the percentage proficient and above in reading for white 4th graders was 1.6 percentage points per year.

[1]Averages are subject to rounding error.

Table NE-8. Percentage of Grade 4 Students by Demographic Subgroup Scoring at the Advanced, Proficient and Above, and Basic and Above Levels in Reading

Subgroup	Reporting Year							Average Yearly Percentage Point Gain[1]
	2002	2003	2004	2005	2006	2007	2008	
All tested students								
Advanced		NA	NA	NA	NA	NA	NA	NA
Proficient and Above		83%	85%	88%	87%	89%	91%	1.7
Basic and Above		NA	NA	NA	NA	NA	NA	NA
Low-income students								
Advanced		NA	NA	NA	NA	NA	NA	NA
Proficient and Above		72%	76%	81%	80%	NA	87%	3.0
Basic and Above		NA	NA	NA	NA	NA	NA	NA
Students with disabilities[2]								
Advanced		NA	NA	NA	NA	NA	NA	NA
Proficient and Above		56%	59%	66%	64%	74%	79%	7.3
Basic and Above		NA	NA	NA	NA	NA	NA	NA
English language learners[2]								
Advanced		NA	NA	NA	NA	NA	NA	NA
Proficient and Above		51%	62%	71%	72%	78%	79%	3.3
Basic and Above		NA	NA	NA	NA	NA	NA	NA
Female								
Advanced		NA	NA	NA	NA	NA	NA	NA
Proficient and Above		87%	88%	91%	89%	NA	93%	1.2
Basic and Above		NA	NA	NA	NA	NA	NA	NA
Male								
Advanced		NA	NA	NA	NA	NA	NA	NA
Proficient and Above		80%	83%	86%	85%	NA	90%	2.0
Basic and Above		NA	NA	NA	NA	NA	NA	NA

Table reads: The percentage of low-income 4th graders who scored at the proficient and above level on the state reading test increased from 72% in 2003 to 87% in 2008. During this period, the average yearly gain in the percentage proficient and above in reading for low-income 4th graders was 3.0 percentage points per year.

[1]Averages are subject to rounding error.

[2]Gap trends for students with disabilities and English language learners should be interpreted with caution because state and federal policy changes may have affected the year-to-year comparability of test results for these subgroups. Average yearly percentage point gains are based on 2006-2008 results.

Table NE-9. Percentages of Grade 4 Students by Racial or Ethnic Subgroup Scoring at the Advanced, Proficient and Above, and Basic and Above Levels in Mathematics

Subgroup	Reporting Year							Average Yearly Percentage Point Gain[1]
	2002	2003	2004	2005	2006	2007	2008	
All tested students								
Advanced	NA	NA	NA	NA	NA	NA	NA	NA
Proficient and Above	78%	82%	87%	90%	88%	91%	94%	2.6
Basic and Above	NA	NA	NA	NA	NA	NA	NA	NA
White								
Advanced		NA	NA	NA	NA	NA	NA	NA
Proficient and Above		84%	90%	91%	89%	NA	95%	2.2
Basic and Above		NA	NA	NA	NA	NA	NA	NA
African American								
Advanced		NA	NA	NA	NA	NA	NA	NA
Proficient and Above		68%	72%	80%	78%	NA	85%	3.4
Basic and Above		NA	NA	NA	NA	NA	NA	NA
Latino								
Advanced		NA	NA	NA	NA	NA	NA	NA
Proficient and Above		70%	80%	84%	83%	NA	91%	4.2
Basic and Above		NA	NA	NA	NA	NA	NA	NA
Asian								
Advanced		NA	NA	NA	NA	NA	NA	NA
Proficient and Above		88%	93%	94%	91%	NA	95%	1.4
Basic and Above		NA	NA	NA	NA	NA	NA	NA
Native American								
Advanced		NA	NA	NA	NA	NA	NA	NA
Proficient and Above		73%	76%	83%	78%	NA	85%	2.5
Basic and Above		NA	NA	NA	NA	NA	NA	NA

Table reads: The percentage of white 4th graders who scored at the proficient and above level on the state math test increased from 84% in 2003 to 95% in 2008. During this period, the average yearly gain in the percentage proficient and above in math for white 4th graders was 2.2 percentage points per year.

[1]Averages are subject to rounding error.

Table NE-10. Percentage of Grade 4 Students by Demographic Subgroup Scoring at the Advanced, Proficient and Above, and Basic and Above Levels in Mathematics

Subgroup	Reporting Year							Average Yearly Percentage Point Gain[1]
	2002	2003	2004	2005	2006	2007	2008	
All tested students								
Advanced	NA	NA	NA	NA	NA	NA	NA	NA
Proficient and Above	78%	82%	87%	90%	88%	91%	94%	2.6
Basic and Above	NA	NA	NA	NA	NA	NA	NA	NA
Low-income students								
Advanced		NA	NA	NA	NA	NA	NA	NA
Proficient and Above		71%	79%	84%	82%	NA	90%	3.8
Basic and Above		NA	NA	NA	NA	NA	NA	NA
Students with disabilities[2]								
Advanced	NA	NA	NA	NA	NA	NA	NA	NA
Proficient and Above	56%	57%	65%	70%	68%	80%	85%	8.4
Basic and Above	NA	NA	NA	NA	NA	NA	NA	NA
English language learners[2]								
Advanced	NA	NA	NA	NA	NA	NA	NA	NA
Proficient and Above	58%	58%	73%	80%	79%	84%	87%	4.0
Basic and Above	NA	NA	NA	NA	NA	NA	NA	NA
Female								
Advanced		NA	NA	NA	NA	NA	NA	NA
Proficient and Above		82%	88%	90%	88%	NA	94%	2.3
Basic and Above		NA	NA	NA	NA	NA	NA	NA
Male								
Advanced		NA	NA	NA	NA	NA	NA	NA
Proficient and Above		81%	87%	89%	87%	NA	94%	2.5
Basic and Above		NA	NA	NA	NA	NA	NA	NA

Table reads: The percentage of low-income 4th graders who scored at the proficient and above level on the state math test increased from 71% in 2003 to 90% in 2008. During this period, the average yearly gain in the percentage proficient and above in math for low-income 4th graders was 3.8 percentage points per year.

[1]Averages are subject to rounding error.

[2]Gap trends for students with disabilities and English language learners should be interpreted with caution because state and federal policy changes may have affected the year-to-year comparability of test results for these subgroups. Average yearly percentage point gains are based on 2006-2008 results.

Achievement by Subgroup — Gap Trends (Percentages Proficient)

Table NE-11. Subgroup Achievement Trends in Reading by Percentages Proficient

NOTE: L = Larger gain than comparison group. S = Smaller gain than comparison group. E = Equal gain to comparison group.
If the average annual gain for the subgroup of interest, such as African American students, is larger than the average annual gain for the comparison group, such as white students, this indicates that the achievement gap has narrowed. If the average gain for the subgroup of interest is smaller, this means the gap has widened.

	Grade 4					Grade 8					Grade 11				
Subgroup	Year Span	Starting PP	Ending PP	Average Annual Gain[1]	Gain Larger or Smaller Than Comparison Group	Year Span	Starting PP	Ending PP	Average Annual Gain[1]	Gain Larger or Smaller Than Comparison Group	Year Span	Starting PP	Ending PP	Average Annual Gain[1]	Gain Larger or Smaller Than Comparison Group
All tested students	02-08	78%	94%	2.6		02-08	72%	90%	3.0		02-08	71%	86%	2.5	
All tested students	03-08	83%	91%	1.7		03-08	80%	92%	2.3		03-08	77%	89%	2.5	
White	03-08	86%	94%	1.6		03-08	83%	94%	2.2		03-08	80%	91%	2.2	
African American	03-08	66%	81%	3.1	L	03-08	62%	85%	4.5	L	03-08	53%	78%	5.0	L
Latino	03-08	71%	86%	2.9	L	03-08	62%	85%	4.5	L	03-08	51%	82%	6.2	L
Asian	03-08	84%	90%	1.3	S	03-08	83%	94%	2.2	E	03-08	74%	89%	3.1	L
Native American	03-08	70%	85%	3.0	L	03-08	62%	82%	4.0	L	03-08	59%	82%	4.6	L
All tested students	03-08	83%	91%	1.7		03-08	80%	92%	2.3		03-08	77%	89%	2.5	
Low-income	03-08	72%	87%	3.0	L	03-08	67%	87%	3.9	L	03-08	60%	82%	4.5	L
All tested students	06-08	87%	91%	2.2		06-08	87%	92%	2.4		07-08	87%	89%	NA	
Students with disabilities[3]	06-08	64%	79%	7.3	L	06-08	61%	78%	8.4	L	07-08	66%	71%	NA	NA
All tested students	06-08	87%	91%	2.2		06-08	87%	92%	2.4		07-08	87%	89%	NA	
English language learners[3]	06-08	72%	79%	3.3	L	06-08	67%	75%	4.2	L	07-08	59%	68%	NA	NA
Female	03-08	87%	93%	1.2		03-08	85%	94%	1.7		03-08	82%	91%	1.9	
Male	03-08	80%	90%	2.0	L	03-08	75%	90%	3.0	L	03-08	72%	87%	3.1	L

Table reads: In 2003, 86% of white 4th graders and 66% of African American 4th graders scored at the proficient level on the state reading test. In 2008, 94% of white 4th graders and 81% of African American 4th graders scored at the proficient level in reading. Between 2003 and 2008, the percentage proficient improved at an average rate of 1.6 percentage points per year for white students and 3.1 percentage points per year for African American students, indicating a larger rate of gain and a narrowing of the achievement gap for African American 4th graders.

[1]Numbers in these columns are subject to rounding error.

[2]The number of students tested in this subgroup at this grade level was fewer than 500 in 2008 or the most recent year with available data, so changes for this subgroup should be interpreted with caution.

[3]Gap trends for students with disabilities and English language learners should be interpreted with caution because state and federal policy changes may have affected the year-to-year comparability of test results for these subgroups.

Table NE-12. Subgroup Achievement Trends in Mathematics by Percentages Proficient

NOTE: L = Larger gain than comparison group. S = Smaller gain than comparison group. E = Equal gain to comparison group.
If the average annual gain for the subgroup of interest, such as African American students, is larger than the average annual gain for the comparison group, such as white students, this indicates that the achievement gap has narrowed. If the average gain for the subgroup of interest is smaller, this means the gap has widened.

	Grade 4					Grade 8					Grade 11				
Subgroup	Year Span	Starting PP	Ending PP	Average Annual Gain[1]	Gain Larger or Smaller Than Comparison Group	Year Span	Starting PP	Ending PP	Average Annual Gain[1]	Gain Larger or Smaller Than Comparison Group	Year Span	Starting PP	Ending PP	Average Annual Gain[1]	Gain Larger or Smaller Than Comparison Group
All tested students	03-08	82%	94%	2.3		03-08	75%	90%	3.0		03-08	65%	86%	4.2	
White	03-08	84%	95%	2.2		03-08	79%	82%	0.6		03-08	69%	87%	3.7	
African American	03-08	68%	85%	3.4	L	03-08	55%	80%	5.1	L	03-08	36%	79%	8.5	L
Latino	03-08	70%	91%	4.2	L	03-08	53%	85%	6.5	L	03-08	38%	79%	8.2	L
Asian	03-08	88%	95%	1.4	S	03-08	85%	95%	2.0	L	03-08	66%	90%	4.9	L
Native American	03-08	73%	85%	2.5	L	03-08	51%	77%	5.1	L	03-08	48%	75%	5.5	L
All tested students	03-08	82%	94%	2.3		03-08	75%	90%	3.0		03-08	65%	86%	4.2	
Low-income	03-08	71%	90%	3.8	L	03-08	60%	84%	4.9	L	03-08	48%	79%	6.1	L
All tested students	06-08	88%	94%	2.9		06-08	85%	90%	2.5		07-08	85%	86%	NA	
Students with disabilities[3]	06-08	68%	85%	8.4	L	06-08	57%	73%	7.8	L	07-08	58%	62%	NA	NA
All tested students	06-08	88%	94%	2.9		06-08	85%	90%	2.5		07-08	85%	86%	NA	
English language learners[3]	06-08	79%	87%	4.0	L	06-08	71%	76%	2.4	S	07-08	58%	68%	NA	NA
Female	03-08	82%	94%	2.3		03-08	77%	91%	2.8		03-08	66%	87%	4.2	
Male	03-08	81%	94%	2.5	L	03-08	74%	89%	3.0	L	03-08	65%	85%	4.0	S

Table reads: In 2003, 84% of white 4th graders and 68% of African American 4th graders scored at the proficient level on the state math test. In 2008, 95% of white 4th graders and 85% of African American 4th graders scored at the proficient level in math. Between 2003 and 2008, the percentage proficient improved at an average rate of 2.2 percentage points per year for white students and 3.4 percentage points per year for African American students, indicating a larger rate of gain and a narrowing of the achievement gap for African American 4th graders.

[1]Numbers in these columns are subject to rounding error.

[2]The number of students tested in this subgroup at this grade level was fewer than 500 in 2008 or the most recent year with available data, so changes for this subgroup should be interpreted with caution.

[3]Gap trends for students with disabilities and English language learners should be interpreted with caution because state and federal policy changes may have affected the year-to-year comparability of test results for these subgroups.

Key Terms

Percentage proficient (and above) — The percentage of students in a group who score at and above the cut score for "proficient" performance on the state test used to determine progress under NCLB. The Act requires states to report student test performance in terms of at least three achievement levels: basic, proficient, and advanced. Adequate yearly progress determinations are based on the percentage of students scoring at the proficient level and above.

Percentage basic (and above) — The percentage of students in a group who score at and above the cut score for "basic" performance on the state test used to determine progress under NCLB.

Percentage advanced — The percentage of students in a group who reach or exceed the cut score for "advanced" performance on the state test used to determine progress under NCLB.

Moderate-to-large gain — For the percentage basic, proficient, or advanced, an average gain of 1 or more percentage points per year. For effect size, an average gain of 0.02 or greater per year.

Slight gain — For the percentage basic, proficient, or advanced, an average gain of less than 1 percentage point per year. For effect size, an average gain of less than 0.02 per year.

Moderate-to-large decline — For the percentage basic, proficient, or advanced, an average decline of 1 or more percentage points per year. For effect size, an average decline of 0.02 or greater per year.

Slight decline — For the percentage basic, proficient, or advanced, an average decline of less than 1 percentage points per year. For effect size, an average decline of less than 0.02 per year.

Effect size — A statistical tool that conveys the amount of difference between test results using a common unit of measurement which does not depend on the scoring scale for a particular test.

Accumulated annual effect size — The cumulative gain in effect size over a range of years.

Mean scale score — The arithmetical average of a group of test scores, expressed on a common scale for a particular state's test. The mean is calculated by adding the scores and dividing the sum by the number of scores.

Standard deviation — A measure of how much test scores tend to deviate from the mean—in other words, how spread out or bunched together test scores are. If students' scores are bunched together, with many scores close to the mean, then the standard deviation will be small. If scores are spread out, with many students scoring at the high or low ends of the scale, then the standard deviation will be large.

Cautions and Explanations

Different labels for achievement levels — For consistency, all of the state profiles developed for this report use a common set of labels (basic, proficient, and advanced) for the main achievement levels required by NCLB. In practice, however, some states may use different labels, such as "meets standard" instead of proficient, and some states have established additional achievement levels beyond those required by NCLB.

Different names for subgroups — For the sake of consistency and ease of data tabulation, all of the state profiles developed for this report use a common set of names for the major student subgroups. In practice, however, states use various names for subgroups that may differ from those used here (such as using "Hispanic" instead of "Latino," or "special education students" instead of "students with disabilities"). Moreover, a few states separately track the performance of subgroups not included in the analyses for this report.

Special caution for students with disabilities and English language learners — Trends for students with disabilities and English language learners should be interpreted with caution because changes in federal guidance and state accountability plans may have altered which students in these subgroups are tested for accountability purposes, how they are tested, and when their test scores are counted as proficient under NCLB. These factors could affect the year-to-year comparability of test results.

Inclusion of former English language learners — In many states, the subgroup of English language learners (also known as limited English proficient students) includes students who were formerly English language learners but who have achieved English language proficiency or fluency in the last two years. Federal NCLB regulations permit states to include these formerly ELL students (sometimes referred to as "redesignated fluent English proficient" students) in the ELL subgroup for up to two years for purposes of NCLB accountability.

Limitations of percentage proficient measure — The percentage proficient, the main gauge of student performance under NCLB, can be easily understood and gives a snapshot of how many students have met their state's performance expectations. But it also has several limitations as a measure of student achievement. Users of percentage proficient data should keep in mind these limitations, particularly the following:

* "Proficient" means different things across different states. States vary widely in curriculum, learning expectations, and tests, and state tests differ considerably in their difficulty and cut scores for proficient performance.
* Although this study has taken steps to avoid comparing test data where there have been "breaks" in comparability resulting from new tests, changes in content standards, revised cut scores, or other major changes in testing programs, the year-to-year comparability of test results in the same state may still be affected by less obvious policy and demographic changes.
* Changes in student performance may occur that are not reflected in percentage proficient data, such as an increase in the number of students reaching performance levels below and above proficient (such as the basic or advanced levels).
* The size of the achievement gaps between various subgroups depends in part on where a state sets its cut score for proficiency. For example, if a proficiency cut score is set so high that almost nobody reaches it or so low that almost everyone reaches it, there will be little apparent achievement gap. By contrast, if the cut score is closer to the mean test score, the gaps between subgroups will be more apparent.

Difficulty of attributing causes — Although the tables above show trends in test scores since the enactment of NCLB, one cannot assume that these trends have occurred *because* of NCLB. It is always difficult to determine a cause-and-effect relationship between test score trends and any specific education policy or program due to the many federal, state, and local reforms undertaken in recent years and due to the lack of an appropriate "control" group of students not affected by NCLB.