Subgroup Achievement and Gap Trends — Kentucky

K-12 enrollment — 644,799

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.

- Limited data: In recent years, Kentucky has made a number of changes to its testing program. As a result, there is inadequate data to calculate trends in achievement gaps. However, information on the performance of student subgroups for the years 2007 and 2008 is provided in this report.

- Subgroups analyzed: Information is provided for white, African American, Latino, Native American, Asian American, low-income students, students with disabilities, English language learners, and male and female students.

- Grades analyzed: Analyses of subgroup performance 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: grade 4, grade 8, and the high school grade tested for NCLB.

Data Limitations

Years of comparable percentage proficient data	2007 through 2008
Years of comparable mean scale score data	2007 through 2008

Disaggregated data for all subgroups and comparison groups	2007 through 2008 Data for Native American subgroup not available

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	Commonwealth Accountability Testing System (CATS); includes Kentucky Core Content Test (KCCT) and Alternate Portfolio
Grades tested for NCLB accountability	3-8, 10 (reading)/ 11 (math)
State labels for achievement levels	KY uses four achievement levels: Novice, Apprentice, Proficient, and Distinguished. For our analyses we treated Apprentice as Basic, Proficient as Proficient, and Distinguished as Advanced.
High school NCLB test also used as an exit exam?	No
First year test used	2007
Time of test administration	Spring
Major changes in testing system (2002–present)	2007: Changed test vendor and assessment scale

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 KY-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						19%	16%	NA
Proficient and Above						72%	71%	NA
Basic and Above						93%	93%	NA
White								
Advanced						21%	17%	NA
Proficient and Above						75%	74%	NA
Basic and Above						95%	94%	NA
African American								
Advanced						10%	8%	NA
Proficient and Above						55%	51%	NA
Basic and Above						87%	85%	NA
Latino								
Advanced						15%	12%	NA
Proficient and Above						68%	65%	NA
Basic and Above						93%	92%	NA
Asian[2]								
Advanced						36%	30%	NA
Proficient and Above						84%	80%	NA
Basic and Above						96%	96%	NA
Native American								
Advanced						NA	NA	NA
Proficient and Above						NA	NA	NA
Basic and Above						NA	NA	NA

Table reads: The percentage of white 4th graders who scored at the advanced level on the state reading test decreased from 21% in 2007 to 17% in 2008. Average yearly gains have not been calculated because fewer than three consecutive years of data are available, too short a period to constitute a trend

[1]Averages 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.

Table KY-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 2002	2003	2004	2005	2006	2007	2008	Average Yearly Percentage Point Gain[1]
All tested students								
Advanced						19%	16%	NA
Proficient and Above						72%	71%	NA
Basic and Above						93%	93%	NA
Low-income students								
Advanced						13%	10%	NA
Proficient and Above						64%	63%	NA
Basic and Above						91%	90%	NA
Students with disabilities[3]								
Advanced						10%	8%	NA
Proficient and Above						54%	53%	NA
Basic and Above						87%	86%	NA
English language learners[3]								
Advanced						11%	7%	NA
Proficient and Above						59%	55%	NA
Basic and Above						90%	89%	NA
Female								
Advanced						25%	21%	NA
Proficient and Above						77%	76%	NA
Basic and Above						96%	95%	NA
Male								
Advanced						15%	12%	NA
Proficient and Above						70%	67%	NA
Basic and Above						93%	92%	NA

Table reads: The percentage of low-income 4th graders who scored at the advanced level on the state reading test decreased from 13% in 2007 to 10% in 2008. Average yearly gains have not been calculated because fewer than three consecutive years of data are available, too short a period to constitute a trend

[1]Averages 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. Average yearly percentage point gains are based on 2006-2008 results.

Table KY-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						26%	33%	NA
Proficient and Above						60%	71%	NA
Basic and Above						86%	91%	NA
White								
Advanced						28%	35%	NA
Proficient and Above						63%	74%	NA
Basic and Above						88%	92%	NA
African American								
Advanced						12%	15%	NA
Proficient and Above						42%	51%	NA
Basic and Above						76%	81%	NA
Latino								
Advanced						17%	23%	NA
Proficient and Above						50%	63%	NA
Basic and Above						81%	87%	NA
Asian[2]								
Advanced						53%	53%	NA
Proficient and Above						82%	84%	NA
Basic and Above						95%	95%	NA
Native American								
Advanced						NA	NA	NA
Proficient and Above						NA	NA	NA
Basic and Above						NA	NA	NA

Table reads: The percentage of white 4th graders who scored at the advanced level on the state math test increased from 28% in 2006 to 35% in 2008. Average yearly gains have not been calculated because fewer than three consecutive years of data are available, too short a period to constitute a trend

[1]Averages 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.

Table KY-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 2002	2003	2004	2005	2006	2007	2008	Average Yearly Percentage Point Gain[1]
All tested students								
Advanced						26%	33%	NA
Proficient and Above						60%	71%	NA
Basic and Above						86%	91%	NA
Low-income students								
Advanced						17%	23%	NA
Proficient and Above						50%	62%	NA
Basic and Above						82%	88%	NA
Students with disabilities[3]								
Advanced						14%	18%	NA
Proficient and Above						38%	48%	NA
Basic and Above						70%	78%	NA
English language learners[3]								
Advanced						14%	17%	NA
Proficient and Above						43%	53%	NA
Basic and Above						75%	83%	NA
Female								
Advanced						27%	33%	NA
Proficient and Above						61%	71%	NA
Basic and Above						87%	92%	NA
Male								
Advanced						26%	33%	NA
Proficient and Above						60%	71%	NA
Basic and Above						86%	91%	NA

Table reads: The percentage of low-income 4th graders who scored at the advanced level on the state math test increased from 17% in 2007 to 23% in 2008. Average yearly gains have not been calculated because fewer than three consecutive years of data are available, too short a period to constitute a trend

[1]Averages 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. Average yearly percentage point gains are based on 2006-2008 results.

Achievement by Subgroup — Gap Trends (Percentages Proficient)

Table KY-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 10				
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	07-08	72%	71%	NA		07-08	65%	67%	NA		07-08	60%	60%	NA	
White	07-08	75%	74%	NA		07-08	66%	69%	NA		07-08	63%	62%	NA	
African American	07-08	55%	51%	NA	NA	07-08	48%	48%	NA	NA	07-08	43%	43%	NA	NA
Latino	07-08	68%	65%	NA	NA	07-08	53%	57%	NA	NA	07-08	49%	49%	NA	NA
Asian	07-08	84%	80%	NA	NA	07-08	81%	80%	NA	NA	07-08	75%	73%	NA	NA
Native American	07-08	NA	NA	NA	NA	07-08	NA	NA	NA	NA	07-08	NA	NA	NA	NA
Not low-income	07-08	83%	81%	NA		07-08	75%	77%	NA		07-08	70%	70%	NA	
Low-income	07-08	64%	63%	NA	NA	07-08	53%	56%	NA	NA	07-08	48%	47%	NA	NA
Not disabled	07-08	76%	74%	NA		07-08	70%	72%	NA		07-08	65%	65%	NA	
Students with disabilities[3]	07-08	54%	53%	NA	NA	07-08	28%	33%	NA	NA	07-08	19%	19%	NA	NA
Not ELL	07-08	73%	72%	NA		07-08	65%	67%	NA		07-08	60%	60%	NA	
English language learners[3]	07-08	59%	55%	NA	NA	07-08	36%	30%	NA	NA	07-08	25%	23%	NA	NA
Female	07-08	77%	76%	NA		07-08	73%	74%	NA		07-08	70%	68%	NA	
Male	07-08	70%	67%	NA	NA	07-08	56%	60%	NA	NA	07-08	51%	52%	NA	NA

Table reads: In 2007, 75% of white 4th graders and 55% of African American 4th graders scored at the proficient level on the state reading test. In 2008, 74% of white 4th graders and 51% of African American 4th graders scored at the proficient level in reading. Average yearly gains have not been calculated because fewer than three consecutive years of data are available, too short a period to constitute a trend

[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]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 KY-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	07-08	60%	71%	NA		07-08	49%	51%	NA		07-08	39%	39%	NA	
White	07-08	63%	74%	NA		07-08	52%	54%	NA		07-08	42%	41%	NA	
African American	07-08	42%	51%	NA	NA	07-08	28%	28%	NA	NA	07-08	21%	18%	NA	NA
Latino	07-08	50%	63%	NA	NA	07-08	39%	39%	NA	NA	07-08	30%	29%	NA	NA
Asian	07-08	82%	84%	NA	NA	07-08	75%	74%	NA	NA	07-08	69%	66%	NA	NA
Native American	07-08	NA	NA	NA	NA	07-08	NA	NA	NA	NA	07-08	NA	NA	NA	NA
Not low-income	07-08	73%	81%	NA		07-08	61%	64%	NA		07-08	48%	48%	NA	
Low-income	07-08	50%	62%	NA	NA	07-08	36%	38%	NA	NA	07-08	24%	25%	NA	NA
Not disabled	07-08	65%	75%	NA		07-08	53%	55%	NA		07-08	43%	42%	NA	
Students with disabilities[3]	07-08	38%	48%	NA	NA	07-08	19%	23%	NA	NA	07-08	10%	13%	NA	NA
Not ELL	07-08	61%	71%	NA		07-08	49%	51%	NA		07-08	39%	39%	NA	
English language learners[3]	07-08	43%	53%	NA	NA	07-08	31%	25%	NA	NA	07-08	24%	19%	NA	NA
Female	07-08	61%	71%	NA		07-08	50%	51%	NA		07-08	41%	39%	NA	
Male	07-08	60%	71%	NA	NA	07-08	49%	51%	NA	NA	07-08	38%	38%	NA	NA

Table reads: In 2007, 63% of white 4th graders and 42% of African American 4th graders scored at the proficient level on the state math test. In 2008, 74% of white 4th graders and 51% of African American 4th graders scored at the proficient level in math. Average yearly gains have not been calculated because fewer than three consecutive years of data are available, too short a period to constitute a trend

[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]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.

Achievement by Subgroup — Gap Trends (Mean Scale Scores)

Table KY-13. Achievement Gap Trends in Reading by Mean Scale Scores

NOTE: L = Larger gain than comparison group. S = Smaller gain than comparison group. E = Equal gain to comparison group.
If the average gain for the subgroup of interest, such as African American students, is larger than the average 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 10				
Subgroup	Statistic	Year Span	Starting Year	Ending Year	Average Gain (Mean Scale Score)[1]	Gain Larger or Smaller than Comparison Group	Year Span	Starting Year	Ending Year	Average Gain (Mean Scale Score)[1]	Gain Larger or Smaller than Comparison Group	Year Span	Starting Year	Ending Year	Average Gain (Mean Scale Score)[1]	Gain Larger or Smaller than Comparison Group
All tested students	Mean SS	07-08	452.1	450.5	NA		07-08	846.6	847.0	NA		07-08	1044.9	1044.1	NA	
	SD	07-08	19.4	19.1			07-08	16.8	16.5			07-08	15.5	15.8		
White	Mean SS	07-08	453.3	451.9	NA		07-08	847.4	848.1	NA		07-08	1045.6	1045.0	NA	
	SD	07-08	18.9	18.6			07-08	16.7	16.2			07-08	15.4	15.5		
African American	Mean SS	07-08	442.7	440.9	NA	NA	07-08	840.3	839.2	NA	NA	07-08	1038.9	1037.3	NA	NA
	SD	07-08	20.9	19.8			07-08	16.2	16.0			07-08	14.6	15.5		
Latino	Mean SS	07-08	449.5	447.1	NA	NA	07-08	842.1	843.0	NA	NA	07-08	1041.3	1039.7	NA	NA
	SD	07-08	18.9	18.9			07-08	16.6	17.4			07-08	15.2	16.2		
Asian	Mean SS	07-08	459.9	457.0	NA	NA	07-08	855.4	854.7	NA	NA	07-08	1053.3	1050.9	NA	NA
	SD	07-08	19.7	18.9			07-08	17.7	17.4			07-08	17.9	18.3		
Native American	Mean SS	07-08	NA	NA	NA	NA	07-08	NA	NA	NA	NA	07-08	NA	NA	NA	NA
	SD	07-08	NA	NA			07-08	NA	NA			07-08	NA	NA		
Not Low-income	Mean SS	07-08	457.5	455.8	NA		07-08	851.2	851.6	NA		07-08	1048.6	1047.9	NA	
	SD	07-08	17.8	17.7			07-08	16.2	15.9			07-08	15.4	15.5		
Low-income	Mean SS	07-08	447.4	445.9	NA	NA	07-08	842.0	842.3	NA	NA	07-08	1040.0	1039.2	NA	NA
	SD	07-08	19.6	19.0			07-08	16.2	15.7			07-08	14.3	14.7		
Not disabled	Mean SS	07-08	453.7	451.8	NA		07-08	848.6	848.8	NA		07-08	1046.6	1045.8	NA	
	SD	07-08	18.7	18.7			07-08	16.1	15.8			07-08	14.9	15.1		
Students with disabilities[3]	Mean SS	07-08	443.8	442.6	NA	NA	07-08	832.7	833.9	NA	NA	07-08	1030.3	1029.0	NA	NA
	SD	07-08	20.8	19.7			07-08	15.2	15.4			07-08	12.8	13.4		
Not ELLs	Mean SS	07-08	452.2	450.7	NA		07-08	846.7	847.2	NA		07-08	1045.0	1044.2	NA	
	SD	07-08	19.4	19.1			07-08	16.8	16.5			07-08	15.5	15.7		
English language learners[3]	Mean SS	07-08	445.0	442.0	NA	NA	07-08	835.4	833.0	NA	NA	07-08	1032.8	1029.6	NA	NA
	SD	07-08	19.4	18.6			07-08	16.6	16.0			07-08	13.9	15.4		
Female	Mean SS	07-08	454.7	453.3	NA		07-08	850.7	850.8	NA		07-08	1048.5	1047.4	NA	
	SD	07-08	19.2	18.9			07-08	16.6	16.1			07-08	15.3	15.7		

		Grade 4					Grade 8					Grade 10				
Subgroup	Statistic	Year Span	Starting Year	Ending Year	Average Gain (Mean Scale Score)[1]	Gain Larger or Smaller than Comparison Group	Year Span	Starting Year	Ending Year	Average Gain (Mean Scale Score)[1]	Gain Larger or Smaller than Comparison Group	Year Span	Starting Year	Ending Year	Average Gain (Mean Scale Score)[1]	Gain Larger or Smaller than Comparison Group
Male	Mean SS	07-08	449.6	447.9	NA	NA	07-08	842.8	843.6	NA	NA	07-08	1041.3	1040.9	NA	NA
	SD	07-08	19.3	18.9			07-08	16.1	16.1			07-08	14.8	15.2		

Table reads: In 2007, the mean scale score on the state 4th grade reading test was 453.3 for white students and 442.7 for African American students. In 2008, the mean scale score in 4th grade reading was 451.9 for white students and 440.9 for African American students. The average annual gains were not calculated because there were fewer than three years of comparable data, too few years to constitute a trend.

Note: The Kentucky Core Content Test is scored on a scale of 0-80 with leading digits that represent grade level.

[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 KY-14. Subgroup Achievement Trends in Mathematics by Mean Scale Scores

NOTE: L = Larger gain than comparison group. S = Smaller gain than comparison group. E = Equal gain to comparison group.
If the average gain for the subgroup of interest, such as African American students, is larger than the average 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 10				
Subgroup	Statistic	Year Span	Starting Year	Ending Year	Average Gain (Mean Scale Score)[1]	Gain Larger or Smaller than Comparison Group	Year Span	Starting Year	Ending Year	Average Gain (Mean Scale Score)[1]	Gain Larger or Smaller than Comparison Group	Year Span	Starting Year	Ending Year	Average Gain (Mean Scale Score)[1]	Gain Larger or Smaller than Comparison Group
All tested students	Mean SS	07-08	447.4	451.8	NA		07-08	839.4	840.7	NA		07-08	1134.9	1134.6	NA	
	SD	07-08	22.4	21.4			07-08	21.8	21.5			07-08	21.3	21.5		
White	Mean SS	07-08	448.8	453.4	NA		07-08	840.7	842.3	NA		07-08	1135.9	1135.9	NA	
	SD	07-08	22.1	20.9			07-08	21.6	21.2			07-08	21.2	21.4		
African American	Mean SS	07-08	436.8	440.4	NA	NA	07-08	828.8	828.4	NA	NA	07-08	1124.8	1123.2	NA	NA
	SD	07-08	21.5	21.7			07-08	19.7	19.8			07-08	18.7	18.4		
Latino	Mean SS	07-08	441.8	446.8	NA	NA	07-08	834.3	834.4	NA	NA	07-08	1129.9	1129.0	NA	NA
	SD	07-08	21.5	21.5			07-08	20.7	20.2			07-08	20.2	20.5		
Asian	Mean SS	07-08	460.7	462.2	NA	NA	07-08	855.8	853.8	NA	NA	07-08	1151.7	1151.0	NA	NA
	SD	07-08	20.7	19.4			07-08	22.1	23.1			07-08	22.3	22.7		
Native American	Mean SS	07-08	NA	NA	NA	NA	07-08	NA	NA	NA	NA	07-08	NA	NA	NA	NA
	SD	07-08	NA	NA			07-08	NA	NA			07-08	NA	NA		
Not Low-income	Mean SS	07-08	454.3	458.2	NA		07-08	846.0	847.1	NA		07-08	1139.8	1139.4	NA	
	SD	07-08	20.9	19.5			07-08	21.0	20.7			07-08	21.1	21.6		
Low-income	Mean SS	07-08	441.3	446.1	NA	NA	07-08	832.9	834.0	NA	NA	07-08	1127.0	1127.2	NA	NA
	SD	07-08	21.9	21.4			07-08	20.5	20.3			07-08	19.1	19.2		
Not disabled	Mean SS	07-08	449.7	453.7	NA		07-08	841.9	842.9	NA		07-08	1137.0	1136.5	NA	
	SD	07-08	21.3	20.3			07-08	20.8	20.7			07-08	20.7	20.9		
Students with disabilities[3]	Mean SS	07-08	435.5	440.0	NA	NA	07-08	822.3	824.7	NA	NA	07-08	1115.4	1115.3	NA	NA
	SD	07-08	23.9	24.1			07-08	20.4	20.8			07-08	16.8	17.7		
Not ELLs	Mean SS	07-08	447.5	451.9	NA		07-08	839.6	840.8	NA		07-08	1135.0	1134.6	NA	
	SD	07-08	22.3	21.4			07-08	21.7	21.5			07-08	21.3	21.5		
English language learners[3]	Mean SS	07-08	438.1	441.9	NA	NA	07-08	828.8	826.8	NA	NA	07-08	1126.2	1124.1	NA	NA
	SD	07-08	22.1	21.5			07-08	20.8	20.1			07-08	20.1	20.3		
Female	Mean SS	07-08	447.6	451.8	NA		07-08	840.1	841.1	NA		07-08	1135.5	1135.4	NA	

		Grade 4					Grade 8					Grade 10				
Subgroup	Statistic	Year Span	Starting Year	Ending Year	Average Gain (Mean Scale Score)[1]	Gain Larger or Smaller than Comparison Group	Year Span	Starting Year	Ending Year	Average Gain (Mean Scale Score)[1]	Gain Larger or Smaller than Comparison Group	Year Span	Starting Year	Ending Year	Average Gain (Mean Scale Score)[1]	Gain Larger or Smaller than Comparison Group
	SD	07-08	22.3	21.3			07-08	21.2	21.2			07-08	20.7	20.7		
Male	Mean SS	07-08	447.2	451.7	NA	NA	07-08	838.9	840.3	NA	NA	07-08	1134.4	1133.7	NA	NA
	SD	07-08	22.4	21.5			07-08	22.3	21.9			07-08	21.9	22.3		

Table reads: In 2007, the mean scale score on the state 4th grade math test was 448.8 for white students and 436.8 for African American students. In 2008, the mean scale score in 4th grade math was 453.4 for white students and 440.4 for African American students. The average annual gains were not calculated because there were fewer than three years of comparable data, too few years to constitute a trend.

Note: The Kentucky Core Content Test is scored on a scale of 0-80 with leading digits that represent grade level.

[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 KY-15. Numbers of Test-Takers

Subgroup	Subject	Grade 4					Grade 8					Grade 10 Reading/Grade 11 Math				
		Year Span	# of Test-Takers Start Year	# of Test-Takers End Year	Change in # of Test-Takers Over Time	% of Test-Takers in Subgroup in End Year	Year Span	# of Test-Takers Start Year	# of Test-Takers End Year	Change in # of Test-Takers Over Time	% of Test-Takers in Subgroup in End Year	Year Span	# of Test-Takers Start Year	# of Test-Takers End Year	Change in # of Test-Takers Over Time	% of Test-Takers in Subgroup in End Year
All tested students	Reading	07-08	47,519	49,030	3.2%	100.0%	07-08	49,706	49,397	-0.6%	100.0%	07-08	49,060	49,189	0.3%	100.0%
	Math	07-08	47,519	49,030	3.2%	100.0%	07-08	49,706	49,397	-0.6%	100.0%	07-08	42,924	44,419	3.5%	100.0%
White	Reading	07-08	40,062	40,879	2.0%	83.4%	07-08	42,749	41,861	-2.1%	84.7%	07-08	42,336	41,793	-1.3%	85.0%
	Math	07-08	40,062	40,879	2.0%	83.4%	07-08	42,749	41,861	-2.1%	84.7%	07-08	37,602	38,160	1.5%	85.9%
African American	Reading	07-08	4,816	5,121	6.3%	10.4%	07-08	4,917	5,232	6.4%	10.6%	07-08	4,923	5,418	10.1%	11.0%
	Math	07-08	4,816	5,121	6.3%	10.4%	07-08	4,917	5,232	6.4%	10.6%	07-08	3,863	4,610	19.3%	10.4%
Latino	Reading	07-08	1,134	1,399	23.4%	2.9%	07-08	880	1,035	17.6%	2.1%	07-08	745	916	23.0%	1.9%
	Math	07-08	1,134	1,399	23.4%	2.9%	07-08	880	1,035	17.6%	2.1%	07-08	624	731	17.1%	1.6%
Asian	Reading	07-08	444	477	7.4%	1.0%	07-08	390	451	15.6%	0.9%	07-08	407	493	21.1%	1.0%
	Math	07-08	444	477	7.4%	1.0%	07-08	390	451	15.6%	0.9%	07-08	363	420	15.7%	0.9%
Native American	Reading	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Math	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Low-income	Reading	07-08	25,338	26,245	3.6%	53.5%	07-08	24,815	24,409	-1.6%	49.4%	07-08	21,530	21,775	1.1%	44.3%
	Math	07-08	25,338	26,245	3.6%	53.5%	07-08	24,815	24,409	-1.6%	49.4%	07-08	16,417	17,613	7.3%	39.7%
Students w/ disabilities	Reading	07-08	7,673	7,320	-4.6%	14.9%	07-08	6,291	6,524	3.7%	13.2%	07-08	5,325	5,659	6.3%	11.5%
	Math	07-08	7,673	7,320	-4.6%	14.9%	07-08	6,291	6,524	3.7%	13.2%	07-08	4,164	4,679	12.4%	10.5%
English language learners	Reading	07-08	861	852	-1.0%	1.7%	07-08	471	440	-6.6%	0.9%	07-08	437	444	1.6%	0.9%
	Math	07-08	861	852	-1.0%	1.7%	07-08	471	440	-6.6%	0.9%	07-08	364	359	-1.4%	0.8%
Female	Reading	07-08	23,057	24,022	4.2%	49.0%	07-08	24,196	23,825	-1.5%	48.2%	07-08	24,255	23,988	-1.1%	48.8%
	Math	07-08	23,057	24,022	4.2%	49.0%	07-08	24,196	23,824	-1.5%	48.2%	07-08	21,609	22,378	3.6%	50.4%
Male	Reading	07-08	24,411	25,002	2.4%	51.0%	07-08	25,465	25,569	0.4%	51.8%	07-08	24,751	25,194	1.8%	51.2%
	Math	07-08	24,411	25,002	2.4%	51.0%	07-08	25,465	25,569	0.4%	51.8%	07-08	21,269	22,037	3.6%	49.6%

Table reads: In 2007, 40,062 students in the white subgroup took the state 4th grade reading test. By 2008, the number of white test-takers had risen to 40,879 students, an increase of 2.0%. In 2008, the white subgroup made up 83.4% of the 49,030 4th graders taking the reading test that year.

Note: **Bold** type indicates that 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.

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.