Subgroup Achievement and Gap Trends — Kentucky

K-12 enrollment — 671,147

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 labeled State Testing Data. In the list of results that appears, look for the most recent report on student achievement since 2002. Below the name of the report, click on the link for State Profiles and Worksheets. Scroll down the page until you reach the list of states. Click on the Worksheet link for proficiency data or scale score data for a particular state.

Subgroup Achievement Trends and Gap Trends — Key Findings

Summary. In grade 8 (the only grade in which subgroup trends were analyzed by achievement level), Kentucky showed mostly gains in both reading and math at the basic, proficient, and advanced levels for racial/ethnic subgroups, low income students, and boys and girls. Gains tended to be greater in math than in reading. Achievement gaps narrowed in both reading and math in grades 4, 8, and high school in most, but not all, cases. Comparable data were available from 2007 through 2009.

- ***Declines for some subgroups.*** There were slight declines in the percentages of African American students and female students reading at the basic level.

- ***Some gaps widened.*** Gaps between the African American and white subgroups widened in reading at grade 4 and 10. In grade 4 reading, gaps widened between the Latino and white subgroups, and between boys and girls. In math, gaps between the African American and white subgroups widened in grades 8 and 11.

Data Limitations

Years of comparable percentage proficient data	2007 through 2009
Years of comparable mean scale score data	2007 through 2009

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	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 Middle School 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 8 students by racial or ethnic subgroup scoring at the advanced, proficient-and-above, and basic-and-above levels in reading

	Reporting year								Average yearly percentage point gain[1]
Subgroup	2002	2003	2004	2005	2006	2007	2008	2009	
All tested students									
Advanced						14%	14%	15%	0.5
Proficient-and-above						64%	67%	68%	1.9
Basic-and-above						95%	95%	95%	0.0
White									
Advanced						14%	15%	16%	1.0
Proficient-and-above						66%	69%	70%	1.9
Basic-and-above						95%	95%	96%	0.5
African American									
Advanced						6%	5%	6%	0.0
Proficient-and-above						48%	48%	52%	1.9
Basic-and-above						89%	88%	88%	-0.5
Latino									
Advanced						9%	10%	10%	0.5
Proficient-and-above						52%	57%	61%	4.2
Basic-and-above						92%	90%	92%	0.0
Asian[2]									
Advanced						31%	30%	33%	1.0
Proficient-and-above						81%	80%	79%	-0.8
Basic-and-above						97%	97%	94%	-1.5
Native American[2]									
Advanced						7%	8%	20%	6.5
Proficient-and-above						63%	57%	75%	6.3
Basic-and-above						99%	92%	95%	-2.0

Table reads: The percentage of white 8th graders who scored at the advanced level on the state reading test increased from 14% in 2007 to 16% in 2009. During this period, the average yearly gain in the percentage advanced in reading for white 8th graders was 1.0 percentage point per year.

[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 2009 or the most recent year with available data, so changes for this subgroup should be interpreted with caution.

Table KY-8. Percentage of grade 8 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	2009	
All tested students									
Advanced						14%	14%	15%	0.5
Proficient-and-above						64%	67%	68%	1.9
Basic-and-above						95%	95%	95%	0.0
Low-income students									
Advanced						8%	7%	8%	0.0
Proficient-and-above						53%	56%	58%	2.4
Basic-and-above						91%	92%	92%	0.5
Students with disabilities[3]									
Advanced						2%	2%	3%	0.5
Proficient-and-above						28%	33%	35%	3.9
Basic-and-above						80%	81%	81%	0.5
English language learners[3]									
Advanced						4%	3%	3%	-0.5
Proficient-and-above						36%	30%	33%	-1.5
Basic-and-above						83%	81%	79%	-2.0
Female									
Advanced						20%	19%	20%	0.0
Proficient-and-above						73%	74%	76%	1.3
Basic-and-above						97%	96%	96%	-0.5
Male									
Advanced						8%	9%	9%	0.5
Proficient-and-above						56%	60%	61%	2.4
Basic-and-above						92%	93%	92%	0.0

Table reads: The percentage of low-income 8th graders who scored at the advanced level on the state reading test remained the same at 8% in 2007 and in 2009. During this period, the average yearly change in the percentage advanced in reading for low-income 8th graders was 0.0 percentage points per year.

[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 2009 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 2006-2009 results.

Table KY-9. Percentages of grade 8 students by racial or ethnic subgroup scoring at the advanced, proficient-and-above, and basic-and-above levels in mathematics

	Reporting year								Average yearly percentage point gain[1]
Subgroup	2002	2003	2004	2005	2006	2007	2008	2009	
All tested students									
Advanced						16%	17%	19%	1.5
Proficient-and-above						49%	51%	55%	3.1
Basic-and-above						80%	81%	83%	1.5
White									
Advanced						17%	18%	20%	1.5
Proficient-and-above						51%	54%	58%	3.5
Basic-and-above						82%	83%	85%	1.5
African American									
Advanced						5%	5%	6%	0.5
Proficient-and-above						29%	28%	32%	1.5
Basic-and-above						65%	63%	69%	2.0
Latino									
Advanced						9%	8%	11%	1.0
Proficient-and-above						39%	39%	46%	3.7
Basic-and-above						76%	75%	78%	1.0
Asian[2]									
Advanced						47%	39%	46%	-0.5
Proficient-and-above						75%	74%	77%	0.9
Basic-and-above						92%	89%	91%	-0.5
Native American[2]									
Advanced						9%	10%	26%	8.5
Proficient-and-above						43%	44%	62%	9.3
Basic-and-above						73%	82%	78%	2.5

Table reads: The percentage of white 8th graders who scored at the advanced level on the state math test increased from 17% in 2007 to 20% in 2009. During this period, the average yearly gain in the percentage advanced in math for white 8th graders was 1.5 percentage points per year.

[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 2009 or the most recent year with available data, so changes for this subgroup should be interpreted with caution.

Table KY-10. Percentage of grade 8 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	2009	
All tested students									
Advanced						16%	17%	19%	1.5
Proficient-and-above						49%	51%	55%	3.1
Basic-and-above						80%	81%	83%	1.5
Low-income students									
Advanced						8%	9%	10%	1.0
Proficient-and-above						36%	38%	43%	3.4
Basic-and-above						72%	73%	77%	2.5
Students with disabilities[3]									
Advanced						4%	5%	7%	1.5
Proficient-and-above						19%	23%	28%	4.5
Basic-and-above						51%	55%	61%	5.0
English language learners[3]									
Advanced						6%	5%	5%	-0.5
Proficient-and-above						31%	25%	27%	-1.8
Basic-and-above						65%	61%	59%	-3.0
Female									
Advanced						16%	17%	19%	1.5
Proficient-and-above						50%	51%	57%	3.8
Basic-and-above						82%	83%	86%	2.0
Male									
Advanced						16%	17%	18%	1.0
Proficient-and-above						48%	51%	53%	2.5
Basic-and-above						79%	80%	81%	1.0

Table reads: The percentage of low-income 8th graders who scored at the advanced level on the state math test increased from 8% in 2007 to 10% in 2009. During this period, the average yearly gain in the percentage advanced in math for low-income 8th graders was 1.0 percentage point per year.

[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 2009 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 2006-2009 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	07-09	73%	74%	0.8		07-09	64%	68%	1.9		07-09	60%	62%	0.8	
White	07-09	75%	77%	0.9		07-09	66%	70%	1.9		07-09	62%	64%	1.0	
African American	07-09	54%	56%	0.7	S	07-09	48%	52%	1.9	E	07-09	44%	44%	0.2	S
Latino	07-09	68%	67%	-0.5	S	07-09	52%	61%	4.2	L	07-09	49%	53%	1.9	L
Asian	07-09	84%	82%	-0.7	S	07-09	81%	79%	-0.8[2]	S	07-09	75%	75%	0.1[2]	S
Native American	07-09	76%	66%	-5.0[2]	S	07-09	63%	75%	6.3[2]	L	07-09	63%	69%	3.4[2]	L
Not low-income	07-09	82%	84%	0.9		07-09	75%	79%	1.6		07-09	70%	71%	0.4	
Low-income	07-09	64%	66%	1.0	L	07-09	53%	58%	2.4	L	07-09	48%	51%	2.0	L
Not disabled	07-09	76%	78%	0.7		07-09	70%	73%	1.5		07-09	66%	67%	0.9	
Students with disabilities[3]	07-09	54%	56%	0.9	L	07-09	28%	35%	3.9	L	07-09	19%	23%	1.7	L
Not ELLs	07-09	73%	74%	0.8		07-09	65%	68%	2.0		07-09	60%	62%	0.8	
English language learners[3]	07-09	59%	58%	-0.1	S	07-09	36%	33%	-1.5	S	07-09	25%	27%	1.1[2]	L
Female	07-09	76%	78%	0.9		07-09	73%	76%	1.3		07-09	69%	70%	0.5	
Male	07-09	69%	70%	0.6	S	07-09	56%	61%	2.4	L	07-09	51%	54%	1.2	L

Table reads: In 2007, 75% of white 4th graders and 54% of African American 4th graders scored at the proficient level on the state reading test. In 2009, 77% of white 4th graders and 56% of African American 4th graders scored at the proficient level in reading. Between 2007 and 2009, the percentage proficient improved at an average rate of 0.9 percentage points per year for white students and 0.7 percentage points per year for African American students, indicating a smaller rate of gain and a widening 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 2009 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-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	07-09	60%	71%	5.5		07-09	49%	55%	3.1		07-09	39%	41%	1.0	
White	07-09	63%	74%	5.4		07-09	51%	58%	3.5		07-09	41%	44%	1.2	
African American	07-09	42%	53%	5.7	L	07-09	29%	32%	1.5	S	07-09	21%	21%	-0.1	S
Latino	07-09	50%	65%	7.1	L	07-09	39%	46%	3.7	L	07-09	30%	34%	2.2	L
Asian	07-09	82%	84%	1.0	S	07-09	75%	77%	0.9[2]	S	07-09	69%	70%	0.3[2]	S
Native American	07-09	46%	53%	3.3[2]	S	07-09	43%	62%	9.3[2]	L	07-09	32%	34%	1.2[2]	E
Not low-income	07-09	73%	82%	4.6		07-09	62%	68%	3.0		07-09	49%	51%	1.1	
Low-income	07-09	50%	63%	6.5	L	07-09	36%	43%	3.4	L	07-09	25%	28%	1.8	L
Not disabled	07-09	65%	75%	5.1		07-09	54%	59%	2.9		07-09	43%	45%	0.8	
Students with disabilities[3]	07-09	38%	51%	6.5	L	07-09	19%	28%	4.5	L	07-09	10%	16%	3.0	L
Not ELLS	07-09	61%	72%	5.4		07-09	49%	56%	3.2		07-09	39%	41%	1.0	
English language learners[3]	07-09	43%	58%	7.6	L	07-09	31%	27%	-1.8	S	07-09	24%	21%	-1.8[2]	S
Female	07-09	61%	72%	5.5		07-09	50%	57%	3.8		07-09	40%	42%	0.8	
Male	07-09	60%	71%	5.4	S	07-09	48%	53%	2.5	S	07-09	39%	41%	1.0	L

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 2009, 74% of white 4th graders and 53% of African American 4th graders scored at the proficient level in math. Between 2007 and 2009, the percentage proficient improved at an average rate of 5.4 percentage points per year for white students and 5.7 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 2009 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.

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. MSS = mean scale score. SD = standard deviation.
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	Start year	End year	Avg. gain MSS[1]	Gain larger or smaller than comp. group	Year span	Start year	End year	Avg. gain MSS[1]	Gain larger or smaller than comp. group	Year span	Start year	End year	Avg. gain MSS[1]	Gain larger or smaller than comp. group
All tested students	MSS	07-09	452	452	0.0		07-09	847	847	0.0		07-09	1045	1044	-0.5	
	SD	07-09	19.4	18.9			07-09	16.8	16.9			07-09	15.5	14.9		
White	MSS	07-09	453	454	0.5		07-09	847	848	0.5		07-09	1046	1045	-0.5	
	SD	07-09	18.9	18.4			07-09	16.7	16.7			07-09	15.4	14.7		
African American	MSS	07-09	443	443	0.0	S	07-09	840	840	0.0	S	07-09	1039	1038	-0.5	E
	SD	07-09	20.9	19.7			07-09	16.2	16.8			07-09	14.6	14.6		
Latino	MSS	07-09	450	448	-1.0	S	07-09	842	844	1.0	L	07-09	1041	1041	0.0	L
	SD	07-09	18.8	18.1			07-09	16.6	17.0			07-09	15.2	14.7		
Asian	MSS	07-09	460	458	-1.0	S	07-09	855	855	0.0[2]	S	07-09	1053	1050	-1.5[2]	S
	SD	07-09	19.7	19.9			07-09	17.7	19.1			07-09	17.9	17.4		
Native American	MSS	07-09	452	447	-2.5[2]	S	07-09	844	849	2.5[2]	L	07-09	1044	1043	-0.5[2]	E
	SD	07-09	17.9	14.9			07-09	12.8	17.5			07-09	13.7	14.1		
Not low-income	MSS	07-09	457	458	0.5		07-09	851	852	0.5		07-09	1049	1048	-0.5	
	SD	07-09	17.8	17.3			07-09	16.2	16.2			07-09	15.4	14.6		
Low-income	MSS	07-09	447	448	0.5	E	07-09	842	843	0.5	E	07-09	1040	1040	0.0	L
	SD	07-09	19.6	18.8			07-09	16.2	16.3			07-09	14.3	14.3		
Not disabled	MSS	07-09	454	454	0.0		07-09	849	849	0.0		07-09	1047	1046	-0.5	
	SD	07-09	18.7	18.2			07-09	16.1	16.2			07-09	14.9	14.2		
Students with disabilities[3]	MSS	07-09	444	444	0.0	E	07-09	833	834	0.5	L	07-09	1030	1031	0.5	L
	SD	07-09	20.8	20.4			07-09	15.2	16.5			07-09	12.8	13.5		
Not ELLs	MSS	07-09	452	452	0.0		07-09	847	848	0.5		07-09	1045	1044	-0.5	
	SD	07-09	19.4	18.9			07-09	16.8	16.9			07-09	15.5	14.9		
English language learners[3]	MSS	07-09	445	444	-0.5	S	07-09	835	833	-1.0	S	07-09	1033	1032	-0.5[2]	E
	SD	07-09	19.3	18.5			07-09	16.6	16.6			07-09	13.9	12.2		
Female	MSS	07-09	455	455	0.0		07-09	851	851	0.0		07-09	1048	1048	0.0	
	SD	07-09	19.2	18.6			07-09	16.6	16.5			07-09	15.3	14.6		
Male	MSS	07-09	450	450	0.0	E	07-09	843	844	0.5	L	07-09	1041	1041	0.0	E
	SD	07-09	19.3	18.8			07-09	16.1	16.5			07-09	14.8	14.5		

Table reads: In 2007, the mean scale score on the state 4th grade reading test was 453 for white students and 443 for African American students. In 2009, the mean scale score in 4th grade reading was 454 for white students and 443 for African American students. Between 2007 and 2009, the mean scale score improved at an average yearly rate of 0.5 points for white students and did not change for African American students, indicating a widening of the achievement gap for African Americans.

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 2009 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. Achievement gap 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. MSS = mean scale score. SD = standard deviation.
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 11				
Subgroup	Statistic	Year span	Start year	End year	Avg. gain MSS[1]	Gain larger or smaller than comp. group	Year span	Start year	End year	Avg. gain MSS[1]	Gain larger or smaller than comp. group	Year span	Start year	End year	Avg. gain MSS[1]	Gain larger or smaller than comp. group
All tested students	MSS	07-09	447	452	2.5		07-09	839	842	1.5		07-09	1135	1135	0.0	
	SD	07-09	22.4	21.6			07-09	21.8	21.5			07-09	22.0	20.9		
White	MSS	07-09	449	453	2.0		07-09	841	844	1.5		07-09	1136	1136	0.0	
	SD	07-09	22.1	21.2			07-09	21.6	21.1			07-09	22.0	20.7		
African American	MSS	07-09	437	441	2.0	E	07-09	829	830	0.5	S	07-09	1125	1124	-0.5	S
	SD	07-09	21.5	21.9			07-09	19.7	19.8			07-09	18.7	18.7		
Latino	MSS	07-09	442	448	3.0	L	07-09	834	837	1.5	E	07-09	1130	1131	0.5	L
	SD	07-09	21.5	20.9			07-09	20.7	20.7			07-09	20.2	20.1		
Asian	MSS	07-09	461	461	0.0	S	07-09	856	856	0.0[2]	S	07-09	1152	1151	-0.5[2]	S
	SD	07-09	20.7	21.0			07-09	22.1	21.9			07-09	22.3	22.3		
Native American	MSS	07-09	444	443	-0.5[2]	S	07-09	835	844	4.5[2]	L	07-09	1131	1132	0.5[2]	L
	SD	07-09	21.6	18.3			07-09	21.1	23.1			07-09	19.7	20.9		
Not low-income	MSS	07-09	454	458	2.0		07-09	846	849	1.5		07-09	1140	1140	0.0	
	SD	07-09	20.9	20			07-09	21.0	20.4			07-09	21.1	20.7		
Low-income	MSS	07-09	441	446	2.5	L	07-09	833	836	1.5	E	07-09	1127	1128	0.5	L
	SD	07-09	21.9	21.6			07-09	20.5	20.5			07-09	21.0	19.2		
Not disabled	MSS	07-09	450	454	2.0		07-09	842	844	1.0		07-09	1137	1137	0.0	
	SD	07-09	21.3	20.5			07-09	20.8	20.5			07-09	20.7	20.2		
Students with disabilities[3]	MSS	07-09	436	441	2.5	L	07-09	822	827	2.5	L	07-09	1115	1117	1.0	L
	SD	07-09	23.9	24.2			07-09	20.4	21.7			07-09	24.1	18.5		
Not ELLs	MSS	07-09	448	452	2.0		07-09	840	842	1.0		07-09	1135	1135	0.0	
	SD	07-09	22.3	21.6			07-09	21.7	21.4			07-09	22.0	20.9		
English language learners[3]	MSS	07-09	438	444	3.0	L	07-09	829	827	-1.0	S	07-09	1126	1123	-1.5[2]	S
	SD	07-09	22.0	21.9			07-09	20.8	20.5			07-09	20.1	19.2		
Female	MSS	07-09	448	452	2.0		07-09	840	844	2.0		07-09	1135	1135	0.0	
	SD	07-09	22.3	21.6			07-09	21.2	20.7			07-09	22.1	20.5		
Male	MSS	07-09	447	451	2.0	E	07-09	839	841	1.0	S	07-09	1134	1134	0.0	E
	SD	07-09	22.4	21.6			07-09	22.3	22.1			07-09	21.9	21.3		

Table reads: In 2007, the mean scale score on the state 4th grade math test was 449 for white students and 437 for African American students. In 2009, the mean scale score in 4th grade math was 453 for white students and 441 for African American students. Between 2007 and 2009, the mean scale score improved at an

average yearly rate of 2.0 points for both white and African American students, indicating no change in the achievement gap for African Americans.

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 2009 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	07-09	47,518	49,188	3.5%	100.0%	07-09	49,707	48,605	-2.2%	100.0%	07-09	49,061	48,685	-0.8%	100.0%
	Math	07-09	47,518	49,188	3.5%	100.0%	07-09	49,707	48,605	-2.2%	100.0%	07-09	42,925	43,876	2.2%	100.0%
White	Reading	07-09	40,062	40,823	1.9%	83.0%	07-09	42,750	40,849	-4.4%	84.0%	07-09	42,336	41,270	-2.5%	84.8%
	Math	07-09	40,062	40,823	1.9%	83.0%	07-09	42,750	40,849	-4.4%	84.0%	07-09	37,603	37,405	-0.5%	85.3%
African American	Reading	07-09	4,816	5,165	7.2%	10.5%	07-09	4,917	5,201	5.8%	10.7%	07-09	4,923	5,309	7.8%	10.9%
	Math	07-09	4,816	5,165	7.2%	10.5%	07-09	4,917	5,201	5.8%	10.7%	07-09	3,863	4,634	20.0%	10.6%
Latino	Reading	07-09	1,133	1,413	24.7%	2.9%	07-09	880	1,234	40.2%	2.5%	07-09	745	976	31.0%	2.0%
	Math	07-09	1,133	1,413	24.7%	2.9%	07-09	880	1,234	40.2%	2.5%	07-09	624	857	37.3%	2.0%
Asian	Reading	07-09	444	554	24.8%	1.1%	07-09	390	468	20.0%	1.0%	07-09	407	441	8.4%	0.9%
	Math	07-09	444	554	24.8%	1.1%	07-09	390	468	20.0%	1.0%	07-09	363	478	31.7%	1.1%
Native American	Reading	07-09	49	59	20.4%	0.1%	07-09	68	64	-5.9%	0.1%	07-09	55	61	10.9%	0.1%
	Math	07-09	49	59	20.4%	0.1%	07-09	68	64	-5.9%	0.1%	07-09	50	54	8.0%	0.1%
Low-income	Reading	07-09	25,337	27,165	7.2%	55.2%	07-09	24,815	24,677	-0.6%	50.8%	07-09	21,530	22,694	5.4%	46.6%
	Math	07-09	25,337	27,165	7.2%	55.2%	07-09	24,815	24,677	-0.6%	50.8%	07-09	16,417	18,422	12.2%	42.0%
Students w/ disabilities	Reading	07-09	7,672	7,625	-0.6%	15.5%	07-09	6,291	6,074	-3.4%	12.5%	07-09	5,325	5,515	3.6%	11.3%
	Math	07-09	7,672	7,625	-0.6%	15.5%	07-09	6,291	6,074	-3.4%	12.5%	07-09	4,164	4,570	9.8%	10.4%
English language learners	Reading	07-09	860	1,085	26.2%	2.2%	07-09	471	650	38.0%	1.3%	07-09	437	481	10.1%	1.0%
	Math	07-09	860	1,085	26.2%	2.2%	07-09	471	650	38.0%	1.3%	07-09	364	462	26.9%	1.1%
Female	Reading	07-09	23,056	23,918	3.7%	48.6%	07-09	24,196	23,611	-2.4%	48.6%	07-09	24,256	23,766	-2.0%	48.8%
	Math	07-09	23,056	23,918	3.7%	48.6%	07-09	24,196	23,611	-2.4%	48.6%	07-09	21,610	21,853	1.1%	49.8%
Male	Reading	07-09	24,411	25,268	3.5%	51.4%	07-09	25,466	24,994	-1.9%	51.4%	07-09	24,751	24,915	0.7%	51.2%
	Math	07-09	24,411	25,268	3.5%	51.4%	07-09	25,466	24,994	-1.9%	51.4%	07-09	21,269	22,019	3.5%	50.2%

Table reads: In 2007, 40,062 students in the white subgroup took the state 4th grade reading test. By 2009, the number of white test-takers had risen to 40,823 students, an increase of 1.9%. In 2009, the white subgroup made up 83.0% of the 49,188 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 2009 or the most recent year with available data.

Key Terms

Percentage proficient (and above) — The percentage of students in a group who score at or 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 or 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 point 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 end 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 in this profile 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.