2012 COUNTY DATA BOOK

A Project of Kentucky Youth Advocates and the Kentucky State Data Center, University of Louisville

Kentucky kids count

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KENTUCKY YOUTH ADVOCATES

Kentucky kids count

2012 County Data Book

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Content and research by Kentucky Youth Advocates. Data collection and processing by Michael Price and Thomas Sawyer of the Kentucky State Data Center at the University of Louisville and by Kentucky Youth Advocates.

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KIDS COUNT Data Partners

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Featured Artwork

Many of the photographs featured on the cover and throughout the book were provided by residents of the Commonwealth of Kentucky to celebrate the children in their lives.

Kentucky KIDS COUNT is part of a nationwide initiative of the Annie E. Casey Foundation to track the status of children in the United States. By providing policymakers and citizens with benchmarks of child well-being, KIDS COUNT seeks to enrich local, state, and national discussions of ways to secure better futures for all children. For more information on the KIDS COUNT initiative, visit the Annie E. Casey Foundation web site at www.aecf.org.

Kentucky Counties

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Using the Data Book & the Online Data Center

The Kentucky KIDS COUNT County Data Book provides data for professionals, state policymakers, and community members who work to improve the lives of children in Kentucky. The indicators for the Kentucky KIDS COUNT project represent various measurements of children's economic well-being, education, health, and safety.

This year's printed edition focuses on indicators of education. Each indicator has the most current data for Kentucky and all 120 counties or 174 school districts, along with text that discusses up-to-date research and recommendations for improvement. Where available, the discussion includes state-level data disaggregated by race to identify systemic bias in policies and programs that have created disparities among racial groups. The book also provides data on overarching indicators, child population by county and school district, race and ethnicity, and child poverty, because where children reside, their race, and their family's income each can have a significant impact on outcomes for children.

The KIDS COUNT Data Center provides easy access to data by county and school district for all of the indicators the Kentucky KIDS COUNT project tracks, including the many indicators not published in this printed edition. Kentucky Youth Advocates updates the Data Center with new data on an ongoing basis throughout the year and announces those updates via our blog. To reach Kentucky's county and district-level data, go to http://datacenter.kidscount.org/ky. The KIDS COUNT Data Center also reports data across states, including the National KIDS COUNT project's data on key measures of child well-being, provided by the Annie E. Casey Foundation. A How-To-Use section (http://datacenter.kidscount.org/Help.aspx) explains the many features of the Data Center with instructional videos and answers to frequently asked questions.

Making Sense of the Data

There are several ways to gather meaning from the numbers presented by the Kentucky KIDS COUNT project:

- For indicators with rates, which account for differences in population size, compare the rate for your county to the rate for the state as a whole and the rates for surrounding counties.
- Many indicators include data for different time periods. See if the number has increased or decreased over time.
- If the indicator also provides rates for different time periods, see how your county has changed over time, taking into account changes in the population.

- For indicators without rates, you can estimate the extent of participation in your county. For example, for KCHIP participation, calculate the percent of all KCHIP participants who live in your county (by dividing your county's number of participants by the statewide total number of participants). Compare that percent to the percent of Kentucky children who live in your county (by dividing your county's child population by the statewide child population). The percents will be similar if your county follows the statewide trend.

Important Data Reminders

- Data are based on different time intervals (i.e., calendar year, fiscal year, school year, average monthly number, and three-year averages). Readers should check each indicator, definition, and data source to determine the reported time period.
- Race is reported according to the categories used by the source.
- Standard mathematical formulas were used to convert data to rates or percents.
- For counties where the incidence of an indicator is too small to be considered meaningful, no rates are reported. The same is true for raw numbers for some indicators.

- Indicators may be reported as either raw data, as rates, or both.
- Reported rates may vary. Readers should review each heading definition to interpret the rates (i.e., percent, which is rate per 100; or rate per 1,000 or 100,000).
- Percentages are rounded and, therefore, may not add up to 100.

The KIDS COUNT Data Center offers the following data tools for readers to analyze and share data:

- Rank states, Kentucky counties, and Kentucky school districts, on key indicators of child well-being;
- Create a customized profile of data for a selected county that can include any or all of the indicators produced by the Kentucky KIDS COUNT project;
- Generate your own customized maps and trend lines that show how Kentucky children are faring and use them in presentations and publications;
- Feature maps and graphs on your own website or blog that are automatically updated when new data is uploaded;
- View and share data quickly and easily anytime and anywhere with the enhanced mobile site for smart phones.

Demographics
Child Population

	2010		2011	
	Ages 0-17	Ages 0-4	Ages 0-17	Ages 0-4
Kentucky	**1,023,371**	**282,367**	**1,020,955**	**281,161**
Adair	4,206	1,169	4,147	1,119
Allen	4,887	1,346	4,844	1,287
Anderson	5,446	1,433	5,439	1,397
Ballard	1,828	431	1,808	450
Barren	10,216	2,756	10,120	2,672
Bath	2,866	820	2,901	815
Bell	6,229	1,589	6,284	1,672
Boone	33,579	9,019	34,015	9,059
Bourbon	4,813	1,239	4,792	1,229
Boyd	10,593	2,906	10,564	2,858
Boyle	6,158	1,519	6,089	1,502
Bracken	2,152	569	2,145	587
Breathitt	3,220	846	3,182	825
Breckinridge	4,850	1,221	4,846	1,222
Bullitt	18,783	4,647	18,448	4,477
Butler	2,926	799	2,975	852
Caldwell	2,885	788	2,903	818
Calloway	6,712	1,942	6,695	1,949
Campbell	20,600	5,783	20,572	5,748
Carlisle	1,154	323	1,130	300
Carroll	2,718	805	2,785	838
Carter	6,504	1,747	6,339	1,693
Casey	3,765	995	3,732	1,021
Christian	21,075	7,243	20,784	7,135
Clark	8,369	2,244	8,222	2,216
Clay	4,772	1,289	4,740	1,300
Clinton	2,451	652	2,412	655
Crittenden	2,110	625	2,099	602
Cumberland	1,524	438	1,533	430
Daviess	23,605	6,689	23,629	6,672
Edmonson	2,657	665	2,632	663
Elliott	1,600	444	1,547	418
Estill	3,339	856	3,272	834
Fayette	62,633	19,145	63,371	19,152
Fleming	3,506	914	3,533	957
Floyd	8,874	2,465	8,787	2,476
Franklin	10,665	2,983	10,532	2,949
Fulton	1,368	399	1,395	417
Gallatin	2,303	604	2,318	595
Garrard	3,914	1,047	3,828	1,016
Grant	6,923	1,926	6,859	1,878
Graves	9,052	2,464	9,183	2,493
Grayson	6,144	1,619	6,130	1,606
Green	2,549	681	2,509	648
Greenup	8,325	2,140	8,142	2,007
Hancock	2,225	556	2,195	554
Hardin	27,416	8,010	27,508	7,711
Harlan	6,685	1,890	6,617	1,853
Harrison	4,581	1,155	4,451	1,153
Hart	4,545	1,183	4,470	1,146
Henderson	10,870	3,114	10,852	3,063
Henry	3,823	940	3,780	904
Hickman	1,054	283	1,005	251
Hopkins	10,891	3,052	10,805	2,973
Jackson	3,182	824	3,107	812
Jefferson	171,807	48,634	172,038	49,230
Jessamine	12,549	3,547	12,530	3,575
Johnson	5,249	1,364	5,267	1,360
Kenton	39,946	11,568	39,846	11,702
Knott	3,536	953	3,452	979
Knox	7,863	2,162	7,855	2,173
LaRue	3,375	887	3,367	870
Laurel	14,311	3,824	14,280	3,772
Lawrence	3,681	1,070	3,694	1,097
Lee	1,538	370	1,543	345
Leslie	2,418	649	2,411	698
Letcher	5,430	1,523	5,413	1,477
Lewis	3,308	857	3,236	862
Lincoln	6,100	1,629	6,065	1,596
Livingston	1,953	538	1,957	538
Logan	6,588	1,711	6,400	1,631
Lyon	1,283	339	1,283	343
McCracken	14,706	3,921	14,605	3,850
McCreary	4,117	1,081	4,074	1,089
McLean	2,225	553	2,214	553
Madison	17,850	5,069	17,899	5,000
Magoffin	3,194	803	3,103	771
Marion	4,888	1,322	4,882	1,364
Marshall	6,540	1,668	6,458	1,677
Martin	2,758	733	2,684	686
Mason	4,265	1,197	4,257	1,182
Meade	7,805	2,194	7,948	2,157
Menifee	1,464	345	1,453	349
Mercer	5,038	1,275	4,925	1,322
Metcalfe	2,419	643	2,428	634
Monroe	2,546	643	2,502	627
Montgomery	6,500	1,804	6,504	1,836
Morgan	2,840	727	2,803	754
Muhlenberg	6,821	1,766	6,761	1,694
Nelson	11,285	2,993	11,241	2,943
Nicholas	1,724	450	1,701	444
Ohio	5,934	1,703	6,027	1,639
Oldham	16,796	3,420	16,401	3,141
Owen	2,663	697	2,677	644
Owsley	1,058	263	1,095	270
Pendleton	3,680	922	3,533	909
Perry	6,244	1,691	6,276	1,776
Pike	14,262	3,812	14,139	3,819
Powell	3,105	858	3,108	874
Pulaski	14,358	3,838	14,407	3,743
Robertson	490	140	455	119
Rockcastle	3,957	964	3,955	985
Rowan	4,562	1,353	4,572	1,384
Russell	3,923	1,058	3,891	1,085
Scott	12,668	3,544	12,766	3,445
Shelby	10,443	2,769	10,676	2,950
Simpson	4,268	1,157	4,198	1,161
Spencer	4,386	1,106	4,402	1,084
Taylor	5,465	1,558	5,481	1,551
Todd	3,393	984	3,395	938
Trigg	3,228	819	3,134	802
Trimble	2,210	552	2,140	534
Union	3,447	920	3,416	927
Warren	25,912	7,239	26,081	7,265
Washington	2,714	697	2,739	687
Wayne	4,696	1,260	4,679	1,234
Webster	3,189	921	3,180	931
Whitley	8,509	2,164	8,439	2,232
Wolfe	1,768	480	1,778	492
Woodford	6,003	1,435	5,834	1,431

For data sources and notes please see page 55.

Demographics
Child Population by Race & Ethnicity

2011

	Black	Hispanic	White	Other
Kentucky	**107,492**	**52,489**	**843,366**	**17,608**
Adair	152	143	3,831	21
Allen	101	137	4,578	28
Anderson	206	137	5,055	41
Ballard	86	39	1,676	7
Barren	563	454	9,043	60
Bath	61	69	2,764	7
Bell	226	78	5,945	35
Boone	1,425	1,811	29,762	1,017
Bourbon	364	583	3,818	27
Boyd	387	221	9,869	87
Boyle	560	314	5,117	98
Bracken	37	45	2,057	6
Breathitt	53	39	3,053	37
Breckinridge	174	82	4,557	33
Bullitt	330	437	17,499	182
Butler	63	134	2,765	13
Caldwell	248	59	2,576	20
Calloway	414	301	5,872	108
Campbell	921	518	18,850	283
Carlisle	19	33	1,068	10
Carroll	95	290	2,379	21
Carter	69	151	6,086	33
Casey	44	182	3,489	17
Christian	5,168	1,941	13,233	442
Clark	551	423	7,187	61
Clay	129	62	4,531	18
Clinton	38	100	2,263	11
Crittenden	27	13	2,040	19
Cumberland	64	31	1,436	2
Daviess	1,845	1,135	20,362	287
Edmonson	55	27	2,537	13
Elliott	12	26	1,503	6
Estill	38	33	3,188	13
Fayette	12,684	7,430	40,588	2,669
Fleming	88	85	3,345	15
Floyd	101	109	8,555	22
Franklin	1,307	544	8,477	204
Fulton	450	32	904	9
Gallatin	64	182	2,060	12
Garrard	115	157	3,541	15
Grant	116	284	6,398	61
Graves	662	919	7,532	70
Grayson	97	104	5,900	29
Green	92	81	2,317	19
Greenup	133	122	7,819	68
Hancock	49	44	2,092	10
Hardin	4,330	2,148	20,244	786
Harlan	229	121	6,225	42
Harrison	166	129	4,134	22
Hart	207	103	4,141	19
Henderson	1,146	382	9,237	87
Henry	135	232	3,392	21
Hickman	134	39	823	9
Hopkins	1,085	339	9,300	81
Jackson	27	37	3,037	6
Jefferson	47,790	11,739	107,166	5,343
Jessamine	655	539	11,097	239
Johnson	44	48	5,136	39
Kenton	2,964	1,828	34,451	603
Knott	50	48	3,348	6

2011

	Black	Hispanic	White	Other
Knox	144	164	7,506	41
LaRue	171	196	2,982	18
Laurel	251	298	13,591	140
Lawrence	45	48	3,587	14
Lee	17	24	1,497	5
Leslie	18	14	2,368	11
Letcher	65	45	5,290	13
Lewis	36	38	3,155	7
Lincoln	222	171	5,647	25
Livingston	28	51	1,861	17
Logan	571	256	5,537	36
Lyon	63	43	1,171	6
McCracken	2,406	573	11,426	200
McCreary	63	58	3,940	13
McLean	39	61	2,108	6
Madison	1,058	656	15,917	268
Magoffin	23	33	3,039	8
Marion	407	207	4,224	44
Marshall	77	147	6,189	45
Martin	23	18	2,639	4
Mason	362	138	3,707	50
Meade	499	444	6,882	123
Menifee	49	28	1,371	5
Mercer	260	223	4,397	45
Metcalfe	55	57	2,313	3
Monroe	86	130	2,284	2
Montgomery	234	270	5,963	37
Morgan	35	20	2,731	17
Muhlenberg	310	140	6,290	21
Nelson	786	422	9,945	88
Nicholas	18	53	1,619	11
Ohio	112	376	5,510	29
Oldham	628	819	14,563	391
Owen	53	135	2,481	8
Owsley	15	14	1,064	2
Pendleton	41	66	3,409	17
Perry	182	86	5,967	41
Pike	171	182	13,689	97
Powell	39	40	3,023	6
Pulaski	357	542	13,377	131
Robertson	4	16	435	0
Rockcastle	45	44	3,852	14
Rowan	129	105	4,268	70
Russell	55	243	3,574	19
Scott	852	826	10,882	206
Shelby	1,003	1,557	7,989	127
Simpson	490	118	3,559	31
Spencer	125	104	4,144	29
Taylor	336	165	4,926	54
Todd	308	234	2,845	8
Trigg	337	60	2,714	23
Trimble	46	89	1,989	16
Union	392	74	2,925	25
Warren	2,947	2,118	19,860	1,156
Washington	235	169	2,322	13
Wayne	125	260	4,261	33
Webster	142	297	2,704	37
Whitley	106	140	8,125	68
Wolfe	12	19	1,741	6
Woodford	339	692	4,744	59

For data sources and notes please see page 55.

Demographics
School District Enrollment by Race & Ethnicity

	SY 2011-2012			
	Black	Hispanic	White	Other
Kentucky	**69,222**	**27,420**	**528,601**	**24,445**
Adair Co.	56	91	2,250	62
Allen Co.	33	69	2,760	52
Anderson Co.	82	83	3,439	160
Ballard Co.	48	7	1,212	46
Barren Co.	58	115	4,535	87
Caverna Ind.	79	21	574	48
Glasgow Ind.	238	119	1,463	106
Bath Co.	28	32	1,971	15
Bell Co.	6	8	2,860	7
Middlesboro Ind.	78	10	1,224	49
Pineville Ind.	6	0	519	15
Boone Co.	653	1,006	16,483	1,002
Walton Verona Ind.	14	21	1,453	34
Bourbon Co.	116	266	2,249	50
Paris Ind.	149	89	430	37
Boyd Co.	33	36	3,070	56
Ashland Ind.	138	50	2,794	117
Fairview Ind.	11	5	837	13
Boyle Co.	43	55	2,476	63
Danville Ind.	308	121	1,135	190
Bracken Co.	3	24	1,116	5
Augusta Ind.	9	2	281	0
Breathitt Co.	25	11	2,083	6
Jackson Ind.	4	2	383	4
Breckinridge Co.	66	47	2,550	70
Cloverport Ind.	6	4	341	1
Bullitt Co.	134	230	11,950	254
Butler Co.	11	70	1,952	40
Caldwell Co.	129	25	1,738	45
Calloway Co.	46	98	2,886	107
Murray Ind.	132	46	1,159	90
Campbell Co.	76	73	4,530	129
Bellevue Ind.	23	15	689	30
Dayton Ind.	27	27	774	11
Fort Thomas Ind.	25	52	2,548	98
Newport Ind.	227	83	1,162	220
Silver Grove Ind.	0	5	194	2
Southgate Ind.	38	10	133	19
Carlisle Co.	8	21	728	9
Carroll Co.	31	160	1,554	67
Carter Co.	23	45	4,468	28
Casey Co.	7	85	2,164	34
Christian Co.	2,997	477	5,056	389
Clark Co.	343	217	4,697	126
Clay Co.	39	23	3,236	23
Clinton Co.	17	54	1,602	13
Crittenden Co.	11	14	1,215	17
Cumberland Co.	21	13	912	30
Daviess Co.	397	354	9,583	401
Owensboro Ind.	706	229	2,867	420
Edmonson Co.	40	32	1,861	39
Elliott Co.	2	3	1,043	3
Estill Co.	10	6	2,397	3
Fayette Co.	8,473	4,420	21,473	2,909
Fleming Co.	43	41	2,169	40
Floyd Co.	25	21	6,015	32
Franklin Co.	535	281	4,744	441
Frankfort Ind.	152	26	511	70
Fulton Co.	154	14	331	15
Fulton Ind.	155	5	181	29
Gallatin Co.	14	124	1,447	36
Garrard Co.	59	99	2,213	71
Grant Co.	34	103	3,569	76
Williamstown Ind.	6	15	851	19
Graves Co.	79	197	4,095	170
Mayfield Ind.	265	351	746	133
Grayson Co.	27	55	4,022	61
Green Co.	34	31	1,560	44
Greenup Co.	25	21	2,820	36
Raceland Ind.	16	2	994	11
Russell Ind.	26	23	2,046	71
Hancock Co.	17	26	1,547	29
Hardin Co.	2,344	809	9,870	863
Elizabethtown Ind.	339	89	1,765	212
West Point Ind.	1	2	105	2
Harlan Co.	83	33	3,895	5
Harlan Ind.	35	8	711	20
Harrison Co.	68	78	2,794	53
Hart Co.	59	46	2,140	28
Henderson Co.	647	178	5,832	294
Henry Co.	36	64	2,004	31
Eminence Ind.	79	50	435	31
Hickman Co.	65	9	610	27
Hopkins Co.	693	195	5,623	274
Dawson Springs Ind.	0	8	610	20
Jackson Co.	2	9	2,131	3
Jefferson Co.	34,376	6,241	49,106	5,198
Anchorage Ind.	2	5	328	27
Jessamine Co.	374	239	6,681	269
Johnson Co.	8	9	3,695	33
Paintsville Ind.	23	8	764	11
Kenton Co.	316	450	12,741	658
Beechwood Ind.	20	29	1,101	30
Covington Ind.	1,121	209	1,979	263
Erlanger-Elsmere Ind.	229	176	1,589	177
Ludlow Ind.	4	12	798	21
Knott Co.	32	16	2,308	7
Knox Co.	62	33	4,249	34
Barbourville Ind.	10	7	643	5
LaRue Co.	81	109	2,112	91
Laurel Co.	113	98	8,796	129
East Bernstadt Ind.	14	5	479	2
Lawrence Co.	12	7	2,327	14
Lee Co.	7	4	1,082	9
Leslie Co.	11	8	1,709	3
Letcher Co.	16	16	3,170	12
Jenkins Ind.	4	7	521	1
Lewis Co.	7	10	2,255	40
Lincoln Co.	63	111	3,581	142
Livingston Co.	3	30	1,130	32
Logan Co.	90	53	3,228	62
Russellville Ind.	264	63	632	76
Lyon Co.	33	13	789	35
McCracken Co.	343	173	6,075	215
Paducah Ind.	1,253	133	1,019	278
McCreary Co.	37	20	2,866	7
McLean Co.	21	32	1,512	5
Madison Co.	507	295	9,538	512
Berea Ind.	42	46	972	27
Magoffin Co.	0	16	2,159	3
Marion Co.	240	97	2,760	37
Marshall Co.	6	47	4,495	48
Martin Co.	9	10	2,073	2
Mason Co.	223	56	2,328	119
Meade Co.	85	105	4,620	156
Menifee Co.	49	23	1,004	12
Mercer Co.	98	132	2,542	171
Burgin Ind.	13	6	418	18
Metcalfe Co.	10	32	1,500	5
Monroe Co.	50	72	1,681	30
Montgomery Co.	112	170	4,173	79
Morgan Co.	16	7	1,991	7
Muhlenberg Co.	205	76	4,641	106
Nelson Co.	66	92	4,318	66
Bardstown Ind.	425	122	1,756	145
Nicholas Co.	5	38	1,046	16
Ohio Co.	27	188	3,657	52
Oldham Co.	333	495	10,496	442
Owen Co.	14	58	1,709	17
Owsley Co.	8	2	762	4
Pendleton Co.	32	26	2,397	22
Perry Co.	40	32	4,013	22
Hazard Ind.	77	5	803	50
Pike Co.	94	21	9,271	64
Pikeville Ind.	28	23	1,070	47
Powell Co.	15	32	2,326	14
Pulaski Co.	98	200	7,462	73
Science Hill Ind.	3	16	476	12
Somerset Ind.	80	73	1,276	66
Robertson Co.	0	7	329	1
Rockcastle Co.	6	24	2,776	21
Rowan Co.	45	50	2,941	85
Russell Co.	30	98	2,696	39
Scott Co.	531	467	6,872	258
Shelby Co.	590	972	4,800	276
Simpson Co.	317	81	2,396	129
Spencer Co.	45	75	2,513	91
Taylor Co.	45	49	2,471	53
Campbellsville Ind.	125	39	825	104
Todd Co.	200	114	1,679	46
Trigg Co.	211	39	1,709	96
Trimble Co.	3	26	1,336	23
Union Co.	297	25	1,850	49
Warren Co.	1,104	845	10,412	1,146
Bowling Green Ind.	755	462	2,460	258
Washington Co.	178	102	1,358	10
Wayne Co.	52	36	2,321	21
Monticello Ind.	30	101	708	3
Webster Co.	69	172	1,799	50
Whitley Co.	3	20	4,194	22
Corbin Ind.	7	36	2,637	60
Williamsburg Ind.	24	5	684	13
Wolfe Co.	8	9	1,277	5
Woodford Co.	188	433	3,115	158

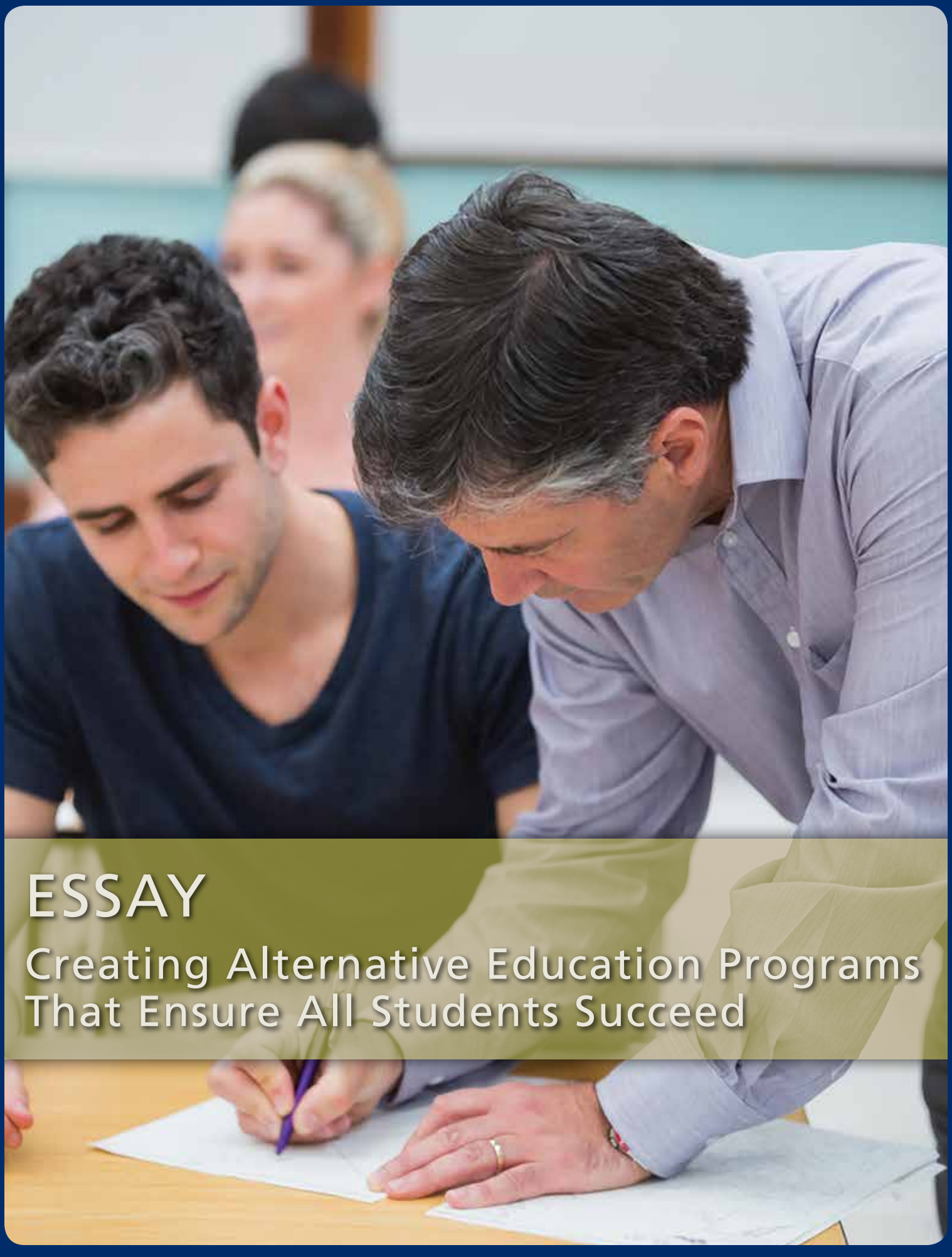
For data sources and notes please see page 55.

Demographics
Children Living in Poverty

	2000		2006-2010	
	Number	Percent	Number	Percent
Kentucky	**203,547**	**20.8**	**243,013**	**24.3**
Adair	1,234	30.9	925	22.4
Allen	1,089	23.8	1,322	27.4
Anderson	455	9.0	971	18.4
Ballard	375	19.8	313	17.6
Barren	1,872	20.6	2,731	27.3
Bath	794	29.9	1,274	44.9
Bell	3,057	42.1	2,217	35.2
Boone	1,637	6.8	2,956	9.2
Bourbon	917	19.3	954	20.4
Boyd	2,506	23.5	2,628	26.2
Boyle	983	16.1	1,818	30.7
Bracken	222	10.7	557	26.2
Breathitt	1,697	43.5	1,341	41.9
Breckinridge	756	16.8	1,288	27.2
Bullitt	1,888	11.5	2,083	11.4
Butler	604	18.8	672	23.1
Caldwell	595	20.6	608	21.9
Calloway	1,165	18.6	1,068	16.3
Campbell	2,799	12.4	3,354	16.5
Carlisle	228	18.6	182	16.3
Carroll	520	20.6	834	31.6
Carter	1,919	29.6	1,909	29.8
Casey	1,197	32.3	1,537	41.5
Christian	3,934	19.5	6,329	31.1
Clark	1,208	15.0	1,930	23.4
Clay	2,852	47.8	2,117	42.0
Clinton	691	31.9	936	39.3
Crittenden	670	30.8	479	23.4
Cumberland	507	30.5	627	39.8
Daviess	3,677	16.0	5,095	22.3
Edmonson	693	25.6	654	24.6
Elliott	521	30.8	805	50.6
Estill	1,214	33.0	1,171	34.3
Fayette	8,039	14.7	12,868	21.6
Fleming	859	25.2	819	23.0
Floyd	3,992	40.1	3,814	43.4
Franklin	1,377	12.8	2,188	20.9
Fulton	626	32.5	628	43.6
Gallatin	381	17.1	879	40.0
Garrard	707	19.7	775	20.3
Grant	964	15.5	1,696	25.0
Graves	1,986	22.7	2,521	29.1
Grayson	1,446	25.0	1,774	28.3
Green	602	23.6	558	21.9
Greenup	1,620	18.9	1,729	20.7
Hancock	402	18.2	465	21.1
Hardin	3,534	13.9	5,216	20.5
Harlan	3,336	40.4	2,937	42.7
Harrison	712	16.1	1,387	30.1
Hart	1,276	28.6	1,269	28.6
Henderson	1,921	17.6	2,244	21.1
Henry	616	16.4	974	25.9
Hickman	316	27.7	241	22.7
Hopkins	2,721	24.7	3,273	30.4
Jackson	1,287	37.0	1,173	37.6
Jefferson	30,604	18.5	39,000	23.3
Jessamine	1,417	14.0	2,485	20.5
Johnson	2,002	36.1	1,454	27.7
Kenton	4,877	12.4	6,468	16.5
Knott	1,717	40.2	1,215	33.5
Knox	3,466	42.5	3,744	47.7
LaRue	642	19.4	769	23.7
Laurel	3,882	29.4	3,598	25.7
Lawrence	1,580	40.6	1,319	35.6
Lee	739	41.8	748	47.8
Leslie	1,181	39.3	412	16.2
Letcher	2,147	36.2	1,829	33.5
Lewis	1,274	36.8	981	30.8
Lincoln	1,600	27.2	1,665	26.8
Livingston	244	11.3	395	20.1
Logan	1,424	21.3	1,469	23.3
Lyon	221	17.6	329	25.2
McCracken	3,318	22.1	3,124	21.5
McCreary	1,907	41.4	2,090	48.5
McLean	505	21.2	617	26.9
Madison	2,777	18.2	3,966	23.3
Magoffin	1,627	46.0	1,248	38.4
Marion	1,012	22.3	1,163	23.6
Marshall	765	11.9	1,087	16.4
Martin	1,591	45.4	1,260	44.6
Mason	949	23.7	1,271	30.7
Meade	1,087	14.1	1,325	16.9
Menifee	654	40.8	408	29.2
Mercer	884	17.6	769	15.2
Metcalfe	713	29.4	602	26.3
Monroe	767	27.5	1,032	40.4
Montgomery	1,032	18.7	1,543	24.9
Morgan	1,063	34.9	1,023	36.5
Muhlenberg	1,934	27.1	1,992	29.1
Nelson	1,607	15.8	2,159	19.5
Nicholas	230	14.4	370	22.1
Ohio	1,266	22.4	1,753	29.9
Oldham	631	5.0	1,227	7.5
Owen	460	17.4	380	14.0
Owsley	666	56.4	518	48.4
Pendleton	602	14.9	1,163	29.9
Perry	2,588	36.9	2,662	42.1
Pike	4,950	30.7	4,289	30.2
Powell	1,089	31.4	1,085	35.5
Pulaski	3,538	27.4	3,634	26.8
Robertson	167	31.2	153	26.6
Rockcastle	1,142	28.8	1,317	33.1
Rowan	928	21.5	1,575	34.0
Russell	1,123	31.0	1,014	26.4
Scott	974	11.3	2,318	19.8
Shelby	1,126	13.4	1,596	16.3
Simpson	598	14.4	736	17.5
Spencer	295	9.4	368	8.6
Taylor	1,260	23.7	1,920	35.0
Todd	702	22.2	1,048	31.7
Trigg	394	13.9	661	20.9
Trimble	319	15.0	431	19.7
Union	929	23.9	706	20.0
Warren	3,845	18.3	6,265	25.5
Washington	398	14.8	457	16.8
Wayne	1,743	34.9	1,519	32.3
Webster	685	20.4	696	21.9
Whitley	3,092	34.2	3,335	38.6
Wolfe	930	51.5	1,012	57.9
Woodford	472	8.1	1,133	19.0

For data sources and notes please see page 55.


Kindergarten
Bound!



ESSAY

Creating Alternative Education Programs That Ensure All Students Succeed

Creating Alternative Education Programs That Ensure All Students Succeed

A quality education provides a strong foundation for young people as they work to become successful adults. Businesses rely on an educated workforce, while individuals use their education to secure stable employment.

Not all youth thrive in the traditional education setting, and alternative education programs can provide an option for students in many of Kentucky's school districts to complete a high school education in a different setting. The number of alternative education programs has grown in Kentucky since 1998 when the Center for School Safety was established to help school districts develop alternative programs.[1] Some of those programs have met the challenge of creating a quality alternative learning environment, while others have lacked rigor and standards. With some improvements already underway, further action can ensure all of Kentucky's alternative education programs create and sustain a high quality learning environment so all students can succeed.

What Are Alternative Education Programs?

Alternative education programs educate students in a nontraditional setting. Alternative education programs can operate as a stand-alone school or as a program within a school. Kentucky has two main types of alternative education programs: those operated by school districts (A5 programs) and those that serve youth involved with Kentucky's juvenile justice, foster care, or behavioral health agencies (A6 programs).

Alternative schools serve a critical function in providing an educational setting for students who do not excel in a traditional classroom.[2] Not only do alternative programs provide a place for nontraditional students to excel, providing an alternative path to graduation helps these students become contributing members of Kentucky's economy as well. State education officials estimate that 25 percent of Kentucky 8th graders today won't graduate from high school.[3] Those 25 percent, or around 12,000 students, will be competing for 8 percent of jobs available that don't require a high school diploma—and that likely do not pay a living wage.[4]

District-operated Programs

The district-operated programs typically serve students sent there for behavior or academic reasons. These programs have the potential to provide individualized support and help students catch up on credits needed for graduation. During the 2011-12 school year, 135 of Kentucky's 174 school districts operated or used alternative education programs. Past estimates suggest these programs serve more than 45,000 students over a school year, and new capacity with the Department of Education's student information system will allow for an accurate enrollment count for the first time.[5]

Programs Serving Children in State Care

The programs serving youth in the care of state agencies are overseen by the Kentucky Educational Collaborative for State Agency Children, and they are typically located at foster care facilities, juvenile justice facilities, day treatment facilities, and other institutions.[6] These alternative education programs offer a setting that accommodates the unique needs of children in the facilities while still addressing their education needs. These programs reported serving 13,666 youth over the 12-month period from December 1, 2010 to December 1, 2011, and the numbers have been declining in recent years.[7]

There are 99 total alternative education programs serving children in state agency care, represented by three state agencies in 54 counties.[8] Of the 99 schools, the Department of Juvenile Justice operates 45, the Department for Community Based Services is responsible for 49, and the Department for Behavioral Health, Developmental and Intellectual Disabilities is responsible for five.[9] These schools serve nearly 14,000 students in a variety of programs, such as day treatment centers, detention centers, hospitals, and group homes.[10] Kentucky statute authorized the creation of the Kentucky Educational Collaborative for State Agency Children (KECSAC) to oversee the agencies and the educational components of these alternative programs. Responsibility for the education of children in state agency care falls to KECSAC rather than to school districts or the Kentucky Department of Education. While this allows for flexibility in educating students facing other challenges, KECSAC must ensure the programs achieve high quality standards

of learning to set those students on a path to becoming productive members of society.

Creating the Framework for Successful Alternative Education Programs

Alternative education programs can help students overcome barriers to success when they combine quality and rigor with innovation. Several alternative education programs in Kentucky have been able to strike that balance and provide a strong learning environment for students in their program. Kentucky's infrastructure for alternative education programs provides some guidelines for these programs to excel, though work remains to ensure all their students receive a high-quality education.

A comprehensive report by Jobs for the Future, *Reinventing Alternative Education: An Assessment of Current State Policy and How to Improve It*, identifies best practices in alternative education. The report outlines seven policy elements to creating successful alternative education programs. The study also identifies, state by state, which elements are being met and which need to be addressed. Kentucky is fully meeting one element and partially meeting five elements, but opportunities remain to ensure all students receive a rigorous education that will help them succeed and become contributing members of society.[11]

Areas of Strength in Kentucky

Kentucky has a strong policy in place for a broad definition of students' eligibility to attend alternative schools.

In addition, the state has made recent strides towards ensuring high-quality staff and setting accountability standards for alternative schools.

Broad Eligibility

Ensuring broad eligibility has been identified as a key policy element for strong alternative education programs. Eligibility refers to the criteria for which students may enroll in an alternative education program, and alternative programs can be most effective when any youth not thriving in the typical school can attend. For many years, Kentucky administrative regulations have allowed students to attend district-operated alternative programs for a wide range of reasons and have not limited the enrollment to youth sent for disciplinary reasons.[12]

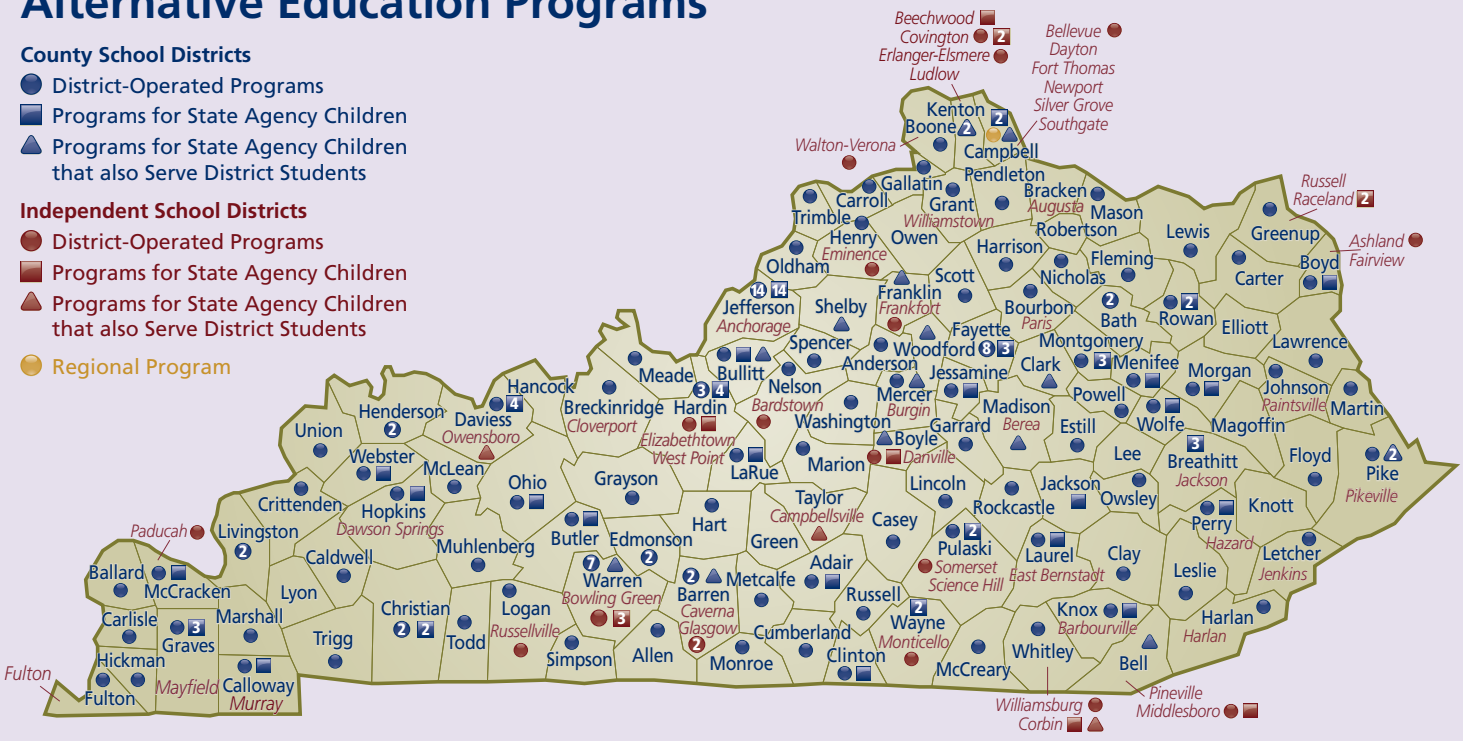
With the implementation of legislation passed in the 2012 Kentucky legislative session, a clear definition of district-operated alternative education programs now exists that reinforces this broad eligibility. They are defined as programs "to meet the needs of students who cannot be addressed in a traditional classroom setting but through the assignment of students to alternative classrooms, centers, or campuses that are designed to remediate academic performance, improve behavior, or provide an enhanced learning experience."[13] This new definition explicitly requires in statute that district-operated programs offer students whose needs are not met in the traditional classroom an alternative route toward a postsecondary education or job placement.

Alternative Education Programs

County School Districts
- District-Operated Programs
- Programs for State Agency Children
- Programs for State Agency Children that also Serve District Students

Independent School Districts
- District-Operated Programs
- Programs for State Agency Children
- Programs for State Agency Children that also Serve District Students

- Regional Program



Sources: *Kentucky Department of Education, Next-Generation Schools and Districts, Division of Student Success and Kentucky Educational Collaborative for State Agency Children.*
Data note: *Programs were counted in December 2011 and changes in program status through December 1, 2012 are reflected in the data.*

Improvements in Staff Quality

Policies to promote high-quality staffing of alternative education programs constitute another critical measure of strong policy.[14] Providing incentives for high-performing teachers to teach at alternative programs and requiring ongoing professional development for program staff represent two core components for promoting quality among staff. Kentucky has established some of these recommendations through the alternative programs serving children in state agencies, but efforts to strengthen the workforce in district-operated programs have lagged.

The Kentucky legislature did take action in 2012 by passing a bill to ensure a minimum standard for teachers in district-operated alternative programs. Previously, site visits to programs found that in some school districts, administrators would reassign teachers to an alternative program as a disciplinary measure.[15] With the implementation of House Bill 168, teachers can no longer be sent to alternative education programs as punishment.[16] By preventing teachers from being sent to alternative programs for their own discipline infractions, the programs will be staffed by teachers who opt to teach there and are dedicated to those students' success.[17]

Although this piece of legislation provides critical protection for students in alternative education programs, teacher quality can be further strengthened with training and incentives for teachers committed to working with this population of students. Currently, KECSAC provides an annual required training for all teachers who are new to A6 programs (serving children in state agency care) and offers an annual conference for all teachers working with populations of students at risk for not succeeding in school. While some teachers in district-operated schools attend KECSAC's annual conference to learn new teaching and classroom management skills, the training is not required of any alternative program educators.

Strengthening Accountability

Tracking accountability for learning in alternative schools provides a measure to ensure that different school learning environments meet the same standards for preparing Kentucky students to become contributing members of society. Because a school's funding and reputation are dependent upon test scores, accountability systems need to be established in a way that assures academic standards are met in alternative programs, recognizes progress for students who were not thriving prior to enrolling in an alternative program, and avoids any unintended incentives for schools to send a student to an alternative program.

The Kentucky Department of Education recently established new guidelines for measuring accountability in Kentucky schools. With the new regulations in place, Kentucky meets several of the standards for strong accountability for learning in alternative education programs. Kentucky continues to hold the school that sends a student to the alternative program accountable for the student's achievement by attributing the test scores of students in alternative programs to the sending school.[18] This avoids creating an incentive for schools to send students who they fear will not perform well on a test to alternative programs.

The recently enacted regulations now go a step further, establishing that each alternative education program will receive an annual report based on tested students.[19] Though details on what assessment data will be included are not yet known, the reports will include information on the "unique features and characteristics" of the program and will outline the appropriate uses and limitations of the data reported.[20] These reports will offer an opportunity to greatly strengthen accountability of alternative education programs by assessing programs on the same measures of academic standards as traditional schools, while also recognizing the unique challenges of alternative education programs. In other states, additional measures have included attendance, student conduct, and average credit completion.[21]

Opportunities for Enhancing Quality

Kentucky has partially succeeded in creating policy standards for strong alternative education programs and has made progress in the past year, yet many more opportunities exist to ensure all students in such programs across the state receive a quality education. According to the *Reinventing Alternative Education* report, Kentucky policy does not fully meet best practice standards in the following elements: clarifying responsibilities, strengthening accountability, ensuring high-quality staff, enhancing support services, and enriching funding.[22] Additionally, state policies do not meet the criteria for increasing support for innovation.[23] Though some individual programs may excel, improving these policies at the state level would foster high-quality programs throughout Kentucky that prepare students for college and career.

Clarify Responsibilities

The identified best practice of clarifying guidelines on state and district roles and responsibilities underscores the need for policies that establish standards for quality operation and management of alternative programs.

Guidelines for state and district responsibilities do exist on some of those key areas identified in the *Reinventing Alternative Education* report, including defining eligibility and how districts should track accountability for children in alternative education programs.

Programs serving children in state agency care follow guidelines in four additional areas identified in the report, including effective practices, funding mechanisms, governance, and staffing. These regulations define KECSAC, the governing body for schools serving children in state agency care, and address governance, staffing, and finances. Additionally, KECSAC has created a policy manual that identifies standards for academic performance, learning environment, and efficiency.[24] It also compares characteristics of effective programs (like strong leaders, high expectations, and holistic approaches) to ineffective programs (poor definitions of mission, non-responsive to student needs, and insufficient support and review).[25]

While the state regulations and policy manual set guidelines for key areas of operations and management, some areas could be improved by ensuring high standards for quality. For example, Kentucky regulations establish a committee to advise KECSAC on the development of policies and procedures, yet they do not establish a method for independent representation on the advisory board nor for an independent evaluation to ensure KECSAC schools are meeting the education needs of children in state agency care.[26] Another area for improvement reflects staff standards. Statute identifies the process for how districts are to staff programs serving state agency children and encourages training for teachers, but lacks standards for the skills teachers in the programs should possess.

Guidelines for operation of district-operated programs have not been established for funding, governance, staffing, or effective practices, which may contribute to the wide variation in quality among district-operated alternative programs. However, promising work underway by the Kentucky Department of Education would establish guidelines through administrative regulation for many of these aspects of district-operated alternative programs.[27] The proposed regulations have been approved by the Kentucky Board of Education but must proceed through a public comment period and approval by a legislative subcommittee.[28]

Strengthen Accountability

Although recent changes in state regulation show great potential, opportunities still exist for ensuring alternative programs meet standards of academic quality. The strongest accountability measures for alternative education programs combine measures of meeting state learning standards with measures of effectiveness at helping students achieve who have not succeeded in the traditional classroom.[29] With the new accountability regulations, students in alternative programs will still have test results attributed to the sending school, and a new report required for each alternative education program has the potential for assessing accountability for learning in individual programs. For the new reports to be effective, they must include accountability measures for schools and districts set forth in Kentucky's new Next Generation Learners standards, including achievement levels and gaps, individual student growth, readiness for college or career, and graduation rates. Additionally, the reports should acknowledge that students in alternative education programs were not successful in the traditional schools, and the programs should receive credit for progress towards the ultimate goal of students graduating high school prepared to enter college or the workforce.

"The strongest accountability measures for alternative education programs combine measures of meeting state learning standards with measures of effectiveness at helping students achieve who have not succeeded in the traditional classroom."

Accountability could be further strengthened by applying the same standards for state support and recognition that traditional schools receive based on how well they meet accountability standards. As the Kentucky Department of Education implements new accountability measures, schools and districts will be recognized for high performance, while schools and districts failing to meet goals will receive interventions from the Kentucky Department of Education to work on improving outcomes. The new accountability regulations leave the provision of state support and recognition of alternative education programs to the discretion of the Commissioner of Education, but only if resources are available.[30] If such resources can turn around a struggling traditional school, alternative education programs should also have access to those supports. Students in alternative education programs will be best served by a blended accountability measure and the supports needed to make high achievement a reality.

Beyond appropriate measuring and reporting, strong accountability standards need a strong curriculum as the foundation for meeting those standards. Kentucky has begun implementing Common Core State Standards that have been developed nationally and will better prepare students for college and careers. Students attending alternative programs will be measured by these new standards and also need rigorous academic preparation to succeed after high school. However, the curriculum used in alternative programs across the state varies along with the method of instruction used. While some across the state have typical district instruction, others rely on computer programs or a combination. Regardless of the type of instruction used, all students need to be taught the same core curriculum taught in traditional schools to meet the new state standards designed to help them compete in a global economy.

Increase Support for Innovation

Students enrolled in alternative education programs succeed with innovative approaches to education, and a strong policy framework can set the stage for innovation to thrive. Two states across the nation — Minnesota and Oklahoma — have policies in place that reflect a systematic, rather than piecemeal, approach to encouraging innovation.[31] District-operated schools and schools serving state agency children should be given the autonomy and funds to create programs — based in research — that are tailored to their students. Improving outcomes for the students in alternative education programs is imperative to get them back on track for graduation in order to increase the chances that they will become productive members of society.

Improving outcomes for the students in alternative education programs is imperative to get them back on track for graduation in order to increase the chances that they will become productive members of society."

Oklahoma provides an example of creating a policy structure to support innovation. Schools in Oklahoma that have high dropout rates are eligible for grants to support alternative programs based on 17 criteria that encourage the use of effective practices, such as staffing, program structure, instruction, and student supports.[32] In the 2010-2011 school year, 85 percent of programs scored satisfactory or higher on implementation of the 17 criteria.[33] School districts still have the autonomy to create programs that meet local needs, but the criteria establish guidelines for districts in implementing the programs. The evaluations conducted on the state's alternative programs have consistently found fewer absences, higher grades, fewer failed classes, a greater number of credits earned, and fewer referrals for discipline problems among students in the programs compared to a similar group of students in traditional schools.[34] Kentucky could follow this lead by ensuring Safe Schools funding, distributed through the Kentucky Center for School Safety and used by districts in part for alternative education programs, is used to implement effective practices.[35]

Ensure High-Quality Staff

Kentucky has started to implement policies that increase the quality of teachers in alternative schools by preventing teachers from being assigned to district-operated programs as a disciplinary action, but work remains to ensure programs are staffed by high-quality teachers. Because students in alternative education programs need bright and creative teachers to assist them in the learning process, there should be policies in place that provide incentives to attract high-quality staff and offer continuing professional development.[36]

Research shows a strong link between the quality of teachers and student achievement.[37] For students not succeeding in traditional schools, the quality of teaching can be especially important. Incentives to attract high-quality teachers to alternative programs can ensure that children who have been disengaged in learning are receiving high-quality instruction from bright and creative teachers who opt to teach in alternative programs.

The small size of many alternative programs poses another challenge to ensuring quality teaching. Without a sufficient student population size to hire a certified teacher in each main subject area, teachers in alternative programs often teach outside of their training or expertise.[38] This has resulted in teachers being assigned to alternative programs who lack subject-specific certification, or even certification to teach students at that grade level. Oklahoma has struck a balance on certification by requiring teachers in alternative education programs to be certified in the core subject areas, such as English, reading, math, foreign language or history; but certification is not required for teaching elective courses.[39] Kentucky could strengthen alternative education programs by also requiring certification in core subject areas while acknowledging that teachers in small programs may need to teach other subjects without certification.

While not addressing broader certification or specialization opportunities, the proposed administrative regulations for district-operated alternative education programs would require the programs to follow Kentucky's certification standards that apply in traditional schools.

A strong professional development component offers another method for ensuring strong teacher quality in alternative education programs. Teachers in schools serving state agency children are required to attend training before their first year as a KECSAC teacher, regardless of how experienced they are in traditional schools. KECSAC also organizes an annual conference each year entitled "Alternative Strategies for Educating Students At-Risk," which is open to program staff in state agency and district-operated programs.[40] Promising trends in professional development, such as embedded training, learning community circles, and collegial support networks, offer creative options for learning tailored to work with students at risk of not succeeding in school. For example, the Ohio Valley Educational Cooperative and the Central Kentucky Educational Cooperative have created a peer-learning network for alternative school administrators in their regions. Such measures need to be proactively supported for professionals in state agency and district-operated alternative education programs.

Enhance Student Support Services

All students need support services to thrive in school, especially those students enrolled in alternative programs. Two key policy areas to support the provision of strong support services include explicitly linking support services to academic success in policy and encouraging the use of community partnerships through which students can receive supports. Kentucky statutes and regulations currently do not explicitly connect support services to academic success for either type of alternative program. The statute creating KECSAC, however, does state that the educational needs of students shall emphasize coordination with treatment services the child receives.[41] New regulations for alternative education programs proposed by Kentucky's State Board of Education encourage coordination with support services already available, like tutoring and counseling, but the state should also encourage partnerships with outside agencies and colleges for additional supports not already offered by the district.[42]

The Learning to Work initiative in New York City provides an example of going beyond the classroom to provide support services. The program connects students with their communities by partnering with community-based organizations to increase their chances of graduation and prepare them for post-secondary education or entrance into the workforce. This program provides career exploration, job skills development, and subsidized internships to students who are at risk of not receiving a diploma, specifically those who are over age 18 and behind on class credits.[43] The Learning to Work program shows greater success at helping at-risk students graduate and transition into full-time employment or post-secondary education than traditional high schools.[44] By effectively connecting community-based support services with students enrolled in alternative education programs, Kentucky could also help students receive a full range of supports to achieve academic success.

Several states across the country emphasize the value of these partnerships. In Virginia, state policy requires, as part of the application for grants, that alternative education programs reach out to partner with groups such as community-based organizations and postsecondary training programs.[45] In California, successful models have been created linking alternative education programs with local community colleges, yet the practice has not been supported in policy.[46] State policies supporting the creation of meaningful partnerships with the community, higher education, and organizations in the workforce could create meaningful avenues for students in alternative schools to realize the purpose of their education. In innovative districts, schools have not only been a place for children to complete high school but also a place to begin the path to a college degree or a career.

In addition to specialized supports that can help students in alternative education programs succeed, basic school-based supports also hold value. Research in Kentucky identified two areas of basic support that many students in alternative programs did not have: access to extracurricular activities and inclusion of parents. Extracurricular activities have been linked with improved academic success,[47] yet most students in alternative programs — even those attending programs for a year or longer — are not allowed to participate. If students meet all other criteria for participation, such as grades and behavior, Kentucky should allow access to these activities that provide positive options for out-of-school time. Similarly, engaging families in the education process increases academic achievement and high school graduation,[48] but parent involvement has been absent from most alternative education programs. Proposed administrative regulations include specific provisions for district-operated programs to invite parents to participate in the development of an "Individual Learning Plan addendum," an action plan for addressing student education needs as they enter or leave an alternative

program. The proposed regulations would also allow students to participate in extracurricular activities.[49]

Enrich Funding and Strengthen Fiscal Accountability

Kentucky needs to invest in all students achieving a successful transition into adulthood. Without adequate funding in alternative education programs, students already off track for graduation may become even less engaged in the learning process and more likely to drop out. The *Reinventing Alternative Education* report calls for state policies that direct greater investment of resources in students at risk of not succeeding and that ensure agencies contracting to provide education services receive appropriate funding. Some school districts in Kentucky have recognized the value of such investments and find additional district dollars to fund alternative programs, but state policy still lacks a mechanism to provide additional resources.[50]

School districts determine funding for alternative programs they operate. Across Kentucky, the level of investment varies, with some districts finding ways to supplement base funding and expend a higher per pupil amount on alternative education programs. In other districts, funding per pupil may be the same as all other schools or even less, which fails to address the more intense work needed to get the students on track to complete high school. Safe Schools funds can be utilized by school districts to fund alternative programs, and school districts collectively used 44 percent of all Safe Schools funding for that purpose in fiscal year 2011.[51]

Alternative education programs operated by state agencies receive funding distributed by a formula outlined in the KECSAC regulations. The formula first calculates the dollars for all children in state agency programs through the state's education funding formula. Then dollars are withheld to fund KECSAC, for general education services that would benefit all children in state agency care, and for matching funds. The remaining amount is then divided by the number of children in the programs and distributed to the school districts providing education services.[52] While this funding formula likely provides the same amount of funding as the allocation for any Kentucky student, the formula does not factor in the additional costs for services and unique needs of the population of children in state agency care. The students served by these programs need adequate funding allocated to ensure their successful transition to productive citizens of our state.

One option for improving funding without additional new dollars entails fully tracking the categorical funding tied to particular students and ensuring it follows the students. Categorical funding includes dollars allocated for students with disabilities or those in families with limited income, above and beyond the state funding formula dollars. Currently, KECSAC regulations require that such funding be available to all children in state agency care, yet it remains unclear if the funds are appropriately allocated to programs serving children in state agency care.[53] Regarding district-operated programs, no explicit regulations state that such funds should follow a student to an alternative education program, but regulations approved by Kentucky's Board of Education would, if implemented, require districts to use the statewide financial management system for alternative education programs, thereby allowing for better tracking of the funds.

Indiana and Virginia are among the states identified as having exemplary practices for funding of alternative education programs. Both states factor the additional academic and support service needs of students enrolled in alternative programs into the funding formula for distributing state funds. Five additional states—Illinois, Massachusetts, Ohio, Oklahoma, and Wisconsin—have created competitive grants that encourage improvement of alternative programs by offering funding for implementation.[54]

The most successful programs in the nation recognize the need to allocate more funds to students who have not succeeded in the traditional school setting. In order to ensure that students in alternative programs are receiving funds that match their needs, Kentucky should ensure that funding is tracked so that money follows students and that schools are receiving adequate funding to keep students engaged in the learning process. Such investments will yield dividends for the state when the students graduate and become contributing adults in Kentucky communities.

Recommendations

Kentucky policy on alternative education programs encompasses a number of strong components, but room remains for improvement. The recommendations that follow emanate from policy research on what works in alternative education and understanding the gaps in Kentucky's system.

- **Stronger oversight**. Alternative education programs in Kentucky have shown great variance in success at educating students and getting students on track to succeed. Stronger oversight would ensure that all alternative education programs meet minimum standards for governance and achieving the educational goals of students.

External and independent oversight. For schools serving children in state agency care, KECSAC has established an advisory group, as required in administrative regulation, to advise the agency on policies and procedures. Although an advisory group can provide important guidance, the regulations should go further to make certain students are receiving the highest quality education. With the great responsibility for educating children in state agency care, KECSAC should have an external and independent oversight committee as well as an independent evaluation procedure to ensure unbiased assessments of the success of the programs in educating the students served. Independence of both the oversight structure and evaluation processes must be driven by professionals who are not dependent on KECSAC or related funding. These measures will bolster the current strengths of KECSAC and help identify areas for improving the education of the students served.

Governance of district-operated schools. District-operated alternative education programs vary greatly across the state, and no guidelines currently exist for funding, governance, staffing, or effective practices. The Kentucky Department of Education should move forward to adopt administrative regulations that would address many of the needs identified in the *Reinventing Alternative Education* report. Among other changes, the proposed regulations would require school districts to have policies and procedures governing alternative education programs and would address entrance and exit procedures for students.

- **Accountability**. Just as the state strives to ensure traditional schools achieve goals for proficiency with their students, it must apply accountability standards to alternative education programs.

  Reports on progress. New administrative regulations that took effect in September 2012 continue to attribute student test scores to the sending school to discourage schools from pushing low-scoring students into alternative education programs. The new regulations will also establish a report on test scores for the alternative education programs. Measuring accountability for the individual programs represents a significant improvement in the capacity to assess whether or not students are learning in the programs. Yet, the content of those reports remains unclear. To have the greatest impact on improving program quality, the reports should include standard accountability measures related to achievement, individual student growth, readiness for college and career, and graduation rates in order to reflect how students in alternative education programs are progressing. These reports should also give credit to alternative education programs by including measures that acknowledge their work with students who have not succeeded in traditional schools by helping them stay in school and make progress towards graduation.

  Accessing state supports and recognition. The administrative regulations for accountability established in September 2012 do not apply the same standards for recognition of success or supports to alternative education programs as they do for traditional schools. For programs, support and recognition are left to the discretion of the Commissioner and only when funds are available. To the extent this structure encourages traditional schools to excel and supports schools that are not achieving proficiency goals, the same supports should be offered to alternative education program.

"The proposed administrative regulations, approved by Kentucky's Board of Education, should be adopted to ensure the curriculum in alternative education programs be aligned with the Kentucky Core Academic Standards."

  Curriculum. To succeed on accountability measures, alternative education programs need a strong curriculum as the foundation. Kentucky has adopted the Common Core State Standards, developed nationally, to drive curricula to best prepare students for life after high school. Throughout the state, alternative education programs implement different curricula using different instruction methods. To ensure a high quality education, the curriculum for alternative education programs across the state should be aligned with the Kentucky Core Academic Standards. The proposed administrative regulations, approved by Kentucky's Board of Education, would require alignment and should be adopted.

- **Staffing**. A critical element of success in schools is the strength of the teaching staff, and high-quality teachers are equally critical for the success of alternative education programs.

Incentives for teachers. Strong alternative education policy creates a structure to attract high-quality teachers to alternative education programs. In individual school districts in Kentucky, administrators recognize the additional challenges of working with youth at risk of not succeeding in school and build in supports for teachers. For example, one school district built in extra pay for teachers to have a planning period after the school day ended, which meant teachers had time to communicate with one another about student education needs without having to leave the classroom during the school day to do so. Kentucky should create a policy that encourages such practices or other incentives to attract highly-qualified teachers to alternative education programs.

Professional development. Teachers in district-operated alternative programs would benefit from access to targeted professional development on working with the population of students in alternative education programs. The Department of Education should utilize promising trends in professional development (e.g., learning communities, collegial support networks, or embedded training) to identify ways districts can support teachers in alternative education programs in staying up-to-date on effectively working with students at risk of not succeeding in school.

- **Support services**. Supports beyond the educational services provided to students play a crucial role in student success.

  Network of support. Using policy to explicitly connect support services, within and outside of alternative education programs, to academic success provides an environment for students to succeed. The Department of Education should ensure proposed administrative regulations for alternative education programs are adopted that would encourage the use of support services already available in a district, such as tutoring and counseling. The policy could be further strengthened by encouraging collaboration with outside agencies and postsecondary institutions to help students succeed.

  Extracurricular activities. In addition to traditional student supports, extracurricular activities have been linked to many positive outcomes for students, yet students in alternative education programs have generally been denied access to extracurricular activities in Kentucky. As the Kentucky Department of Education has proposed in regulatory changes, students should have access to extracurricular activities, as long as they meet other eligibility criteria.

  Parent involvement. Beyond school-based supports, students in alternative education programs benefit from parental support, yet parent involvement has been essentially absent in many Kentucky programs. The administrative regulations proposed by the Kentucky Department of Education would provide for the inclusion of parents in developing an action plan for students when they enter or exit an alternative education program. This move towards meaningful parent involvement should be adopted.

- **Funding**. Alternative education programs serving students at risk of not succeeding need adequate resources to provide a high-quality education.

  Tracking and adequacy. Strong state policies acknowledge districts' additional costs to educate students who have not succeeded in traditional schools. A first step in determining the adequacy of funds for alternative education programs is to accurately measure the funding distributed to the programs, including base funding as well as funding from special streams, such as funds for students with disabilities or for students from families with limited income. Detailed tracking should assess the degree to which base and categorical funding follows students to alternative education programs. The administrative regulations approved by the Kentucky Board of Education would require alternative education programs to use the statewide financial management system, which would make it easier to track these funds. Applying funding from dedicated streams may be complicated and require adjustments, such as basing calculations on the average student enrollment, but such measures must be explored to ensure funds are used for the intended students.

  Innovative and effective practices. Strong funding policies recognize that students in alternative education programs may need additional resources to succeed in school. Kentucky should factor in the additional academic and support service needs of students enrolled in alternative education programs. Kentucky should offer funding, beyond the funding formula, that spurs innovation and provides incentives to school districts to implement programming proven effective with students at risk of not succeeding. ■

Achieving Educational Excellence: Thoughts from Across Kentucky

Kentucky Youth Advocates thanks the guest contributors for sharing their thoughts on education in Kentucky, but acknowledges that the opinions of the contributors do not necessarily reflect the opinions of KYA.

Early Childhood Must Remain a Priority

We all acknowledge that education doesn't begin or end at the schoolhouse door. Nor does it start in kindergarten – it starts in the cradle and spans cradle to career. For our youngest citizens, educational success begins prenatally. Babies who are born healthy will develop optimally and be ready to succeed when they arrive at kindergarten. And families need access to appropriate services and information to support their young child's development in this early period when the brain develops so rapidly. Parents are a child's first teacher. I believe that every parent aspires to a bright and educated future for their children. We need to support their aspirations. Kentucky's Health Access Nurturing Development Services (HANDS) home visiting program is one way that we are doing that.

We also need to assure that every child has access to high-quality early care and education opportunities, regardless of whether they go to private child care, public preschool, or Head Start. Every child deserves to have the best possible start, regardless of family income. Kentucky must help make sure every child comes to kindergarten ready, regardless of whether they live on a farm, in the inner city, or in a remote holler, because children who start school behind often fail to ever catch up.

In early childhood education, there have been four exciting developments in the last 24 months. In 2011, Kentucky adopted a uniform definition of kindergarten readiness. The exciting thing about this definition is that it goes beyond just cognitive and language expectations. As Nobel Laureate Economics Professor James Heckman assures us, "Effective early education packages cognitive skills with character skills such as attentiveness, impulse control, persistence, and teamwork. Together cognition and character drive education…with character development often being the most important factor." This definition gives us common language to talk to families, communities, and schools about what will be expected of children by the time they start school.

Also in 2011, Governor Beshear created a new Governor's Office of Early Childhood and Early Childhood Advisory Council. The creation of our office increases the influence, collaboration and cooperation across state systems and leverages existing resources. It brings renewed emphasis to the part of our education system that produces the greatest return on investment.

In 2012, the Kentucky Board of Education adopted a regulation for a common kindergarten readiness screening tool to be administered by all school districts to screen all children. It's expected that this will be fully implemented in all kindergarten classrooms in the 2013-2014 school year. During the 2012-2013 school year, 109 school districts voluntarily implemented the screening tool, and we await the complete results of that pilot trial. This data will give lawmakers, schools, families, and communities information that they can use to plan at the community level how to best support their kids.

Lastly, in 2012 Governor Beshear awarded $1.2 million in funding to Community Early Childhood Councils (CECCs) to promote school readiness for local children. CECCs are now making early childhood a priority in almost every community in Kentucky. And in early 2013, we will produce individual County Profiles that integrate information from the kindergarten readiness screening and other local data as a planning tool for these CECCs and other policy makers.

We are making progress, but we need to do more – and we want to do more. Of course, it takes money to assure that every child has the opportunity to succeed.

Since 2000, Kentucky has invested 25 percent of its Master Tobacco Settlement revenues into a variety of programs that support and provide early childhood services, including HANDS, efforts to improve child care quality, and expanding child care subsidies. However, that is a diminishing resource, which needs to be replaced with a sustainable funding source. For Kentucky to continue to make progress, new resources to invest in our early childhood systems must be secured.

–Terry Tolan

Executive Director, Governor's Office of Early Childhood

The Great Education Divide

The recent statewide test scores confirmed what we've long known: there is a great divide in education. In a system built upon "one form of education fits all," over 10,000 young Kentuckians each year drop out of school with little likelihood of returning. With this decision to quit comes a new future that often includes prison (80% of prison inmates are high school dropouts) and harsh limits on a potentially rewarding and accomplished life. Why would anyone choose to squash their future at such a young age?

Let's take a look at a young student we'll call Chris, and go back to when he entered kindergarten. He showed up the first day with a vocabulary that was one-third that of peers coming from families with a history of education success. Each year he lost ground academically while his peers succeeded with encouragement and consistent academic emphasis at home. Chris, on the other hand, would return in the fall having regressed due to the academic desert he lived in over the summer. The missing home support wasn't his only disadvantage. He lived on a street without diverse role models and in a home of economic chaos, resulting in his narrow view of the future.

By the time Chris reached the fourth grade, the die was cast. He was already one grade behind his former peers, he still could not read at a basic level, and he felt the failure. He stayed in school six more years and even spent time in an alternative school, but he was just marking time until his sixteenth birthday, the day his education ended. Full of energy and free from school, he decided to get a job. Unfortunately, the job application was too challenging to read. He was also crushed to learn that even low wage seasonal jobs require a GED. You can imagine the remainder of Chris's life; but in all likelihood, it is not a life any of us would choose for our children. This bleak future resulted despite his significant mental capacity, despite teachers who cared and despite a parent who wanted him to be successful but was not equipped to help. This tragedy is played out every day across Kentucky.

The facts are clear: the current single form of education is failing a large percentage of our children. Nowhere is the deficiency more acute than in Jefferson County. With 32,000 out of the 100,000 current students dropping out into a difficult and often dependent life, it is past time to add a new form of education to meet the needs of at-risk children. These children and their parents need a choice.

An astoundingly successful form of education eliminating the great divide is public charter schools. One visit to Tindley School in Indianapolis will convince anyone that poverty and education failure is not destiny for children with large gaps in their lives. Tindley is a public charter school located in the middle of a neighborhood previously having a 24% graduation rate. Students enter Tindley in the sixth grade typically three years behind academically. By eighth grade the achievement divide is eliminated, and by graduation their achievement scores actually surpass the public school average and rival those of elite public schools. It is a different form of education with a longer school day, a longer school week, and a longer school year, along with broadening the students' context of life; but students and parents are choosing it! The school also eliminates physical obstacles with medical care, clothing, three meals per day, and help with homework.

Outstanding educational achievements for at-risk students at Success Academy in Harlem, KIPP schools in Nashville, Tindley School in Indianapolis and in thousands of innovative public charter schools in 42 states across the country are shouting out to Kentucky.

Shouldn't the thousands of at-risk children in Kentucky's schools have the opportunity to at least choose an education fully addressing their needs? Isn't educating all children our moral responsibility? Doesn't our future depend on education as the necessary ingredient to grow our state's economy and create high paying jobs of the future?

I believe so. The time for public charter schools in Kentucky is now.

—Hal Heiner

Chairman, Kentuckians Advocating Reform in Education (KARE)

Raising the Educational Bar

More than two decades ago, Kentucky's leaders set a new trajectory for K-12. The Kentucky Education Reform Act of 1990 transformed not only the funding and educational systems, but it refocused our values on the state's most important natural resource – our children.

Kentucky has moved from a bottom dweller on state-by-state rankings of many education measures to the middle of the pack. We haven't reached our ultimate goal, but it's proof that by raising the bar on our expectations, commitment, and resources, Kentucky and its children will excel.

Today, in a more globally-connected economy, we are taking a similar approach to aim higher but this time focused on a new goal – increased educational attainment. The new "bar" isn't set at the end of high school, but seeks to make major strides on another crucial measure of success – the number of working-age adults with college degrees. That's important because study after study shows a college degree is the ticket to a good job, a bigger paycheck, and greater quality of life.

The stakes are high. Kentucky must increase the pool of college graduates to compete with other states – and other countries – for economic investment and good-paying jobs. If we fail this test, we risk losing companies, economic investment, and the jobs that fuel local economies across the Commonwealth.

With this end goal in mind, we have refocused public education to ensure all school children are prepared for college and careers, with many more high school graduates continuing on to complete college degrees.

Kentucky took a giant step toward this higher bar with the bold decision to be the first state in the nation to adopt new, tougher Common Core standards for educational attainment in K-12 – to teach skills needed for 21st century jobs and to measure our progress in a global marketplace.

As a member of the Kentucky Board of Education, I'm proud that Education Commissioner Terry Holliday and educators across the Commonwealth have embraced the new approach, the greatest change in K-12 education since KERA.

The results of the first round of the more rigorous Common Core tests provided a crucial baseline that we need to measure our progress. The numbers are sobering: a large majority of our schools and districts need improvement to help all children become college and career ready.

In the classroom, we will see a more intense focus on writing and critical-thinking skills and less on memorization and repetition. Our children will increasingly tackle homework assignments that answer the question, "When am I ever going to need to know that?" because classwork will relate more directly to the workplace.

While we are making strides in college preparation, Kentucky is also working hard to raise our grade on another crucial measure – college graduation. That's the greatest focus of my time and effort as I lead a movement in Louisville called 55,000 Degrees. Our goal is the same as our name: increase the number of working-age adults in Louisville with college degrees by 55,000 by the year 2020.

The movement was launched two years ago by then-Mayor of Louisville Jerry Abramson and a team of education, business, and civic leaders. Everyone around the table – university and college presidents, superintendents and educators, CEOs and civic leaders –understood the price of standing still in a world of increasing global competition for talent.

In our first two years, we've made great strides by pulling together the team under now-Mayor Greg Fischer and embracing the audacious challenge of moving the percentage of Louisvillians with college degrees from one-third to one-half in just a decade.

Collectively, we're working with middle and high schools to inspire students to raise their own expectations and set a course for college. We're educating students and parents about the path to a college degree – taking qualifying tests, applying to schools, seeking financial aid and preparing for the rigors of college.

Our partnership is working to overcome the most common reasons people give for not pursuing college – "I can't afford it" – by showing them ways they can and why they can't afford not to get a college degree. Even after subtracting the costs of college loans, the average lifetime earnings of a person with a bachelor's degree is about $1 million greater than someone with only a high school diploma.

As I talk with educators and leaders across Kentucky, it is clear people in many communities are coming together to foster higher educational attainment. These growing collaborations– a common mission across the Commonwealth – will produce success for Kentucky and its children.

—Mary Gwen Wheeler
Executive Director, 55,000 Degrees
Member, Kentucky Board of Education

Creating the School of Tomorrow Today

Never before in education have our schools been faced with more demands and change than right now. We have the pressures of tightening budgets, higher standards, preparing for a global marketplace, equipping students with fundamental Next Generation Skills, and ensuring that all are college or career ready. However, never before has there been a more collaborative commitment from teachers to parents to college professors — everyone is stepping up, and the final result will be a historic milestone for education in Kentucky.

At Eminence Independent Schools, approximately 70 percent of our students are on Free or Reduced-Price Lunch, and more than 85 percent of our students are from families that have no college graduates in their household. We had classrooms where the instruction looked much as it had for the past 50 years. Despite these barriers, we achieved terrific state assessment test results. However, our students were not experiencing increased college or career readiness. We knew something had to change.... This need for change was the driving force behind the birth of our School on F.I.R.E. (Framework of Innovation for Reinventing Education) model. The foundation for the model is based on the Council for Chief State School Officers' six principles of innovation: are anytime, anywhere learning; personalized learning; comprehensive systems of support; world-class knowledge and skills; student agency; and performance-based learning.

The goal of the School on FIRE model is to systemically create complete Next Generation students that are college or career ready, equipped not only with mastery of the Common Core Standards, but with skills such as creativity, collaboration, critical thinking, and communication. To accomplish this we must embed authentic engagement with the content where students become co-participants in their learning.

For instance, instead of third grade students writing a book report for their teacher, they may have their own blog. Instead of classes being spent on rote busy work, teachers employ "flipped classrooms," where basic skills are achieved independently and class time is used for analysis and applications. Students are no longer bound to group projects with their own classmates, but have group members from other countries, backgrounds, and languages via the World Wide Web. Lessons no longer revolve around a lecture, but are fully interactive experiences with every student having a personal computer for backchanneling; collaborative real-time, cloud-based note taking/discussions; Skype; social media incorporation; product creation; and workplace problem solving, to name a few. Classes are no longer defined by time in a seat, but by mastery of the content. Students are no longer limited by the time constraints of their class schedule, but by their readiness for the material. Learning occurs anytime, anywhere, even on Wi-Fi equipped buses.

The School on FIRE model was made possible in large part by the courageous leadership of Bellarmine University. Bellarmine and Eminence have formed a historic partnership entitled the "BE Ready" Initiative in which, for the first time in Kentucky's history, any high school student meeting the College ACT Benchmarks in English, Reading, and Mathematics will be allowed to start attending college as a full-time student and earning college credits without charge. Participating students attend Eminence High School on Mondays, Wednesdays, and Fridays for their core high school classes while attending Bellarmine on Tuesdays and Thursdays. After two years of this schedule, Eminence students can graduate high school as sophomores in college. Students from Eminence have all the privileges and benefits of any other Bellarmine student, from the food court to the exercise facilities, and most importantly, the Pioneer Program serving first-generation college students. Bellarmine has truly taken a major first step in creating the school of tomorrow today! What better way for a group of high school students to become ready for college than to be able to attend one of the most rigorous, well-respected universities in the state combined with the support structures of their own high school as well?

I truly believe as Walt Disney so eloquently stated, "The era we are living in today is a dream of coming true." Thanks to the efforts and leadership of forward thinking educators, funders, and academic institutions, our students are destined to fulfill their dream of becoming college or career ready and equipped with the skills to lead us into a next generation of success.

—Buddy Berry

Superintendent, Eminence Independent Schools

Working Toward Educational Equity

My journey began in 1953 when I was born in the colored wing of a hospital. I can only imagine the humiliation that my parents must have experienced on that hot August day. Things were presumed separate, but equal.

In 1966, America experienced a major policy change to its education system – schools were court ordered to end the practice of racial desegregation. Racial inequity had been the norm. In pursuit of the American dream, my parents, who were graduates of the local colored high school, had greater hopes for their children's education.

At the innocent age of 13, I was among the very few chosen to desegregate the local junior high school, but I was not received with open arms. The school's policy change was significant, but it was made reluctantly. The system chose not to track data by race as it related to graduation rates, school suspensions, or even student achievement. I had been afforded the opportunity, but equitable outcomes were not of importance to policymakers in the 1960s.

Forty-six years later, education data continues to reflect the lasting impact that our nation's history of racial discrimination and disenfranchisement has had on families of color. We see persistent, significant gaps in educational achievement and high school graduation rates for youth of color. As a community we can no longer afford to be passive in the presence of such disparities. Truthfully, we have not been able to afford it all along, and we have suffered from it. We must challenge policymakers to take intentional steps toward ensuring all students, including children of color and those from low-income families, graduate from high school ready for college or a career.

Not only do we have a moral obligation to provide all children with an adequate and equitable education, the economic effect of not improving educational outcomes and preventing high school dropout is more than we can afford to bear. We need ALL of our young people positioned to become the kind of productive citizens we need to keep our country strong. It would be wonderful if race did not matter, but when data show such disparities among children, it clearly does, and we must engage in courageous, honest conversations about it.

Let's all make a commitment to having difficult conversations about the factors contributing to the disparities, and how to work together to improve them. Youth are an integral voice in those conversations. We must treat them as our customers and take their comments seriously – they know what they need, they just might not know how to get it.

— Marion Gibson

Co-chair, Fayette County Race, Community & Child Welfare Initiative
Area Agent, Strengthening KY Families Program,
Cooperative Extension Program, Kentucky State University

Education Reform: Beyond the Buzz Word

When looking at the big picture of reforming education, one question emerges immediately: What issues do we tackle if we want to become more engaged in driving positive changes? I believe the answer has to be: Any issue that has an impact on educational excellence. "Education reform" must include making changes throughout the system - not on just one or two issues. Here are some of the many topics at the forefront of debates on how to improve our education system.

- ***Student Achievement:*** *It is 2012 and yet we still see significant achievement gaps between student groups. What strategies do we pursue to change that? For example, could high-quality preschool for all students eliminate these gaps in the future?*
- ***Curriculum and Standards:*** *What should we be teaching our kids? At last count, 45 states (including Kentucky) have adopted the Common Core Standards; defining the knowledge and skills all students need to graduate high school ready for college or workforce training programs. Will these consistent standards succeed in improved teaching and learning?*
- ***Accountability and Testing:*** *How do we measure student progress? How much should we test students? Should standardized testing be used to hold teachers accountable? Are teachers teaching to the test, and is that good or bad?*
- ***Teachers:*** *How should teachers be evaluated? Should teacher pay be linked to student performance? Are salaries and benefits too low or too high? Is tenure good or bad?*
- ***Factors Outside the Classroom:*** *What role should schools play in addressing societal problems, such as poverty, to ensure all students receive a high-quality education? How important is the role of the parent/guardian in the school and what should that look like? Are extracurricular activities important?*
- ***School Choice:*** *Charters, vouchers, private schools, magnet schools, home schools, digital schools, schools of innovation....Does increased choice make a positive difference for student performance?*
- ***Funding:*** *Is current funding for schools adequate? Are funding formulas equitable? What proportion of school funding should come from the state versus the county? Are citizens willing to pay more taxes to support local schools?*
- ***Governance and Leadership:*** *Do we need site-based decision-making councils, boards of education, and state departments of education? Or are there other governance structures that would work better?*

Many people hold such strong opinions on these issues that there is limited, or no opportunity for a civil discussion. Too much energy is being spent on the disagreement - and not enough on the effort to find common ground. Having a meaningful impact on improving education means we must come together to find answers to these questions. It's time for adults to focus their shared energies on progress that will benefit our kids.

—Stu Silberman

Executive Director, Prichard Committee for Academic Excellence

EDUCATION

Births to Mothers with No High School Degree

Definition

Births to mothers with no high school degree is the percent of total births to women with less than a high school diploma.

Data in context

Children do better with a strong start in life as part of a stable family. The educational attainment of the mother can impact not only birth outcomes but also later childhood outcomes. Higher maternal education has been linked to improved birth weight and lower infant mortality.[1] Parental educational attainment is also associated with a child's school readiness skills, academic achievement, and positive health outcomes.[2]

In Kentucky from 2007 to 2009, one in five births (20.6 percent) were to mothers without a high school degree, down from 22 percent from 2004 to 2006.

More than half of all births to mothers without a high school degree in Kentucky were among mothers ages 20 to 29, largely because of the higher birth rate among women of that age group. Of births to women ages 19 and younger, 54 percent were to mothers without a high school diploma or equivalent.[3] Nationally, women who gave birth as teens were less likely to earn a high school diploma or equivalent degree by age 22 (66 percent, compared to 94 percent of women who were not teen mothers).[4]

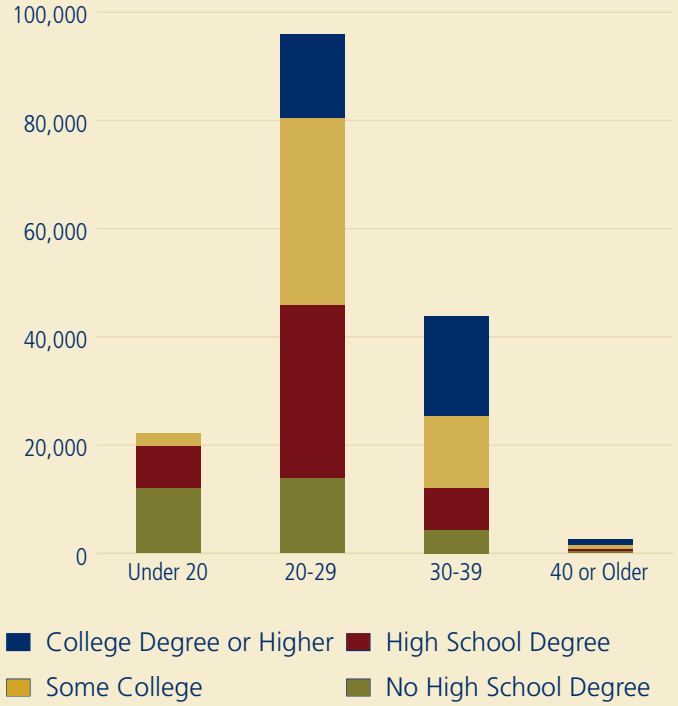
In Kentucky, births to White mothers accounted for 73 percent of all births to mothers without a high school degree.[5] Yet, unequal opportunities in the education system and a lack of community protective factors result in different rates by race: 1 in 4 Black mothers and more than 1 in 2 Hispanic mothers lacked a high school degree or equivalent when they gave birth from 2007 to 2009, compared to approximately 1 in 6 White mothers.[6]

County rates of births to women without a high school degree vary substantially, ranging from approximately 1 in 10 births in Oldham and Spencer Counties to more than 1 in every 3 births in Casey, Clay, Hart, Knox, Lee, Magoffin, Martin, and Todd Counties. Most Kentucky counties (92 of 120) showed improvement in their rates between the 2004-2006 and 2007-2009 time periods, with Lawrence and Lewis Counties showing the greatest improvement in rates.

Strategies to increase the education level of parents must begin early by helping young people graduate from high school. Programs that combine a package of services, such as remedial education, vocational training, and day care services, as well as programs that provide financial incentives for teen mothers to return or stay in school, have shown success at preventing dropout and increasing completion rates.[7] Effective implementation of the chosen program proved to be the key factor in achieving success.[8] Children born to teen mothers would also benefit from intervention; a study found that children of parents who had dropped out of high school that participated in preschool showed higher high school completion at age 28.[9]

An opportunity also exists with older mothers. Two out of every three births to mothers without a high school degree were to women age 20 or older. Research suggests that mothers without a high school degree who increase their education levels can increase the language skills of their young children.[10]

Births by Mother's Education Level and Age, 2007-2009



Source: *Kentucky Cabinet for Health and Family Services, Vital Statistics Branch, processed by the Kentucky State Data Center at the University of Louisville.*

Data Source: Kentucky Cabinet for Health and Family Services, Vital Statistics Branch, processed by the Kentucky State Data Center at the University of Louisville.
Data Notes: All data are based on the mother's county of residence. Births to mothers with a GED are counted with those who have completed high school. For cases where the information for this variable was missing, the case was excluded from the total number of live births.
Rate calculation: (number of births to women who are not high school graduates between 2004-2006 * 100) / (total number of live births between 2004-2006)
(number of births to women who are not high school graduates between 2007-2009 * 100) / (total number of live births between 2007-2009)

Births to Mothers with No High School Degree

(number & percent of all births)

	2004–2006		2007–2009	
	Number	Percent	Number	Percent
Kentucky	**37,122**	**22.0**	**34,892**	**20.6**
Adair	153	24.3	143	22.0
Allen	169	24.5	195	25.3
Anderson	110	14.4	115	13.7
Ballard	42	16.7	39	14.0
Barren	410	25.4	430	25.8
Bath	143	30.2	137	26.3
Bell	330	29.2	321	28.1
Boone	651	13.1	608	13.5
Bourbon	168	22.3	188	25.3
Boyd	401	22.3	287	18.0
Boyle	209	22.0	176	19.0
Bracken	76	21.2	62	17.5
Breathitt	161	28.5	173	31.3
Breckinridge	198	26.9	173	25.1
Bullitt	334	14.9	296	13.2
Butler	109	21.9	120	23.2
Caldwell	84	20.6	81	18.0
Calloway	127	12.1	137	11.6
Campbell	670	19.4	510	18.2
Carlisle	39	20.5	37	20.1
Carroll	159	35.7	156	29.7
Carter	276	25.1	192	19.9
Casey	207	37.2	198	33.8
Christian	827	20.0	822	17.6
Clark	339	25.1	292	21.3
Clay	337	40.0	323	38.6
Clinton	121	32.1	133	31.4
Crittenden	96	29.7	106	30.1
Cumberland	74	30.3	63	26.0
Daviess	666	16.8	654	16.1
Edmonson	52	14.5	53	15.0
Elliott	83	34.0	66	29.9
Estill	169	29.2	146	26.5
Fayette	2,435	20.8	2,358	19.6
Fleming	156	27.8	154	25.9
Floyd	514	30.6	493	29.7
Franklin	354	18.8	316	17.0
Fulton	66	25.9	55	20.6
Gallatin	137	30.7	107	28.8
Garrard	103	19.7	119	20.0
Grant	274	22.3	232	20.2
Graves	439	31.0	426	27.8
Grayson	235	23.8	222	21.6
Green	59	15.9	68	18.3
Greenup	291	23.3	176	16.2
Hancock	63	18.5	44	13.3
Hardin	666	14.1	586	12.3
Harlan	418	35.2	379	31.5
Harrison	151	22.4	159	21.7
Hart	274	38.5	299	40.1
Henderson	505	27.5	360	20.3
Henry	132	22.3	116	20.0
Hickman	27	19.7	35	23.3
Hopkins	440	24.3	400	21.8
Jackson	174	31.9	136	27.4
Jefferson	5,763	19.3	6,075	19.5
Jessamine	401	20.6	375	18.1
Johnson	253	27.7	252	29.2
Kenton	1,415	19.9	1,290	20.2
Knott	188	33.7	195	32.4
Knox	579	36.4	460	34.0
LaRue	108	21.6	94	19.3
Laurel	672	29.6	619	27.1
Lawrence	228	36.1	148	25.1
Lee	79	33.9	82	37.3
Leslie	142	32.8	153	31.0
Letcher	274	28.1	210	25.2
Lewis	236	42.0	76	21.2
Lincoln	288	27.0	276	27.1
Livingston	63	20.4	57	18.6
Logan	263	24.4	244	23.1
Lyon	28	15.4	34	17.3
McCracken	459	18.7	422	18.2
McCreary	209	29.1	151	23.0
McLean	80	22.2	62	18.3
Madison	564	18.0	509	16.7
Magoffin	204	35.8	171	34.1
Marion	163	21.1	164	19.7
Marshall	163	17.3	175	17.4
Martin	207	42.9	161	37.8
Mason	173	25.4	149	21.5
Meade	141	18.7	129	15.9
Menifee	64	29.0	59	28.1
Mercer	147	18.8	135	16.5
Metcalfe	117	29.3	112	28.0
Monroe	116	26.1	112	27.1
Montgomery	259	23.6	266	22.8
Morgan	128	26.8	105	22.1
Muhlenberg	270	23.3	221	22.1
Nelson	236	13.4	223	12.6
Nicholas	67	23.7	61	21.1
Ohio	249	23.7	269	28.1
Oldham	183	11.2	173	10.6
Owen	78	19.4	72	20.5
Owsley	58	31.5	45	27.8
Pendleton	108	20.0	89	17.1
Perry	358	30.4	333	26.8
Pike	624	27.1	497	22.1
Powell	183	31.0	154	29.2
Pulaski	489	21.4	528	22.4
Robertson	19	29.7	22	27.8
Rockcastle	140	23.1	119	21.3
Rowan	119	15.6	159	18.8
Russell	189	31.3	208	31.2
Scott	352	18.2	283	14.1
Shelby	518	30.8	504	27.8
Simpson	136	22.0	130	19.1
Spencer	69	12.3	63	10.3
Taylor	168	19.4	194	20.3
Todd	188	34.1	218	39.6
Trigg	81	18.8	86	19.0
Trimble	94	29.3	75	22.6
Union	138	25.6	110	21.2
Warren	801	19.3	757	17.6
Washington	62	15.4	53	13.8
Wayne	243	32.8	207	27.7
Webster	180	31.9	163	30.8
Whitley	380	29.9	413	26.1
Wolfe	115	32.7	87	27.2
Woodford	150	18.2	182	21.3

Child Care Providers

Definition

Regulated providers is the total number of licensed centers, licensed homes, and certified homes. Regulated capacity is the total number of spaces available for children at these regulated providers. *STAR-rated providers* is the number of licensed centers, licensed homes, and certified homes participating in Kentucky's voluntary Quality Rating System.

Data in context

All children in their early years need stimulating environments conducive to learning and healthy development. Child care allows parents to work or attend school while children learn and interact with others. Quality child care can also support the rapidly developing architecture of the human brain during the early years of life. One study concluded that a cohort of children that received high-quality care in their early years scored higher in areas of academic and cognitive achievement at the age of 15 compared to children that received low-quality care.[1]

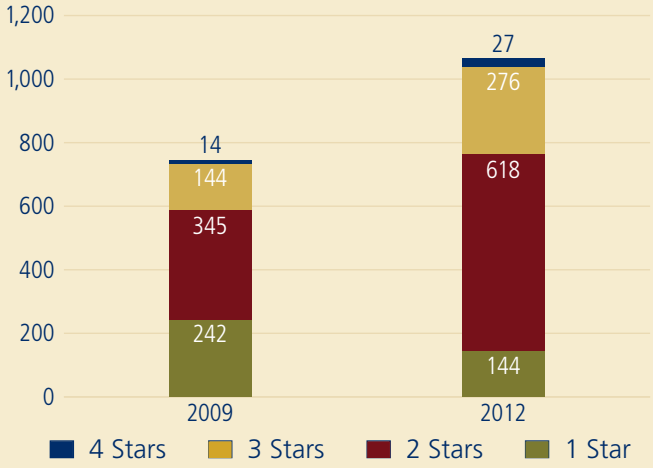
In Kentucky, licensed providers, which care for 13 or more children in a residential setting or 4 or more children in a non-residential setting, represented 79 percent of regulated providers as of July 2012, as well as most of regulated child care capacity statewide (98 percent).[2] Certified homes, which care for 7 to 12 children in a home, are the second most common type of regulated provider and offer 2 percent of the regulated capacity statewide.[3]

Child care providers participating in Kentucky's STARS for KIDS NOW voluntary Quality Rating System earn a rating of one to four stars based on components such as teacher-child ratios, curriculum, teacher training and regulatory compliance.[4] Participating providers are eligible for financial incentives, as well as technical assistance to continue increasing quality.[5] As of June 30, 2012, only twenty-seven providers received the highest rating (4 stars) statewide, serving 18 counties.[6] Statewide, 1,065 regulated child care providers were STAR-rated, serving all but seven of Kentucky's 120 counties. The majority of STAR-rated providers (87 percent) were licensed centers.[7]

Nationally, nearly 11 million children from birth through age 4 are in some type of child care arrangement each week while their mother works.[8] Nearly one-third of those children rely on multiple care arrangements to meet the need for child care while their parent(s) work.[9] Parents often turn to relatives, neighbors, and friends for child care needs due to affordability and convenience. Family-based caregivers served a critical role for an estimated 87,000 Kentucky children in 2007 (25 percent of all children under age 6 in child care).[10] Relatives, friends and neighbors (usually not regulated providers themselves) also need support in providing high-quality care. Studies have shown the use of home visiting programs with these types of caregivers leads to improvements in the caregiver's knowledge of child development, their care-giving skills and discipline practices, and the relationships between caregivers and parents.[11]

Kentucky has made progress in making high-quality care a priority through the statewide Quality Rating System, but with less than half of regulated child care providers participating in STARS, there is still much work to be done. Boosting participation rates in STARS requires a two-pronged approach: heightening incentives for providers and increasing the demand for high quality care by educating parents on the benefits. Providing additional incentives such as tax credits, materials, and scholarships for professional development opportunities could encourage more providers to participate or seek more stars.[12] Strategies to familiarize and recruit parents to use STARS providers are most effective when they are sustained and provided through multiple channels, including websites and online media, mailings, pediatricians' offices, parent networks, and radio and television advertising (including non-English language media.[13] Another innovative way of educating parents on the STARS program is to publicize it on the tax form parents complete to receive the Child and Dependent Care Tax Credit, such as Maine does for the tax form parents complete for using high-quality care.[14]

Regulated Child Care Providers Participating in STARS by Rating, 2009 and 2012



Source: *Kentucky Cabinet for Health and Family Services, Division of Child Care.*

Data Sources: Number of providers and capacity data from University of Kentucky, Child Care Aware of Kentucky. STARS data from Kentucky Cabinet for Health and Family Services, Division of Child Care.
Data Notes: Number of providers and capacity reports July 2012 data. Capacity data is rounded to the nearest ten. STARS participation data reflect participation as of June 29, 2012.

Regulated Providers (number & capacity) and STAR-rated Providers

	July 2012		June 2012
	Number of regulated providers	Regulated capacity (number of children)	STAR-rated providers
Kentucky	**2,815**	**182,350**	**1,065**
Adair	6	430	6
Allen	6	280	4
Anderson	16	1,010	5
Ballard	4	220	4
Barren	24	1,580	11
Bath	5	320	3
Bell	14	660	4
Boone	75	7,050	31
Bourbon	17	1,300	7
Boyd	22	1,610	4
Boyle	16	920	9
Bracken	4	160	0
Breathitt	3	130	3
Breckinridge	8	390	2
Bullitt	45	3,390	18
Butler	5	130	4
Caldwell	6	260	4
Calloway	24	1,920	15
Campbell	65	3,950	36
Carlisle	2	30	0
Carroll	1	120	0
Carter	7	350	2
Casey	7	330	7
Christian	69	2,770	39
Clark	27	2,240	17
Clay	5	300	2
Clinton	9	230	4
Crittenden	9	430	4
Cumberland	7	200	3
Daviess	64	5,250	26
Edmonson	3	160	2
Elliott	3	90	3
Estill	3	200	1
Fayette	226	19,060	65
Fleming	8	370	3
Floyd	12	420	2
Franklin	36	3,490	17
Fulton	5	160	3
Gallatin	6	200	1
Garrard	7	350	3
Grant	16	610	4
Graves	19	1,290	12
Grayson	13	910	3
Green	6	140	3
Greenup	19	1,030	8
Hancock	3	160	2
Hardin	85	5,340	19
Harlan	8	260	4
Harrison	10	490	9
Hart	2	90	2
Henderson	23	1,650	17
Henry	15	710	6
Hickman	3	100	3
Hopkins	26	1,410	12
Jackson	4	40	2
Jefferson	718	46,710	141
Jessamine	30	2,520	11
Johnson	12	650	7
Kenton	138	8,660	73
Knott	9	320	8

	July 2012		June 2012
	Number of regulated providers	Regulated capacity (number of children)	STAR-rated providers
Knox	35	1,340	16
LaRue	10	630	5
Laurel	18	740	11
Lawrence	3	170	2
Lee	3	180	2
Leslie	6	200	3
Letcher	9	370	8
Lewis	8	250	0
Lincoln	6	140	2
Livingston	2	50	0
Logan	7	360	3
Lyon	2	70	1
McCracken	39	3,220	19
McCreary	6	230	5
McLean	3	150	2
Madison	37	3,190	15
Magoffin	4	100	2
Marion	12	760	6
Marshall	11	620	10
Martin	2	70	2
Mason	9	550	2
Meade	18	610	1
Menifee	2	100	2
Mercer	9	690	3
Metcalfe	2	130	2
Monroe	11	200	9
Montgomery	12	960	10
Morgan	9	200	6
Muhlenberg	8	550	1
Nelson	25	2,210	14
Nicholas	2	90	0
Ohio	8	330	1
Oldham	37	4,030	16
Owen	2	100	1
Owsley	2	170	1
Pendelton	12	370	4
Perry	12	760	8
Pike	12	840	5
Powell	10	360	0
Pulaski	46	2,440	20
Robertson	1	50	1
Rockcastle	6	210	5
Rowan	14	750	4
Russell	15	520	10
Scott	38	3,600	9
Shelby	36	1,860	12
Simpson	8	630	2
Spencer	7	560	2
Taylor	12	640	7
Todd	4	180	3
Trigg	6	360	6
Trimble	4	90	2
Union	10	470	6
Warren	59	4,860	15
Washington	11	460	5
Wayne	20	400	10
Webster	5	50	1
Whitley	23	970	12
Wolfe	6	160	3
Woodford	19	1,450	10

Child Care Subsidies

Definition

Child care subsidies is the number of children whose families receive financial assistance for child care by type of provider. *Licensed centers, licensed homes*, and *certified homes* are regulated by the state, while *registered providers* are not subject to licensing regulations but must meet requirements of the Child Care Assistance Program (CCAP).

Data in context

Every child benefits from quality care, especially in their formative early years. Child care subsidies allow low-income parents to work while ensuring their children are cared for and educated in a safe environment. Parents who use child care subsidies are more likely to maintain employment and successfully transition off of welfare.[1]

A significant proportion of a family's budget is dedicated to child care, with low-income families carrying a disproportionate burden based on their annual income.[2] In Kentucky, the annual cost of care for two children is 69 percent more than the annual cost for rent.[3] The annual cost for an infant in a full-time child care center is nearly as much as tuition at a Kentucky public college.[4] Annual fees for center-based child care in Kentucky in 2011 averaged $5,766 for a 4-year-old and $6,594 for an infant.[5] Subsidies help low-income families access higher quality care than they could otherwise afford.[6] During federal fiscal year (FFY) 2010, 73 percent of Kentucky families receiving subsidies paid a co-pay, spending on average 7 percent of their family income.[7]

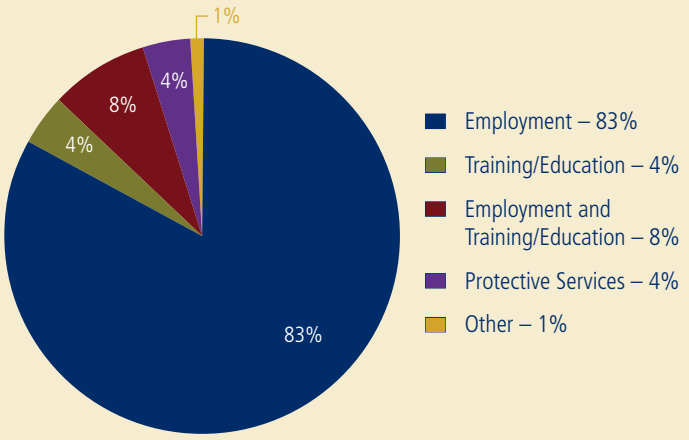
Nationally, child care subsidies served an average of almost 1.7 million children each month during FFY 2010, with the majority of children served at child care centers (66 percent).[8] Most families using child care subsidies received them to support employment (73 percent); other reasons for receiving subsidies include receiving training or education and families at risk of child abuse and neglect.[9]

In Kentucky, families can receive child care subsidies if income eligible, at risk of abuse or neglect, a teen parent attending school, parents are participating in the Kentucky Transitional Assistance Program (KTAP) or working and pursuing education, or providing foster care.[10] Child care subsidies are generally intended for children under the age of 13 but are also available for children up to age 18 with special needs.[11]

During FY 2012, approximately 75,000 Kentucky children received child care subsidies, a decrease of more than 3,000 from five years ago. Across the Commonwealth, child care subsidies are most frequently used for licensed child care centers (89 percent of children receiving subsidies), followed by registered providers (4 percent). Licensed centers, which have the largest capacity, served 100 percent of the children receiving child care subsidies in Caldwell, Crittenden, Edmonson, Knott, Lee, Lyon, and Metcalfe Counties.

Providing adequate reimbursement rates for child care providers can entice more providers to accept subsidies as a form of payment, thereby providing more choice for low-income parents who rely on subsidies to access quality care. Providing high-quality child care is not cheap, and inadequate reimbursement rates can negatively affect the quality of care provided due to insufficient resources. Kentucky has not raised its child care reimbursement rates for providers accepting subsidies since 2006. Kentucky's current reimbursement rates for providers serving families who use a subsidy are below the federally recommended level (the 75th percentile of current market rates).[12]

Reason for Receipt of Child Care Assistance From CCDBG Funds, FFY 2010



Source: *U.S. Department of Health and Human Services, Office of Child Care, FFY 2010 CCDF Data Tables.*

Data Source: Kentucky Cabinet for Health and Family Services, Division of Child Care.
Data Notes: If a child was cared for by both a licensed center and a licensed home during the fiscal year, he/she will be counted twice. Children may also appear in the count for more than one county, if they moved between counties during the fiscal year and received child care subsidies in each location.

Children Receiving Child Care Subsidies

(number of children by provider type)

FY 2012

	Licensed centers	Licensed homes	Certified homes	Registered providers	Total
Kentucky	**67,255**	**1,003**	**4,095**	**3,374**	**75,727**
Adair	302	0	18	0	320
Allen	83	2	0	0	85
Anderson	142	8	6	18	174
Ballard	35	0	5	4	44
Barren	497	0	2	8	507
Bath	185	0	0	5	190
Bell	215	0	25	11	251
Boone	1,653	0	68	27	1,748
Bourbon	338	0	1	31	370
Boyd	667	0	1	3	671
Boyle	297	0	47	54	398
Bracken	110	0	0	2	112
Breathitt	26	0	0	2	28
Breckinridge	73	0	1	5	79
Bullitt	1,194	25	35	34	1,288
Butler	79	9	0	0	88
Caldwell	72	0	0	0	72
Calloway	576	0	0	18	594
Campbell	1,377	0	76	31	1,484
Carlisle	8	2	0	3	13
Carroll	0	0	0	0	0
Carter	150	0	16	10	176
Casey	123	0	0	2	125
Christian	1,412	22	220	178	1,832
Clark	776	0	9	26	811
Clay	29	0	0	6	35
Clinton	82	0	14	0	96
Crittenden	40	0	0	0	40
Cumberland	86	6	2	6	100
Daviess	1,832	2	2	43	1,879
Edmonson	82	0	0	0	82
Elliott	4	0	0	3	7
Estill	214	0	0	17	231
Fayette	6,606	141	295	291	7,333
Fleming	75	27	4	5	111
Floyd	125	16	0	9	150
Franklin	1,096	0	24	70	1,190
Fulton	58	0	0	15	73
Gallatin	183	0	0	5	188
Garrard	192	0	2	8	202
Grant	466	0	28	2	496
Graves	611	0	2	27	640
Grayson	312	0	0	4	316
Green	89	7	7	4	107
Greenup	296	0	1	5	302
Hancock	0	0	2	1	3
Hardin	2,161	28	88	127	2,404
Harlan	152	29	5	12	198
Harrison	178	0	1	11	190
Hart	76	0	0	6	82
Henderson	605	2	0	15	622
Henry	178	10	3	10	201
Hickman	8	0	0	6	14
Hopkins	641	2	0	37	680
Jackson	17	2	9	1	29
Jefferson	19,088	202	2,010	1,248	22,548
Jessamine	1,097	11	21	53	1,182
Johnson	228	0	0	5	233
Kenton	3,152	14	431	101	3,698
Knott	24	0	0	0	24

FY 2012

	Licensed centers	Licensed homes	Certified homes	Registered providers	Total
Knox	972	45	34	20	1,071
LaRue	255	6	6	6	273
Laurel	354	33	18	16	421
Lawrence	63	0	0	5	68
Lee	79	0	0	0	79
Leslie	8	0	0	1	9
Letcher	67	0	0	2	69
Lewis	61	6	8	1	76
Lincoln	14	0	12	46	72
Livingston	35	0	5	4	44
Logan	221	0	6	17	244
Lyon	23	0	0	0	23
McCracken	1,326	0	14	82	1,422
McCreary	157	0	0	17	174
McLean	4	0	3	6	13
Madison	1,524	3	0	81	1,608
Magoffin	42	0	9	8	59
Marion	334	0	0	2	336
Marshall	287	0	4	1	292
Martin	3	0	0	2	5
Mason	278	2	25	40	345
Meade	248	6	16	5	275
Menifee	0	0	0	1	1
Mercer	284	0	2	25	311
Metcalfe	104	0	0	0	104
Monroe	48	16	10	1	75
Montgomery	429	0	6	21	456
Morgan	30	0	19	2	51
Muhlenberg	261	0	0	4	265
Nelson	567	0	5	20	592
Nicholas	64	0	0	11	75
Ohio	272	0	15	10	297
Oldham	444	0	3	21	468
Owen	17	0	0	3	20
Owsley	0	0	17	0	17
Pendleton	115	9	17	3	144
Perry	286	0	7	7	300
Pike	507	0	0	8	515
Powell	140	4	8	9	161
Pulaski	1,124	59	102	24	1,309
Robertson	0	0	0	2	2
Rockcastle	83	13	8	8	112
Rowan	410	23	0	9	442
Russell	355	47	10	3	415
Scott	820	13	22	37	892
Shelby	563	1	57	14	635
Simpson	179	21	0	2	202
Spencer	110	0	0	3	113
Taylor	379	22	2	5	408
Todd	158	27	0	8	193
Trigg	81	8	0	1	90
Trimble	0	0	22	0	22
Union	149	0	2	7	158
Warren	1,386	8	8	22	1,424
Washington	100	5	7	17	129
Wayne	276	9	9	13	307
Webster	13	4	3	11	31
Whitley	301	44	59	25	429
Wolfe	0	0	30	10	40
Woodford	372	2	4	20	398

Preschool

Definition

At risk is all participating 4-year-olds who meet income eligibility for the Kentucky Preschool Program. Disabled is all participating 3- and 4-year-olds who meet eligibility for the Kentucky Preschool Program due to developmental delay or disabilities. *Head Start* is participating 3- and 4-year-olds whose family income meets federal guidelines for poverty. Percent is the total number of children enrolled in these programs of all 3- and 4-year-olds.

Data in context

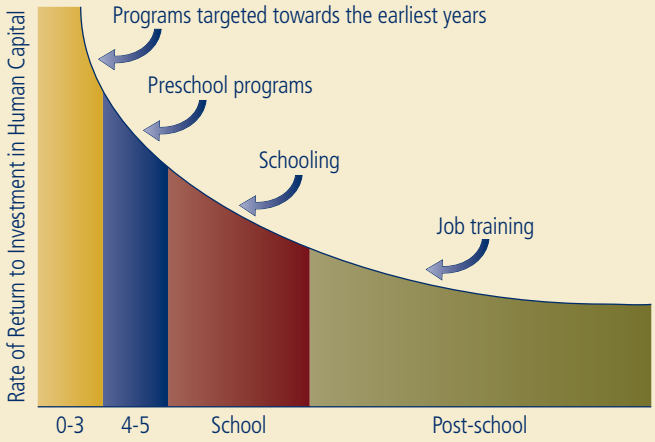
All children deserve to start school ready to succeed and on a level playing field with their peers, but differential experiences and environments during early childhood result in some children beginning at a disadvantage. High-quality early childhood education programs, including state- and federally-funded preschool programs, build a solid foundation for young children, preparing them for future learning. A comprehensive review of studies shows that for all children preschool programs result in significant positive short-term and moderate longer-term effects on children's cognitive development.[1] The effect on cognitive development among lower-income children is significant enough to close half, or more, of the achievement gap at school entry between them and their peers.[2]

Nationwide, 39 states offered state-funded public preschool programs in school year 2010-2011, serving 32 percent of 4-year-olds and 8 percent of 3-year-olds.[3] The Kentucky Preschool Program serves 3- and 4-year olds with developmental delays or disabilities, and 4-year old children in families with income below 150 percent of the federal poverty line (FPL). Kentucky's state-funded preschool program served 32 percent of all 4-year-olds in 2010-2011, and 7 percent of 3-year-olds.[4]

Created in 1965 to help break the cycle of poverty, the federal Head Start program serves more than one million children nationwide each year.[5] Head Start provides early childhood education, as well as health, nutrition, and social services, to low-income children and their families to promote school readiness.[6] Research shows participation in Head Start yields significant short-term improvements in children's cognitive, academic, and social-emotional development, as well as their health. Studies also suggest that Head Start yields long-term benefits into adolescence and early adulthood, including graduation from high school, decreased behavior problems and interactions with the justice system, and greater workforce attachment.[7] Kentucky uses its federal Head Start funding to serve as many 3- and 4-year old children in families with income below 150 percent FPL as possible, then using the state-funded preschool program to serve as many additional eligible 4-year olds as possible.

Kentucky's publically-funded preschool programs served 1,803 children with limited English proficiency (LEP) in December 2010.[8] Children with LEP face several risk factors that increase the potential benefits of preschool participation.

Early Childhood Education Yields Greatest Return on Investment



Source: *Professor James Heckman's "Schools, Skill, and Synapses"*

However, national research indicates children in immigrant families are less likely to participate in early childhood center-based and preschool programs, due to structural barriers like poverty and level of parental education, as well as language barriers.[9] Increasing access to quality early education for immigrant families through targeted outreach that eliminates language and informational barriers can help address the participation gap.[10]

In December 2011, Kentucky served 30.7 percent of all 3- and 4-year-olds through Head Start and the Kentucky Preschool Program. Fewer than 20 percent of children were served by public preschool in Boone, Hardin, and Meade Counties. Rates exceeded 70 percent in Ballard, Breathitt, Fulton, Hickman, Owsley and Robertson Counties.

Kentucky's preschool program meets 9 out of 10 benchmarks of quality recommended by the National Institute of Early Education Research, and would meet all 10 if assistant teachers were required to hold a Child Development Associate credential.[11] Kentucky can strengthen early childhood education by expanding access to all 3- and 4-year-olds in households with income below 200 percent of the federal poverty line. A 2009 study on the projected costs and benefits of taking this step concluded that for every dollar the state would invest in an expanded pre-K program, the total estimated return on investment would be more than five dollars.[12] Any additional appropriations for preschool programs should be made on the condition that recipients demonstrate collaboration and coordination with other early care providers, as increased collaboration among early childhood agencies is needed to maximize the benefits of public investments.[13]

Data Sources: Kentucky Department of Education and Governor's Office of Early Childhood. Number of children for rate calculation from the Kentucky State Data Center at the University of Louisville. Head Start enrollment numbers for Jackson and Owsley Counties provided by the grantees for those counties' programs.
Data Note: Data reflect enrollment on December 1, 2011.
Rate Calculation: (total number of students enrolled in publically-funded preschool * 100) / (estimated number of 3- and 4-year-olds)

Preschoolers in Publically-funded Preschools

(number & percent of all 3- & 4-year-olds)

December 2011

	At-risk	Disabled	Head Start	Percent
Kentucky	**11,637**	**9,523**	**14,274**	**30.7**
Adair	49	62	72	42.4
Allen	82	28	44	29.8
Anderson	66	95	38	34.0
Ballard	19	92	37	79.1
Barren	185	215	82	42.9
Bath	41	18	81	39.4
Bell	53	62	163	41.1
Boone	167	270	66	13.3
Bourbon	65	25	193	55.7
Boyd	34	73	320	37.0
Boyle	145	70	18	35.7
Bracken	19	47	18	32.1
Breathitt	68	129	60	74.1
Breckinridge	12	15	134	31.4
Bullitt	225	163	92	24.7
Butler	31	28	34	27.0
Caldwell	69	29	34	38.6
Calloway	122	75	112	39.7
Campbell	139	283	173	26.3
Carlisle	8	41	19	48.6
Carroll	26	21	105	49.4
Carter	62	49	143	36.4
Casey	44	19	67	34.3
Christian	268	117	282	23.3
Clark	49	95	153	33.1
Clay	43	59	192	52.8
Clinton	35	38	40	42.8
Crittenden	27	25	49	41.2
Cumberland	5	8	60	39.7
Daviess	434	309	383	40.7
Edmonson	34	77	32	52.6
Elliott	4	7	49	32.8
Estill	55	20	41	31.8
Fayette	612	351	703	21.9
Fleming	26	12	158	52.5
Floyd	14	33	233	28.3
Franklin	75	108	110	23.6
Fulton	23	37	54	70.4
Gallatin	48	13	16	31.4
Garrard	59	26	37	26.6
Grant	60	50	116	28.6
Graves	126	141	128	39.7
Grayson	61	101	158	48.0
Green	6	15	80	35.8
Greenup	32	46	166	29.0
Hancock	46	16	30	41.6
Hardin	302	260	60	19.6
Harlan	87	140	199	57.3
Harrison	31	28	153	42.8
Hart	46	70	40	32.7
Henderson	229	89	71	31.8
Henry	80	37	25	37.1
Hickman	11	48	25	73.7
Hopkins	182	115	194	39.7
Jackson	15	82	80	48.8
Jefferson	2,291	841	1,847	25.2
Jessamine	191	101	63	24.3
Johnson	1	15	148	30.7
Kenton	466	444	172	23.5
Knott	29	79	59	41.5

December 2011

	At-risk	Disabled	Head Start	Percent
Knox	82	114	320	56.8
LaRue	38	22	42	27.7
Laurel	56	153	200	27.1
Lawrence	63	54	36	34.7
Lee	0	0	80	54.1
Leslie	64	31	75	60.5
Letcher	26	60	164	41.5
Lewis	31	32	93	44.7
Lincoln	36	30	185	39.2
Livingston	29	31	37	41.1
Logan	72	179	10	38.3
Lyon	27	4	19	35.2
McCracken	108	82	307	31.5
McCreary	76	110	60	52.6
McLean	29	19	59	45.3
Madison	132	196	168	24.1
Magoffin	0	15	143	48.3
Marion	48	39	90	31.4
Marshall	71	49	63	28.0
Martin	5	10	124	47.4
Mason	49	80	151	57.4
Meade	73	55	33	17.5
Menifee	5	0	62	42.4
Mercer	58	66	40	33.3
Metcalfe	37	28	45	46.2
Monroe	53	26	40	46.3
Montgomery	83	41	97	29.2
Morgan	3	0	132	42.5
Muhlenberg	82	89	181	49.4
Nelson	134	99	100	27.6
Nicholas	27	4	73	57.8
Ohio	131	38	122	43.1
Oldham	85	147	72	21.0
Owen	43	25	30	34.8
Owsley Δ	5	7	90	109.7
Pendleton	23	67	17	29.4
Perry	107	94	124	45.5
Pike	15	38	501	35.4
Powell	28	51	105	51.0
Pulaski	221	136	132	31.7
Robertson	6	14	37	100.0
Rockcastle	60	18	59	31.1
Rowan	85	74	34	34.8
Russell	65	28	52	34.6
Scott	147	163	35	24.5
Shelby	176	67	59	26.4
Simpson	39	63	35	27.7
Spencer	60	30	15	21.7
Taylor	63	43	108	33.3
Todd	39	141	13	47.5
Trigg	33	35	50	39.5
Trimble	2	4	53	26.1
Union	69	29	105	49.6
Warren	356	280	102	25.4
Washington	18	26	61	36.7
Wayne	106	52	130	58.8
Webster	56	53	74	48.7
Whitley	111	72	177	40.4
Wolfe	0	0	108	49.1
Woodford	57	48	34	22.7

ΔPercent exceeds 100 due to deriving the calculation's denominator from an estimated population number.

School Attendance

Definition

Attendance is a school district's average daily attendance rate based on enrollment. *Chronic absenteeism* is the percent of students that missed 10 percent or more days of school in the school year.

Data in context

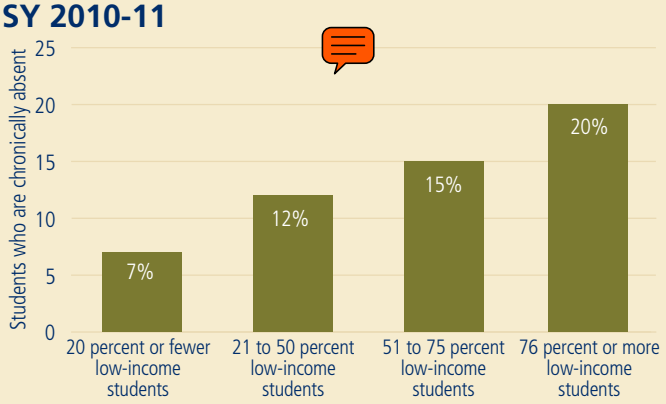
All students need to attend school regularly in order to learn and develop the skills they need to become successful adults. A growing body of research suggests that absenteeism is linked to lower academic achievement, especially in the early grades. In fact, one study indicates that even for children who enter kindergarten with strong skills that suggest success in third grade, chronic absenteeism in kindergarten and first grade nearly erases those gains.[1] Frequent absenteeism is also linked to poor outcomes in adolescence, such as involvement with the juvenile justice system,[2] and serves as an early warning sign for dropping out of school.[3]

While average daily attendance provides a collective measure of school attendance, chronic absenteeism more accurately measures the number of students at risk of struggling in school.[4] Still, chronic absenteeism tends to be overlooked and not widely reported across the nation, despite being associated with many negative outcomes.[5] A recent national report estimates that between 10 and 15 percent of pre-kindergarten through twelfth-grade students are chronically absent each school year.[6]

Students miss school for a variety of reasons that can often be explained within three categories: (1) students cannot attend due to illness, socioeconomic factors such as homelessness, or court involvement; (2) students will not attend due to fear of bullying, feeling unsafe going to and from school, harassment, or embarrassment; and (3) to a lesser extent, students do not attend because they or their families do not value education and make other things a priority.[7]

The reasons for missing school are often exacerbated by the pressures faced by students in low-income families,[8] contributing to disparities in attendance rates. Among 4th and 8th grade students, students eligible for free or reduced-price meals were chronically absent at rates of 22 and 23 percent, respectively, compared to 16 percent of higher-income students in each grade.[9] Higher rates of poverty among families of color impacts race disparities in attendance. In 2011 in the United States, the percentage of eighth graders who reported missing 3 or more days of school during the previous month was higher among American Indian, African-American, and Hispanic students compared to Asian and White students.[10] Furthermore, while attendance and academic success are important for all children, students living in low-income families stand to lose more when they are absent.[11]

Districts with High Rates of Low-Income Students Have Higher Chronic Absenteeism, SY 2010-11



Source: *Kentucky Department of Education, processed by Kentucky Youth Advocates.*

Data Note: *Low-income student percentage based on the number of students eligible for free or reduced-price meals.*

Kentucky uses school attendance to determine a school district's state funding.[12] In Kentucky, the average daily attendance rate was 94.1 percent. Average daily attendance in school districts ranged from 89.4 percent in Jenkins Independent and Magoffin County School Districts to 96.6 percent in Anchorage Independent and Fort Thomas Independent School Districts.

In school year 2011, 14.1 percent of Kentucky students were chronically absent from school. Chronic absenteeism ranged from 1.8 percent in [illegible]ell County to over 40 percent in Fairview Independent, Greenup County, Jessamine County and Raceland Independent School Districts.

Schools and communities can take steps to improve student attendance by using data, building a culture of attendance, and helping students address barriers to attendance. Schools can use real-time data on student absenteeism and should share the level of chronic absenteeism with the public through monthly reports. This allows staff to flag students in need of intervention, and enables the community to effectively target resources.[13] At the state level, policies involving attendance, student behavior, and academic performance need to be reviewed to ensure they are not counter-productive, such as using out-of-school suspension or even incarceration for students who miss school.[14,15] States have increasingly been turning to human service agencies to assist school districts in understanding and addressing the underlying factors that contribute to excessive student absences.[16]

Data Sources: Kentucky Department of Education website and their Office of Knowledge, Information & Data Services, Division of Enterprise Data.
Data Note: Independent school districts are listed after the school district for the county in which they are located.

School Attendance

(enrollment, average daily attendance & percent of students with chronic absenteeism)

	SY 2011-12 Student enrollment	SY 2010-11 Average daily attendance rate	SY 2010-11 Chronic absenteeism
Kentucky	**675,530**	**94.1**	**14.1**
Adair Co.	2,605	94.1	18.5
Allen Co.	3,075	94.2	12.5
Anderson Co.	3,844	93.8	13.9
Ballard Co.	1,364	95.2	7.6
Barren Co.	4,837	94.7	9.6
Caverna Ind.	765	92.9	16.2
Glasgow Ind.	2,012	94.5	12.2
Bath Co.	2,116	92.8	21.0
Bell Co.	2,998	92.8	20.7
Middlesboro Ind.	1,463	91.0	24.7
Pineville Ind.	568	91.7	27.4
Boone Co.	19,842	95.4	6.3
Walton Verona Ind.	1,574	96.2	5.7
Bourbon Co.	2,729	93.9	19.8
Paris Ind.	721	94.5	16.9
Boyd Co.	3,321	93.3	18.0
Ashland Ind.	3,256	94.3	11.9
Fairview Ind.	874	93.1	45.8
Boyle Co.	2,702	95.0	9.9
Danville Ind.	1,849	94.0	14.7
Bracken Co.	1,198	95.0	10.2
Augusta Ind.	304	93.9	16.4
Breathitt Co.	2,225	91.7	39.3
Jackson Ind.	410	93.2	22.2
Breckinridge Co.	2,801	94.4	9.0
Cloverport Ind.	363	94.8	14.2
Bullitt Co.	12,921	94.1	13.8
Butler Co.	2,152	94.3	11.9
Caldwell Co.	1,996	94.0	10.1
Calloway Co.	3,275	95.0	7.3
Murray Ind.	1,440	95.8	5.3
Campbell Co.	4,976	95.4	11.8
Bellevue Ind.	761	95.5	12.0
Dayton Ind.	902	94.1	19.4
Fort Thomas Ind.	2,755	96.6	3.6
Newport Ind.	1,809	93.6	14.7
Silver Grove Ind.	204	93.0	15.7
Southgate Ind.	204	95.1	14.0
Carlisle Co.	810	95.1	8.2
Carroll Co.	1,932	93.9	11.1
Carter Co.	4,726	92.0	19.7
Casey Co.	2,370	94.7	9.0
Christian Co.	9,815	94.6	15.0
Clark Co.	5,628	93.8	13.0
Clay Co.	3,448	89.9	29.7
Clinton Co.	1,765	92.5	7.7
Crittenden Co.	1,290	94.4	10.2
Cumberland Co.	1,032	93.1	18.0
Daviess Co.	11,113	95.7	8.7
Owensboro Ind.	4,445	95.4	10.8
Edmonson Co.	2,111	94.3	13.5
Elliott Co.	1,106	92.5	21.9
Estill Co.	2,526	93.4	29.8
Fayette Co.	38,858	93.7	15.3
Fleming Co.	2,379	93.9	20.9
Floyd Co.	6,279	93.7	13.3
Franklin Co.	6,197	94.2	12.9
Frankfort Ind.	783	93.4	18.5
Fulton Co.	554	95.5	2.8
Fulton Ind.	412	94.0	9.1
Gallatin Co.	1,675	93.7	13.2
Garrard Co.	2,542	93.2	16.0
Grant Co.	3,932	94.2	10.9
Williamstown Ind.	862	95.9	9.5
Graves Co.	4,666	95.8	5.5
Mayfield Ind.	1,557	95.6	5.3
Grayson Co.	4,285	94.4	12.0
Green Co.	1,719	94.4	25.2
Greenup Co.	3,063	91.1	45.0
Raceland Ind.	1,060	95.2	47.5
Russell Ind.	2,224	94.6	12.1
Hancock Co.	1,685	95.7	22.8
Hardin Co.	14,598	95.0	13.3
Elizabethtown Ind.	2,477	95.4	11.1
West Point Ind.	121	95.6	28.6
Harlan Co.	4,195	90.7	26.5
Harlan Ind.	819	94.3	17.0
Harrison Co.	3,088	94.1	10.9
Hart Co.	2,330	94.4	13.5
Henderson Co.	7,243	94.4	8.9
Henry Co.	2,180	94.7	9.3
Eminence Ind.	782	95.4	12.1
Hickman Co.	748	96.2	3.0
Hopkins Co.	7,034	94.9	9.5
Dawson Springs Ind.	676	95.4	7.0
Jackson Co.	2,211	91.2	25.4
Jefferson Co.	99,045	93.8	15.4
Anchorage Ind.	362	96.6	3.1
Jessamine Co.	7,824	93.0	44.1
Johnson Co.	3,842	92.3	22.3
Paintsville Ind.	934	94.3	16.8
Kenton Co.	14,514	95.4	8.7
Beechwood Ind.	1,186	96.1	5.4
Covington Ind.	3,909	94.2	16.5
Erlanger-Elsmere Ind.	2,270	94.4	10.4
Ludlow Ind.	865	93.9	11.5
Knott Co.	2,477	90.6	23.1
Knox Co.	4,546	91.7	20.1
Barbourville Ind.	688	92.2	22.3
LaRue Co.	2,423	95.1	10.2
Laurel Co.	9,597	93.0	16.8
East Bernstadt Ind.	519	95.4	9.5
Lawrence Co.	2,440	91.6	25.9
Lee Co.	1,163	92.2	20.8
Leslie Co.	1,793	91.5	19.1
Letcher Co.	3,363	91.5	19.1
Jenkins Ind.	533	89.4	31.6
Lewis Co.	2,418	93.2	17.6
Lincoln Co.	3,983	93.4	12.4
Livingston Co.	1,266	94.3	9.8
Logan Co.	3,514	95.4	7.6
Russellville Ind.	1,077	94.8	7.6
Lyon Co.	894	94.9	7.9
McCracken Co.	7,186	95.2	10.8
Paducah Ind.	2,860	95.0	6.5
McCreary Co.	3,126	91.4	23.4
McLean Co.	1,618	94.8	10.8
Madison Co.	11,208	93.6	13.1
Berea Ind.	1,106	93.1	16.7
Magoffin Co.	2,228	89.4	27.4
Marion Co.	3,186	95.1	7.8
Marshall Co.	4,736	95.5	5.7
Martin Co.	2,214	92.3	20.2
Mason Co.	2,825	92.9	13.5
Meade Co.	5,106	94.9	9.3
Menifee Co.	1,226	93.7	14.1
Mercer Co.	3,018	94.7	8.8
Burgin Ind.	456	95.0	9.9
Metcalfe Co.	1,598	93.0	12.5
Monroe Co.	1,879	94.4	4.2
Montgomery Co.	4,732	93.1	16.3
Morgan Co.	2,148	91.8	17.4
Muhlenberg Co.	5,379	94.5	8.7
Nelson Co.	4,685	94.9	8.9
Bardstown Ind.	2,527	94.2	16.5
Nicholas Co.	1,170	93.6	15.6
Ohio Co.	4,052	93.9	11.7
Oldham Co.	12,030	95.7	7.5
Owen Co.	1,878	93.9	14.9
Owsley Co.	783	91.9	21.2
Pendleton Co.	2,535	94.5	8.5
Perry Co.	4,244	91.2	24.2
Hazard Ind.	935	92.7	17.8
Pike Co.	9,753	94.0	10.4
Pikeville Ind.	1,196	94.2	10.9
Powell Co.	2,429	93.1	19.4
Pulaski Co.	8,102	94.6	11.1
Science Hill Ind.	507	95.9	26.6
Somerset Ind.	1,540	94.3	13.1
Robertson Co.	359	94.1	16.6
Rockcastle Co.	2,918	94.0	9.0
Rowan Co.	3,229	93.3	18.2
Russell Co.	2,968	94.3	1.8
Scott Co.	8,395	93.5	14.7
Shelby Co.	6,804	94.8	6.8
Simpson Co.	3,072	94.4	9.7
Spencer Co.	2,799	94.2	11.8
Taylor Co.	2,629	94.5	11.4
Campbellsville Ind.	1,145	93.9	13.5
Todd Co.	2,164	93.9	15.0
Trigg Co.	2,123	95.0	33.1
Trimble Co.	1,507	94.0	15.9
Union Co.	2,407	94.2	10.6
Warren Co.	14,052	95.0	10.6
Bowling Green Ind.	4,118	95.3	19.9
Washington Co.	1,700	94.5	12.5
Wayne Co.	2,490	94.7	12.0
Monticello Ind.	873	93.2	12.7
Webster Co.	2,183	94.1	8.6
Whitley Co.	4,480	92.4	15.9
Corbin Ind.	2,835	93.6	17.6
Williamsburg Ind.	785	93.3	23.0
Wolfe Co.	1,282	92.7	18.4
Woodford Co.	4,005	94.9	10.0

School Meals

Definition

Children attending public schools eligible for free or reduced-price meals is the percent of enrolled students eligible to receive free or reduced-price school meals.

Data in context

Children need proper nutrition for healthy development and success in school. Access to school meal programs can help prevent child hunger, improve health outcomes, and encourage healthy eating habits, which begin in childhood.[1] Students who eat breakfast show improved math and reading scores, better memory. They also attend school more regularly and experience fewer behavioral problems.[2]

The National School Lunch Program (NSLP) and the School Breakfast Program (SBP) provide nutritionally-balanced, low-cost or free meals to schools (public and private, nonprofit) and residential child care programs across the U.S.[3] Any child at a participating school may purchase a meal through these programs. Children in families with incomes at or below 130 percent of the federal poverty level can eat for free, whereas those with incomes between 131 and 185 percent qualify for reduced-price meals, capped at 40 cents per meal.[4] Students in Head Start, foster care, receiving benefits through Temporary Assistance for Needy Families, or living in a household receiving Supplemental Nutrition Assistance Program benefits (food stamps), are automatically eligible for free or reduced-price meals.[5]

Local schools set their own prices for full-priced meals, but must operate their meal services as nonprofit programs.[6] All school meals, including full-priced meals, are subsidized in some way.[7] Schools that participate in NSLP and SBP receive cash subsidies and donated commodities from the U.S. Department of Agriculture (USDA) for each meal they serve.[8] To participate, schools must serve meals meeting federal nutritional requirements and offer free or reduced-price meals to eligible children.[9]

A national survey of NSLP schools conducted from 2000 to 2004 found that lunches consumed by NSLP participants, regardless of income level, were more nutrient dense than those consumed by non-participants.[10] Students eating school lunch had higher intakes of nutritionally rich foods like milk, meat, and beans, and participating low-income children reported consuming more fruits and vegetables.[11]

During federal fiscal year 2012, approximately 31.6 million children nationwide and 549,000 children in Kentucky participated in the NSLP each month.[12] Of children participating nationally, 68.1 percent received free or reduced-price lunches.[13] That same fiscal year, an average of 12.8 million children participated in the SBP each month, 84.2 percent of whom received free or reduced-price breakfasts.[14] After growth in both the School Breakfast and National School Lunch Programs during the recession, participation in both has since moderated; however, both programs continue to expand and protect children from the lingering effects of the recession.[15] Despite the expansion of the SBP, the rate of eligible low-income children eating breakfast at school remains low – less than half of children receiving free or reduced-priced lunch also receive breakfast.[16]

During the summer, NSLP and the Summer Food Service Program provide free meals at eligible sites in areas where at least 50 percent of children are eligible for free or reduced-price school meals.[17] Despite increased need due to the recession, the 2010 summer nutrition programs fed fewer children than in the previous year, extending the decline first seen in 2009.[18] Kentucky saw an especially large decline, with program participation decreasing 20.1 percent from July 2009 to July 2010, despite an increase in the number of sites participating.[19] This decline likely resulted from several factors: many schools in Kentucky were open longer into the summer than usual because of school closings during winter, so their summer nutrition programs operated fewer days; it was a hot summer and some participating sites could not stay open on hotter days; and budget constraints among site sponsors limit capacity to serve meals.[20]

In Kentucky, over 400,000 students in the 2011-2012 school year were eligible to receive free or reduced-price meals at school.[21] Fifty-eight percent of Kentucky children attending public schools were eligible, with some districts having more than 90 percent of students eligible. Between school year 2007-2008 (in which data was captured in October 2007, before the recent recession hit Kentucky) and school year 2011-2012, 156 school districts saw an increase in the percent of students eligible for free or reduced-price meals, with 21 of those experiencing an increase of more than 10 percentage points.[22] Between school year 2009-2010 and school year 2011-2012, 107 school districts saw an increase in the percent of students eligible for free or reduced-price meals, but only 12 of those had an increase of more than 10 percentage points.

Data Sources: Kentucky Department of Education, Division of School and Community Nutrition. School year 2011-2012 data for Ballard County School District provided by that district.
Data Notes: Independent school districts are listed after the school district for the county in which they are located.
For CEO participating schools, student eligibility for free or reduced-price meals is determined through direct certification instead of household applications, but CEO participating schools provide free meals to all students. For school districts in which all schools participated in the CEO program, the rate portrayed was provided by the data source. For school districts containing both CEO and non-CEO participating schools, KYA calculated the district's overall rate of student eligibility for free or reduced-price meals using this formula:
(((for each CEO school, percentage of students eligible for free or reduced-price meals *student enrollment) + (for each non-CEO school, number of students eligible for free or reduced-price meals from KDE))/(total district enrollment))

The Healthy, Hunger-Free Kids Act

The Healthy, Hunger-Free Kids Act of 2010 expanded the Afterschool Meal Program to cover all 50 states, changed program rules to make it easier for nonprofits to operate summer food programs, and enhances the nutritional quality of food served in schools.[23] The Act also marks the first time to pilot using Medicaid information to connect students to the school lunch program. Announced by the USDA in early 2012, Kentucky is one of six states collaborating on demonstration projects to streamline efforts to provide school meals to children.[24] Kentucky's project is designed to automatically connect eligible low-income children across all school districts with free school meals using Medicaid information. School districts have been using information from the Kentucky Transitional Assistance Program and SNAP to generate lists of students who qualify, and adding Medicaid will further improve program efficiency.[25] The results of these demonstration projects, to be reported to Congress in 2014 and 2015, may affect nationwide implementation.[26]

Children Attending Public Schools Eligible for Free or Reduced-Price Meals

(percent of enrolled students)

	SY 2009-2010	SY 2011-2012
Kentucky	57	58
Adair Co.	63	64
Allen Co.	56	59
Anderson Co.	41	45
Ballard Co.	53	54
Barren Co.	57	58
Caverna Ind.	71	85
Glasgow Ind.	61	60
Bath Co.	68	72
Bell Co.	83	83
Middlesboro Ind.	77	82
Pineville Ind.	75	70
Boone Co.	30	31
Walton Verona Ind.	32	34
Bourbon Co.	55	57
Paris Ind.	68	70
Boyd Co.	62	48
Ashland Ind.	49	57
Fairview Ind.	63	58
Boyle Co.	41	44
Danville Ind.	65	64
Bracken Co.	53	54
Augusta Ind.	74	72
Breathitt Co.	80	80
Jackson Ind.	65	62
Breckinridge Co.	68	65
Cloverport Ind.	72	70
Bullitt Co.	47	47
Butler Co.	58	60
Caldwell Co.	59	59
Calloway Co.	57	56
Murray Ind.	37	39
Campbell Co.	42	44
Bellevue Ind.	69	76
Dayton Ind.	60	85
Fort Thomas Ind.	17	17
Newport Ind.	84	80
Silver Grove Ind.	83	81
Southgate Ind.	71	66
Carlisle Co.	55	55
Carroll Co.	60	67
Carter Co.	62	*66
Casey Co.	67	70
Christian Co.	69	*73
Clark Co.	53	58
Clay Co.	80	*94
Clinton Co.	67	69
Crittenden Co.	52	53
Cumberland Co.	73	74
Daviess Co.	47	48
Owensboro Ind.	77	76
Edmonson Co.	59	60
Elliott Co.	76	*88
Estill Co.	68	68
Fayette Co.	46	48
Fleming Co.	63	65
Floyd Co.	76	*87
Franklin Co.	48	48
Frankfort Ind.	66	67
Fulton Co.	81	80
Fulton Ind.	81	77
Gallatin Co.	68	70
Garrard Co.	55	63
Grant Co.	67	63
Williamstown Ind.	48	49
Graves Co.	52	58
Mayfield Ind.	80	*93
Grayson Co.	65	64
Green Co.	65	69
Greenup Co.	62	65
Raceland Ind.	42	39
Russell Ind.	32	35
Hancock Co.	50	50
Hardin Co.	50	50
Elizabethtown Ind.	48	50
West Point Ind.	80	73
Harlan Co.	76	*80
Harlan Ind.	51	51
Harrison Co.	55	57
Hart Co.	65	66
Henderson Co.	53	56
Henry Co.	53	55
Eminence Ind.	71	64
Hickman Co.	58	67
Hopkins Co.	55	55
Dawson Springs Ind.	58	64
Jackson Co.	78	77
Jefferson Co.	62	64
Anchorage Ind.	2	3
Jessamine Co.	52	54
Johnson Co.	68	66
Paintsville Ind.	46	44
Kenton Co.	36	38
Beechwood Ind.	9	13
Covington Ind.	87	89
Erlanger-Elsmere Ind.	61	62
Ludlow Ind.	62	63
Knott Co.	73	74
Knox Co.	79	*91
Barbourville Ind.	63	63
LaRue Co.	59	57
Laurel Co.	60	63
East Bernstadt Ind.	65	65
Lawrence Co.	65	64
Lee Co.	78	*95
Leslie Co.	69	63
Letcher Co.	69	66
Jenkins Ind.	71	*93
Lewis Co.	71	73
Lincoln Co.	64	66
Livingston Co.	54	57
Logan Co.	53	53
Russellville Ind.	68	70
Lyon Co.	46	47
McCracken Co.	47	49
Paducah Ind.	72	*85
McCreary Co.	79	*81
McLean Co.	60	58
Madison Co.	52	*56
Berea Ind.	56	59
Magoffin Co.	86	85
Marion Co.	59	60
Marshall Co.	46	48
Martin Co.	69	*88
Mason Co.	60	60
Meade Co.	51	49
Menifee Co.	77	75
Mercer Co.	49	51
Burgin Ind.	48	50
Metcalfe Co.	72	71
Monroe Co.	69	*71
Montgomery Co.	61	55
Morgan Co.	73	73
Muhlenberg Co.	53	54
Nelson Co.	49	52
Bardstown Ind.	67	64
Nicholas Co.	67	61
Ohio Co.	66	64
Oldham Co.	19	20
Owen Co.	61	69
Owsley Co.	91	*97
Pendleton Co.	51	56
Perry Co.	79	77
Hazard Ind.	52	53
Pike Co.	70	*75
Pikeville Ind.	32	34
Powell Co.	72	71
Pulaski Co.	66	65
Science Hill Ind.	52	51
Somerset Ind.	52	56
Robertson Co.	59	65
Rockcastle Co.	67	68
Rowan Co.	58	61
Russell Co.	74	69
Scott Co.	37	40
Shelby Co.	48	46
Simpson Co.	52	59
Spencer Co.	46	40
Taylor Co.	53	60
Campbellsville Ind.	72	72
Todd Co.	61	61
Trigg Co.	61	55
Trimble Co.	53	57
Union Co.	57	58
Warren Co.	52	53
Bowling Green Ind.	54	55
Washington Co.	60	62
Wayne Co.	74	71
Monticello Ind.	72	72
Webster Co.	54	59
Whitley Co.	78	79
Corbin Ind.	54	55
Williamsburg Ind.	72	72
Wolfe Co.	80	*91
Woodford Co.	33	40

* District had at least one school participating in the CEO school meals program in SY 2011-12.

School Finance

Definition

Spending per pupil is the total amount of current expenses per pupil, excluding facility expenditures, debt service, or fund transfers. *Local revenue per pupil* is the amount of revenue from local sources that school districts collect. *Percent of total revenue* is local revenue per pupil as a percent of total revenue per pupil, which includes state and federal sources.

Data in context

All students need to attend schools with sufficient resources to ensure a fair opportunity to succeed academically. Yet spending varies among schools, districts, and states, impacting children's opportunities for learning.

In SY 2009-2010, the national average for per-pupil expenditures on public elementary and secondary education was $10,615, with 44 percent of total elementary-secondary school system revenue coming from local sources.[1] Per-student spending for K-12 education nationwide increased by 46 percent from 1988-1989 to 2008-2009, with the costs of interest on debt increasing the most.[2]

Kentucky's comparable spending in SY 2009-2010 was $8,948 per student, ranking 38th of all states and the District of Columbia for elementary-secondary per-pupil expenditures.[3] While Kentucky's per-pupil expenditures are on the rise,[4] they still lag behind six of the seven surrounding states and the national average.[5]

Resources are a critical element in school quality. The Kentucky Supreme Court's ruling in *Rose v. Council for Better Education* stated that the funding system must be adequate, substantially uniform, and provide an equal opportunity for all children in Kentucky.[6] In response to this ruling, Kentucky adopted a school funding formula that supplements school revenues with funding from the state budget.[7]

Funding streams vary greatly from district to district, leading to wide divergence in per-pupil expenditures. Districts raise money and allocate resources, such as personnel, instructional materials, and transportation to schools. In addition to state and federal dollars, school districts depend primarily on property taxes to generate local revenue. Districts may also enact a formula-based utilities tax, and in some districts, a coal severance tax adds to the district funding.

A good education serves as insurance for supporting oneself financially, and is particularly important to poor students, English Language Learners, and students of color. School districts with high populations of these students need to provide extra supports, yet they often receive less funding.[8] Kentucky has gradually increased the progressive nature of its funding system by providing greater funding to districts with high concentrations of poverty than to low-poverty districts.[9] However, analysis of per pupil spending

in relation to school racial composition shows that every 10 percent increase in students of color in Kentucky is matched by a decrease in per pupil spending by $30. This correlation does not necessarily mean that spending is being determined by race, explicitly or implicitly, but given the achievement gaps existing between students of color and their White peers, spending less money on schools that serve more students of color seems counterproductive to ensuring all students succeed.[10]

Kentucky's per-pupil expenditure was $9,246 in SY 2010-2011. The majority of districts (56 percent) fell within 10 percent of the state per-pupil expenditure, yet some districts varied greatly. Per-pupil expenditure was more than a third higher than the state average in Anchorage Independent, Covington Independent, Frankfort Independent, Fulton Independent, Owsley County, Silver Grove Independent and West Point Independent School Districts. In contrast, five school districts spent only 75-82 percent of the state average per student, including Bracken County, Meade County, Science Hill Independent, Scott County and Spencer County School Districts.

The state average for local revenue per student in SY 2010-2011 was $3,733, an increase of 2.3 percent from the previous year.[11] Local revenue accounted for 36.9 percent of total revenue statewide, but ranged greatly among school districts. Local revenue accounted for only 9.9 percent of total revenue in Monticello Independent School District ($1,061 per pupil) compared to 85.8 percent of total revenue in Anchorage Independent School District ($15,658 per pupil).

Data Source: Kentucky Department of Education website.
Data Note: Independent school districts are listed after the school district for the county in which they are located.

Spending per Pupil and Local Revenue per Pupil

(amount & percent of total revenue)

	SY 2010-2011		
	Spending per pupil	Local revenue per pupil	Percent of total revenue
Kentucky	**$9,246**	**$3,733**	**36.9**
Adair Co.	$8,978	$2,077	22.1
Allen Co.	$8,080	$2,004	22.3
Anderson Co.	$7,704	$3,031	33.7
Ballard Co.	$9,202	$2,913	29.9
Barren Co.	$8,590	$2,813	28.5
Caverna Ind.	$12,051	$3,126	26.6
Glasgow Ind.	$9,478	$3,704	34.8
Bath Co.	$8,812	$1,522	16.3
Bell Co.	$9,686	$1,723	16.9
Middlesboro Ind.	$10,402	$2,496	22.8
Pineville Ind.	$9,327	$1,286	12.8
Boone Co.	$7,879	$5,386	58.0
Walton Verona Ind.	$8,013	$4,411	45.0
Bourbon Co.	$9,818	$3,108	30.1
Paris Ind.	$9,377	$2,629	26.8
Boyd Co.	$10,153	$3,708	33.9
Ashland Ind.	$9,058	$2,705	27.5
Fairview Ind.	$8,615	$1,985	21.5
Boyle Co.	$8,191	$3,085	34.0
Danville Ind.	$10,729	$5,162	45.0
Bracken Co.	$7,557	$1,661	19.6
Augusta Ind.	$9,908	$2,090	20.8
Breathitt Co.	$11,071	$1,683	14.8
Jackson Ind.	$10,102	$1,131	11.7
Breckinridge Co.	$9,233	$2,710	27.8
Cloverport Ind.	$10,928	$1,542	13.9
Bullitt Co.	$7,699	$3,366	38.5
Butler Co.	$8,312	$1,758	19.4
Caldwell Co.	$8,479	$1,952	22.1
Calloway Co.	$8,625	$3,291	35.3
Murray Ind.	$10,103	$3,352	29.7
Campbell Co.	$8,574	$5,295	55.3
Bellevue Ind.	$9,215	$4,074	41.8
Dayton Ind.	$9,527	$2,227	22.1
Fort Thomas Ind.	$8,334	$5,665	59.1
Newport Ind.	$12,164	$4,981	38.7
Silver Grove Ind.	$15,478	$6,195	43.6
Southgate Ind.	$10,087	$5,177	46.1
Carlisle Co.	$9,096	$2,562	26.0
Carroll Co.	$10,650	$5,376	43.4
Carter Co.	$8,972	$1,463	15.6
Casey Co.	$9,055	$1,698	17.6
Christian Co.	$8,748	$2,386	24.9
Clark Co.	$7,860	$3,486	38.0
Clay Co.	$10,458	$1,670	15.7
Clinton Co.	$10,678	$2,094	19.2
Crittenden Co.	$8,153	$2,199	24.8
Cumberland Co.	$9,537	$2,309	22.3
Daviess Co.	$8,814	$3,296	34.4
Owensboro Ind.	$10,583	$3,779	32.6
Edmonson Co.	$8,531	$1,751	19.3
Elliott Co.	$9,251	$1,260	12.9
Estill Co.	$8,840	$1,506	15.9
Fayette Co.	$10,235	$6,733	60.1
Fleming Co.	$9,467	$1,818	19.1
Floyd Co.	$9,942	$2,134	20.8
Franklin Co.	$8,269	$4,304	45.7
Frankfort Ind.	$12,393	$4,556	37.6
Fulton Co.	$11,669	$3,189	26.7
Fulton Ind.	$13,289	$3,762	26.7
Gallatin Co.	$8,788	$3,520	34.8
Garrard Co.	$8,737	$2,863	28.3
Grant Co.	$7,921	$2,266	25.8
Williamstown Ind.	$9,658	$2,478	21.9
Graves Co.	$8,122	$2,099	24.1
Mayfield Ind.	$9,785	$2,569	23.2
Grayson Co.	$7,901	$1,979	21.0
Green Co.	$9,172	$1,839	19.5
Greenup Co.	$9,130	$2,442	25.5
Raceland Ind.	$8,333	$1,719	20.2
Russell Ind.	$7,961	$3,132	36.1
Hancock Co.	$9,134	$3,308	34.1
Hardin Co.	$8,491	$3,132	32.4
Elizabethtown Ind.	$7,937	$3,007	32.5
West Point Ind.	$12,715	$4,004	31.6
Harlan Co.	$9,754	$2,304	22.0
Harlan Ind.	$7,992	$1,447	16.8
Harrison Co.	$8,208	$2,186	25.5
Hart Co.	$9,949	$2,209	22.3
Henderson Co.	$8,726	$3,085	33.3
Henry Co.	$7,780	$2,746	30.4
Eminence Ind.	$9,327	$2,211	23.2
Hickman Co.	$10,683	$3,269	29.4
Hopkins Co.	$8,636	$2,424	26.4
Dawson Springs Ind.	$8,699	$1,142	12.3
Jackson Co.	$10,777	$1,248	11.2
Jefferson Co.	$11,154	$6,417	53.0
Anchorage Ind.	$15,978	$15,658	85.8
Jessamine Co.	$8,312	$4,119	42.1
Johnson Co.	$8,983	$1,452	15.4
Paintsville Ind.	$10,173	$3,773	37.7
Kenton Co.	$7,814	$4,296	47.0
Beechwood Ind.	$7,791	$4,781	54.3
Covington Ind.	$12,398	$5,321	39.0
Erlanger-Elsmere Ind.	$8,918	$4,134	40.6
Ludlow Ind.	$8,734	$2,657	29.4
Knott Co.	$10,205	$3,643	32.6
Knox Co.	$10,256	$1,681	15.8
Barbourville Ind.	$7,755	$1,520	18.0
LaRue Co.	$8,421	$1,982	22.1
Laurel Co.	$8,159	$2,089	24.1
East Bernstadt Ind.	$8,586	$1,245	13.8
Lawrence Co.	$9,583	$1,903	18.4
Lee Co.	$9,550	$1,304	13.6
Leslie Co.	$10,457	$2,670	24.0
Letcher Co.	$9,767	$2,401	23.5
Jenkins Ind.	$10,036	$1,951	18.0
Lewis Co.	$9,015	$1,587	16.9
Lincoln Co.	$9,240	$1,753	18.0
Livingston Co.	$10,406	$3,684	37.0
Logan Co.	$8,403	$2,075	23.8
Russellville Ind.	$9,825	$2,848	27.0
Lyon Co.	$8,830	$5,375	57.1
McCracken Co.	$8,037	$4,169	44.7
Paducah Ind.	$11,997	$4,585	36.5
McCreary Co.	$10,614	$1,230	11.1
McLean Co.	$8,462	$2,346	26.0
Madison Co.	$8,084	$3,349	35.3
Berea Ind.	$10,135	$2,564	23.6
Magoffin Co.	$11,289	$1,838	16.7
Marion Co.	$8,715	$2,709	29.1
Marshall Co.	$8,559	$3,584	39.1
Martin Co.	$10,379	$2,579	24.6
Mason Co.	$8,997	$3,187	33.8
Meade Co.	$7,606	$1,882	21.8
Menifee Co.	$9,576	$1,297	12.9
Mercer Co.	$8,657	$3,232	33.9
Burgin Ind.	$7,854	$3,870	44.1
Metcalfe Co.	$10,630	$2,327	20.9
Monroe Co.	$9,597	$2,084	19.3
Montgomery Co.	$8,517	$2,362	24.8
Morgan Co.	$9,077	$1,565	15.9
Muhlenberg Co.	$9,491	$4,265	39.6
Nelson Co.	$8,270	$3,726	39.2
Bardstown Ind.	$8,898	$3,808	38.2
Nicholas Co.	$8,529	$1,831	20.1
Ohio Co.	$9,127	$2,147	23.2
Oldham Co.	$7,634	$4,403	49.3
Owen Co.	$8,492	$2,674	27.5
Owsley Co.	$14,096	$1,848	12.6
Pendleton Co.	$8,590	$2,223	22.3
Perry Co.	$9,580	$2,541	25.3
Hazard Ind.	$8,728	$2,230	23.0
Pike Co.	$9,594	$2,699	27.2
Pikeville Ind.	$10,461	$5,229	49.2
Powell Co.	$9,004	$1,373	14.6
Pulaski Co.	$8,317	$2,566	28.2
Science Hill Ind.	$6,957	$1,688	21.3
Somerset Ind.	$8,424	$3,716	39.2
Robertson Co.	$10,692	$1,928	17.1
Rockcastle Co.	$8,771	$1,306	14.3
Rowan Co.	$8,944	$2,798	28.5
Russell Co.	$8,834	$2,776	27.7
Scott Co.	$7,552	$3,622	42.0
Shelby Co.	$8,805	$4,332	42.6
Simpson Co.	$8,094	$2,866	31.6
Spencer Co.	$7,425	$3,238	36.9
Taylor Co.	$8,030	$2,176	24.4
Campbellsville Ind.	$10,544	$2,967	26.2
Todd Co.	$10,019	$2,126	20.8
Trigg Co.	$8,803	$3,735	39.4
Trimble Co.	$8,502	$3,399	34.0
Union Co.	$10,284	$3,478	33.5
Warren Co.	$8,113	$3,386	38.2
Bowling Green Ind.	$9,368	$3,497	33.3
Washington Co.	$9,457	$3,201	31.3
Wayne Co.	$8,871	$1,857	19.4
Monticello Ind.	$10,079	$1,061	9.9
Webster Co.	$8,573	$2,268	25.0
Whitley Co.	$9,992	$1,334	12.7
Corbin Ind.	$7,862	$1,833	21.1
Williamsburg Ind.	$9,793	$1,662	16.4
Wolfe Co.	$11,445	$1,259	10.5
Woodford Co.	$7,880	$4,229	49.7

Out-of-School Suspensions

Definition

Suspensions for law violations is the number and rate per 100 students removed from school because they broke the law. *Suspensions for board violations* is the number and rate per 100 students removed from school because they violated school or board of education rules.

Data in context

All students benefit from a safe and comfortable learning environment. Successful schools provide a rigorous course of study to help all students achieve while keeping students safe with clearly communicated, consistently enforced, and fairly applied discipline methods.

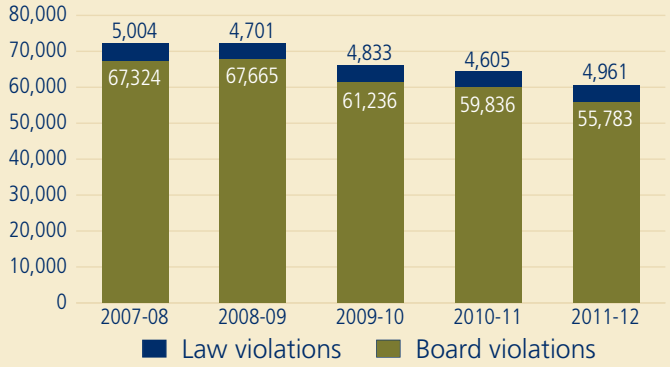
There are numerous measures of school success. Test scores are routinely used to demonstrate the effectiveness of a school, but non-cognitive indicators such as attendance and student discipline are also important to the health of a school and are tied to retention and graduation rates.[1]

When a student misbehaves in school, school administrators can take actions ranging from parent conferences to out-of-school suspensions and expulsion. In SY 2011-12 in Kentucky, out-of-school suspensions were the most widely used disciplinary action by public schools.[2] Out-of-school suspensions were used 60,744 times, decreasing for the third consecutive year.[3] Board violations made up 92 percent of all suspensions. Law violations, which include offenses such as carrying a weapon and drug possession, accounted for only 8 percent of suspensions.

One factor impacting the number of out-of-school suspensions is the widespread use of "zero tolerance" discipline policies in schools. While no exact definition exists for zero tolerance policies, the term generally connotes using harsh mandatory consequences for school rule violations.[4] Conceived first as a response to drug activity and violence in schools, zero tolerance has become a widespread response to any school rule violation, including non-violent violations.[5] Meanwhile, there is no evidence demonstrating the effectiveness of suspension in improving student behavior.[6] In fact, research has shown that suspension is strongly correlated with later involvement with the criminal justice system.[7]

Students deserve fair and equitably-applied discipline practices, yet national and state data reflect notable disparities between groups. A review of suspension data from nearly 7,000 school districts for SY 2009-10 showed African-American students were three times more likely to receive a suspension than their White peers, and students with disabilities were suspended at twice the rate of their non-disabled peers.[8] Kentucky data for SY 2011-12 shows differences in suspension rates by race and gender. African-American students made up 28.1 percent of suspensions, despite making up only 10.3 percent of the student population, but the suspension rate for White students was drastically lower than would be expected based on their proportion of the student population. Male students were suspended at 2.5 times the rate of female students.[9]

Out-of-School Suspensions for Law & Board Violations in Kentucky



Sources: *Kentucky Department of Education and the Kentucky Center for School Safety.*

Among the 110 districts with 6 or more suspensions for law violations in SY 2011-12, Newport, Paris, and Silver Grove Independent School Districts and Simpson County School District had the highest rates. Twenty-two districts had no suspensions for law violations. During the same school year, the rate of suspensions for board violations among districts with at least 6 occurrences was less than 1 percent in Beechwood Independent, Raceland Independent, and Wolfe County School Districts. Rates were more than triple the state rate in Covington, Dayton, Newport, and Silver Grove Independent School Districts.

A disciplinary approach proven to be successful in maintaining discipline in the classroom is spreading throughout Kentucky. The Kentucky Center for Instructional Discipline has been working with school districts and schools in Kentucky to implement Positive Behavioral Interventions and Supports (PBIS),[10] a "decision-making framework that guides selection, integration, and implementation of the best evidence-based academic and behavioral practices for improving important academic and behavior outcomes for all students."[11] Kentucky middle schools that have implemented PBIS have seen significant drops in out-of-school suspensions, and participating high schools have seen a large reduction in dropout rates.[12] Kentucky policymakers can promote effective alternatives to out-of-school suspension, in part, through legislation modeling other states' efforts, such as Maryland's statute requiring districts to adopt PBIS or an alternative behavior modification plan in schools with suspension rates above a certain threshold, or Connecticut's law requiring student suspensions be done on campus rather than out of school, unless the student poses a danger to others.[13]

Data Source: Kentucky Department of Education.
Data Notes: Students may have received more than one out-of-school suspension during the school year. Independent school districts are listed after the school district for the county in which they are located.
Rate Calculation: (number of out-of-school suspensions for law violations during school year 2011-12 * 100) / (number of students during school year 2011-12)
(number of out-of-school suspensions for board violations during school year 2011-12 * 100) / (number of students during school year 2011-12)

Suspensions for Law and Board Violations

(number of incidences & rate per 100 students)

	SY 2011-2012			
	Law violations		Board violations	
	No.	Rate	No.	Rate
Kentucky	**4,961**	**0.7**	**55,783**	**8.3**
Adair Co.	16	0.6	304	11.7
Allen Co.	27	0.9	147	4.8
Anderson Co.	27	0.7	94	2.4
Ballard Co.	4	*	39	2.9
Barren Co.	22	0.5	123	2.5
Caverna Ind.	3	*	86	11.2
Glasgow Ind.	18	0.9	222	11.0
Bath Co.	3	*	61	2.9
Bell Co.	13	0.4	135	4.5
Middlesboro Ind.	5	*	259	17.7
Pineville Ind.	0	0.0	13	2.3
Boone Co.	173	0.9	1,191	6.0
Walton Verona Ind.	7	0.4	129	8.2
Bourbon Co.	35	1.3	118	4.3
Paris Ind.	17	2.4	97	13.5
Boyd Co.	24	0.7	118	3.6
Ashland Ind.	17	0.5	160	4.9
Fairview Ind.	1	*	90	10.3
Boyle Co.	16	0.6	164	6.1
Danville Ind.	25	1.4	204	11.0
Bracken Co.	0	0.0	73	6.1
Augusta Ind.	0	0.0	58	19.1
Breathitt Co.	8	0.4	214	9.6
Jackson Ind.	1	*	8	2.0
Breckinridge Co.	0	0.0	69	2.5
Cloverport Ind.	1	*	19	5.2
Bullitt Co.	88	0.7	809	6.3
Butler Co.	21	1.0	130	6.0
Caldwell Co.	3	*	334	16.7
Calloway Co.	10	0.3	134	4.1
Murray Ind.	0	0.0	40	2.8
Campbell Co.	8	0.2	370	7.4
Bellevue Ind.	5	*	132	17.3
Dayton Ind.	0	0.0	252	27.9
Fort Thomas Ind.	13	0.5	108	3.9
Newport Ind.	46	2.5	895	49.5
Silver Grove Ind.	7	3.4	58	28.4
Southgate Ind.	0	0.0	29	14.2
Carlisle Co.	4	*	3	*
Carroll Co.	17	0.9	193	10.0
Carter Co.	34	0.7	361	7.6
Casey Co.	19	0.8	143	6.0
Christian Co.	51	0.5	820	8.4
Clark Co.	40	0.7	469	8.3
Clay Co.	4	*	176	5.1
Clinton Co.	6	0.3	156	8.8
Crittenden Co.	14	1.1	51	4.0
Cumberland Co.	11	1.1	147	14.2
Daviess Co.	62	0.6	487	4.4
Owensboro Ind.	1	*	588	13.2
Edmonson Co.	4	*	55	2.6
Elliott Co.	6	0.5	70	6.3
Estill Co.	7	0.3	256	10.1
Fayette Co.	335	0.9	5,025	12.9
Fleming Co.	4	*	138	5.8
Floyd Co.	62	1.0	659	10.5
Franklin Co.	19	0.3	851	13.7
Frankfort Ind.	2	*	77	9.8
Fulton Co.	4	*	73	13.2
Fulton Ind.	1	*	102	24.8
Gallatin Co.	3	*	291	17.4
Garrard Co.	37	1.5	177	7.0
Grant Co.	36	0.9	435	11.1
Williamstown Ind.	4	*	49	5.7
Graves Co.	32	0.7	95	2.0
Mayfield Ind.	3	*	95	6.1
Grayson Co.	0	0.0	42	1.0
Green Co.	8	0.5	67	3.9
Greenup Co.	27	0.9	456	14.9
Raceland Ind.	2	*	8	0.8
Russell Ind.	9	0.4	104	4.7
Hancock Co.	4	*	29	1.7
Hardin Co.	47	0.3	982	6.7
Elizabethtown Ind.	0	0.0	382	15.4
West Point Ind.	0	0.0	1	*
Harlan Co.	6	0.1	418	10.0
Harlan Ind.	0	0.0	23	2.8
Harrison Co.	13	0.4	248	8.0
Hart Co.	6	0.3	133	5.7
Henderson Co.	50	0.7	328	4.5
Henry Co.	36	1.7	140	6.4
Eminence Ind.	0	0.0	78	10.0
Hickman Co.	0	0.0	21	2.8
Hopkins Co.	32	0.5	914	13.0
Dawson Springs Ind.	5	*	21	3.1
Jackson Co.	7	0.3	247	11.2
Jefferson Co.	1,488	1.5	13,586	13.7
Anchorage Ind.	0	0.0	0	0.0
Jessamine Co.	71	0.9	895	11.4
Johnson Co.	9	0.2	146	3.8
Paintsville Ind.	2	*	5	*
Kenton Co.	119	0.8	938	6.5
Beechwood Ind.	0	0.0	9	0.8
Covington Ind.	45	1.2	1,117	28.6
Erlanger-Elsmere Ind.	7	0.3	46	2.0
Ludlow Ind.	4	*	49	5.7
Knott Co.	10	0.4	221	8.9
Knox Co.	13	0.3	686	15.1
Barbourville Ind.	1	*	54	7.8
LaRue Co.	15	0.6	89	3.7
Laurel Co.	93	1.0	929	9.7
East Bernstadt Ind.	0	0.0	12	2.3
Lawrence Co.	7	0.3	93	3.8
Lee Co.	4	*	189	16.3
Leslie Co.	2	*	21	1.2
Letcher Co.	13	0.4	237	7.0
Jenkins Ind.	0	0.0	54	10.1
Lewis Co.	0	0.0	141	5.8
Lincoln Co.	38	1.0	194	4.9
Livingston Co.	7	0.6	101	8.0
Logan Co.	14	0.4	77	2.2
Russellville Ind.	1	*	138	12.8
Lyon Co.	3	*	60	6.7
McCracken Co.	10	0.1	154	2.1
Paducah Ind.	0	0.0	260	9.1
McCreary Co.	48	1.5	228	7.3
McLean Co.	8	0.5	84	5.2
Madison Co.	99	0.9	685	6.1
Berea Ind.	10	0.9	114	10.3
Magoffin Co.	13	0.6	220	9.9
Marion Co.	12	0.4	171	5.4
Marshall Co.	26	0.6	101	2.1
Martin Co.	9	0.4	153	6.9
Mason Co.	11	0.4	261	9.2
Meade Co.	18	0.4	182	3.6
Menifee Co.	4	*	29	2.4
Mercer Co.	61	2.0	234	7.8
Burgin Ind.	0	0.0	36	7.9
Metcalfe Co.	24	1.5	120	7.5
Monroe Co.	11	0.6	44	2.3
Montgomery Co.	23	0.5	257	5.4
Morgan Co.	11	0.5	131	6.1
Muhlenberg Co.	39	0.7	193	3.6
Nelson Co.	41	0.9	360	7.7
Bardstown Ind.	8	0.3	314	12.4
Nicholas Co.	5	*	190	16.2
Ohio Co.	4	*	44	1.1
Oldham Co.	103	0.9	290	2.4
Owen Co.	9	0.5	178	9.5
Owsley Co.	7	0.9	96	12.3
Pendleton Co.	24	1.0	501	19.8
Perry Co.	1	*	352	8.3
Hazard Ind.	3	*	53	5.7
Pike Co.	23	0.2	548	5.6
Pikeville Ind.	2	*	34	2.8
Powell Co.	34	1.4	158	6.5
Pulaski Co.	62	0.8	349	4.3
Science Hill Ind.	1	*	19	3.7
Somerset Ind.	27	1.8	153	9.9
Robertson Co.	4	*	25	7.0
Rockcastle Co.	12	0.4	96	3.3
Rowan Co.	10	0.3	178	5.5
Russell Co.	16	0.5	109	3.7
Scott Co.	35	0.4	443	5.3
Shelby Co.	49	0.7	331	4.9
Simpson Co.	69	2.3	182	5.9
Spencer Co.	11	0.4	80	2.9
Taylor Co.	11	0.4	263	10.0
Campbellsville Ind.	1	*	83	7.2
Todd Co.	8	0.4	79	3.7
Trigg Co.	0	0.0	159	7.5
Trimble Co.	9	0.6	166	11.0
Union Co.	47	2.0	329	13.7
Warren Co.	56	0.4	316	2.2
Bowling Green Ind.	4	*	318	7.7
Washington Co.	12	0.7	118	6.9
Wayne Co.	12	0.5	233	9.4
Monticello Ind.	5	*	28	3.2
Webster Co.	12	0.6	74	3.4
Whitley Co.	39	0.9	103	2.3
Corbin Ind.	3	*	55	1.9
Williamsburg Ind.	0	0.0	22	2.8
Wolfe Co.	19	1.5	11	0.9
Woodford Co.	20	0.5	422	10.5

* Rates were not calculated for districts with fewer than 6 occurrences.

Corporal Punishment

Definition

Corporal punishment is the number and rate per 100 students of disciplinary actions by public school districts using physical force with the intention of causing students to experience pain, but not injury.

Data in context

A learning environment that is safe and nurturing is necessary for all children to grow and thrive in school. For children in schools that use corporal punishment, or physical force, as a form of discipline, the classroom can become a threatening environment. The use of corporal punishment in schools instills fear, anxiety, and distrust of educational institutions. Proper non-physical discipline by teachers and school officials is warranted and preferable to give students the boundaries and supervision they need.

While some educators believe that corporal punishment is an effective way to deter students from misbehavior, evidence supports the conclusion that it is not only ineffective in changing behavior patterns, but also puts children at risk for substantial problems in the future. Corporal punishment of children is related to decreased internalization of moral rules and decreased long-term compliance with rules and societal norms. Negative consequences also include increased aggressive behavior, defiance, antisocial behavior and mental health problems, as well as an increased risk of physical injury.[1]

Despite the fact that more than fifty respected national organizations condemn corporal punishment as an ineffective form of school discipline,[2] corporal punishment has been legal in the United States since 1977, based on the Supreme Court decision in *Ingraham v. Wright*.[3] In the U.S., 31 states and the District of Columbia have banned the practice in schools.[4] Interestingly, Kentucky law prohibits the use of this practice in other institutions that serve children, including child care facilities, foster care homes and group homes, as well as correctional facilities.[5,6,7]

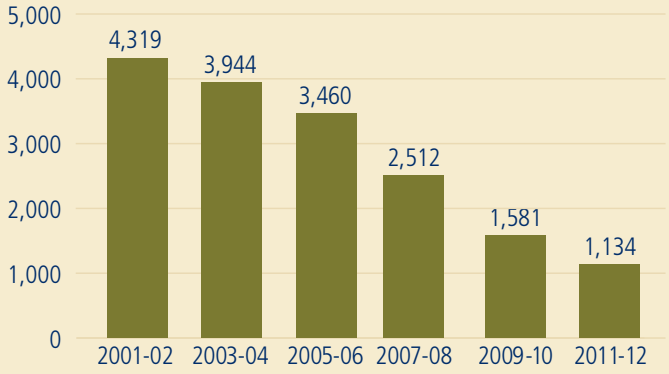
Contradictory to widespread perception, corporal punishment is not reserved as a punishment only for serious, violent offenses. In practice, schools utilize corporal punishment on students in Kentucky public schools in response to a wide variety of student misbehavior. Many children in Kentucky have received corporal punishment for minor offenses such as disruptive behavior, dress code violations, tardiness, and failure to follow instructions.[8]

All students have the right to be free from violence and receive equitable treatment; however, national data show schools disproportionately use corporal punishment on certain groups of students, including students with disabilities, low-income students, males, and African-American students.[9] During the 2009-10 school year in Kentucky, 13 percent of public school students had special education needs,[10] yet more than one-third (38 percent) of the 1,581 uses of corporal punishment involved these students.[11] This disparate treatment could in part be due to punishing students for behaviors related to their disability.[12] That same school year, students from low-income families eligible for free or reduced-price meals were overrepresented by being involved in 81 percent of all corporal punishment incidents, despite making up only 57 percent of the student population.[13] Also mirroring the national trend, male students were overrepresented, with nearly 9 out of 10 occurrences involving boys; however, unlike the national landscape, African-American students were not overrepresented.[14]

In Kentucky, local boards of education determine the exact guidelines for use of corporal punishment in their districts, meaning that children are at differing risks of corporal punishment depending on the school district in which they live. Corporal punishment incidents in Kentucky public schools have declined from 2,847 in SY 2006-07 to 1,134 in SY 2011-12, a 60 percent decrease over time. Of the 174 public school districts in Kentucky, only 36 (one-fifth) used corporal punishment in SY 2011-12. Bell, Fulton, and McCreary County school districts had the highest rates of using corporal punishment.

Kentucky should legislatively prohibit the use of corporal punishment in all Kentucky public schools, or at a minimum require districts to allow parents to opt out of permitting corporal punishment of their children. Effective alternative forms of discipline need to be promoted to schools. Many programs have proven successful in maintaining discipline in the classroom without resorting to corporal punishment.[15] Alternative discipline strategies can be integrated to support students, support teachers, support parents, and change the school and classroom environment.[16]

Corporal Punishment Incidents in Kentucky Public Schools



Source: *Kentucky Department of Education.*

Data Source: Kentucky Department of Education.
Data Notes: Students may have been disciplined by corporal punishment more than once throughout the school year. Independent school districts are listed after the school district for the county in which they are located.
Rate Calculation: (number of corporal punishment incidents during school year 2006-07 * 100) / (number of students during school year 2006-07) (number of corporal punishment incidents during school year 2011-12 * 100) / (number of students during school year 2011-12)

Corporal Punishment

(number of incidences & rate per 100 students)

	SY 2006-2007		SY 2011-2012	
	Number	Rate	Number	Rate
Kentucky	**2,847**	**0.5**	**1,134**	**0.2**
Adair Co.	0	0.0	0	0.0
Allen Co.	16	0.5	0	0.0
Anderson Co.	0	0.0	0	0.0
Ballard Co.	0	0.0	0	0.0
Barren Co.	0	0.0	0	0.0
Caverna Ind.	0	0.0	0	0.0
Glasgow Ind.	0	0.0	0	0.0
Bath Co.	166	8.5	18	0.9
Bell Co.	352	11.7	175	5.8
Middlesboro Ind.	0	0.0	0	0.0
Pineville Ind.	0	0.0	0	0.0
Boone Co.	0	0.0	0	0.0
Walton Verona Ind.	0	0.0	0	0.0
Bourbon Co.	0	0.0	0	0.0
Paris Ind.	0	0.0	0	0.0
Boyd Co.	0	0.0	0	0.0
Ashland Ind.	0	0.0	0	0.0
Fairview Ind.	3	*	21	2.4
Boyle Co.	0	0.0	0	0.0
Danville Ind.	0	0.0	0	0.0
Bracken Co.	0	0.0	0	0.0
Augusta Ind.	0	0.0	0	0.0
Breathitt Co.	21	1.0	6	0.3
Jackson Ind.	0	0.0	0	0.0
Breckinridge Co.	83	3.1	12	0.4
Cloverport Ind.	0	0.0	0	0.0
Bullitt Co.	0	0.0	0	0.0
Butler Co.	30	1.4	29	1.3
Caldwell Co.	54	2.8	6	0.3
Calloway Co.	0	0.0	0	0.0
Murray Ind.	0	0.0	0	0.0
Campbell Co.	0	0.0	0	0.0
Bellevue Ind.	0	0.0	0	0.0
Dayton Ind.	0	0.0	0	0.0
Fort Thomas Ind.	0	0.0	0	0.0
Newport Ind.	0	0.0	0	0.0
Silver Grove Ind.	0	0.0	0	0.0
Southgate Ind.	0	0.0	0	0.0
Carlisle Co.	0	0.0	0	0.0
Carroll Co.	0	0.0	0	0.0
Carter Co.	8	0.2	0	0.0
Casey Co.	0	0.0	0	0.0
Christian Co.	1	*	0	0.0
Clark Co.	7	0.1	0	0.0
Clay Co.	0	0.0	0	0.0
Clinton Co.	88	5.5	48	2.7
Crittenden Co.	11	0.9	17	1.3
Cumberland Co.	0	0.0	0	0.0
Daviess Co.	0	0.0	0	0.0
Owensboro Ind.	0	0.0	0	0.0
Edmonson Co.	0	0.0	0	0.0
Elliott Co.	40	3.5	27	2.4
Estill Co.	0	0.0	0	0.0
Fayette Co.	0	0.0	0	0.0
Fleming Co.	39	1.7	36	1.5
Floyd Co.	185	3.0	44	0.7
Franklin Co.	0	0.0	0	0.0
Frankfort Ind.	0	0.0	0	0.0
Fulton Co.	33	5.2	24	4.3
Fulton Ind.	20	4.8	0	0.0
Gallatin Co.	0	0.0	0	0.0
Garrard Co.	0	0.0	0	0.0
Grant Co.	0	0.0	0	0.0
Williamstown Ind.	0	0.0	0	0.0
Graves Co.	0	0.0	0	0.0
Mayfield Ind.	46	3.2	7	0.4
Grayson Co.	30	0.7	1	*
Green Co.	0	0.0	0	0.0
Greenup Co.	44	1.5	1	*
Raceland Ind.	15	1.5	24	2.3
Russell Ind.	0	0.0	0	0.0
Hancock Co.	0	0.0	0	0.0
Hardin Co.	0	0.0	0	0.0
Elizabethtown Ind.	0	0.0	0	0.0
West Point Ind.	0	0.0	0	0.0
Harlan Co.	116	2.7	40	1.0
Harlan Ind.	0	0.0	0	0.0
Harrison Co.	0	0.0	0	0.0
Hart Co.	0	0.0	0	0.0
Henderson Co.	0	0.0	0	0.0
Henry Co.	0	0.0	0	0.0
Eminence Ind.	0	0.0	0	0.0
Hickman Co.	9	1.2	0	0.0
Hopkins Co.	1	*	0	0.0
Dawson Springs Ind.	0	0.0	0	0.0
Jackson Co.	0	0.0	0	0.0
Jefferson Co.	0	0.0	0	0.0
Anchorage Ind.	0	0.0	0	0.0
Jessamine Co.	0	0.0	0	0.0
Johnson Co.	44	1.2	0	0.0
Paintsville Ind.	0	0.0	0	0.0
Kenton Co.	0	0.0	0	0.0
Beechwood Ind.	0	0.0	0	0.0
Covington Ind.	0	0.0	0	0.0
Erlanger-Elsmere Ind.	0	0.0	0	0.0
Ludlow Ind.	0	0.0	0	0.0
Knott Co.	4	*	18	0.7
Knox Co.	0	0.0	0	0.0
Barbourville Ind.	0	0.0	0	0.0
LaRue Co.	0	0.0	0	0.0
Laurel Co.	0	0.0	0	0.0
East Bernstadt Ind.	0	0.0	0	0.0
Lawrence Co.	4	*	18	0.7
Lee Co.	0	0.0	0	0.0
Leslie Co.	0	0.0	0	0.0
Letcher Co.	0	0.0	0	0.0
Jenkins Ind.	0	0.0	0	0.0
Lewis Co.	25	1.0	0	0.0
Lincoln Co.	106	2.6	4	*
Livingston Co.	0	0.0	0	0.0
Logan Co.	1	*	0	0.0
Russellville Ind.	0	0.0	0	0.0
Lyon Co.	0	0.0	0	0.0
McCracken Co.	0	0.0	0	0.0
Paducah Ind.	0	0.0	0	0.0
McCreary Co.	458	14.7	230	7.4
McLean Co.	0	0.0	0	0.0
Madison Co.	0	0.0	0	0.0
Berea Ind.	0	0.0	0	0.0
Magoffin Co.	11	0.5	0	0.0
Marion Co.	0	0.0	0	0.0
Marshall Co.	0	0.0	0	0.0
Martin Co.	18	0.8	8	0.4
Mason Co.	0	0.0	0	0.0
Meade Co.	0	0.0	0	0.0
Menifee Co.	0	0.0	0	0.0
Mercer Co.	0	0.0	0	0.0
Burgin Ind.	0	0.0	0	0.0
Metcalfe Co.	0	0.0	0	0.0
Monroe Co.	11	0.6	0	0.0
Montgomery Co.	0	0.0	0	0.0
Morgan Co.	19	0.9	0	0.0
Muhlenberg Co.	0	0.0	0	0.0
Nelson Co.	0	0.0	0	0.0
Bardstown Ind.	0	0.0	0	0.0
Nicholas Co.	0	0.0	0	0.0
Ohio Co.	0	0.0	0	0.0
Oldham Co.	0	0.0	0	0.0
Owen Co.	0	0.0	0	0.0
Owsley Co.	47	6.0	10	1.3
Pendleton Co.	0	0.0	0	0.0
Perry Co.	80	1.9	7	0.2
Hazard Ind.	7	0.8	2	*
Pike Co.	372	3.9	120	1.2
Pikeville Ind.	0	0.0	0	0.0
Powell Co.	0	0.0	0	0.0
Pulaski Co.	92	1.2	106	1.3
Science Hill Ind.	0	0.0	0	0.0
Somerset Ind.	0	0.0	0	0.0
Robertson Co.	0	0.0	4	*
Rockcastle Co.	4	*	15	0.5
Rowan Co.	0	0.0	0	0.0
Russell Co.	0	0.0	2	*
Scott Co.	0	0.0	0	0.0
Shelby Co.	0	0.0	0	0.0
Simpson Co.	0	0.0	0	0.0
Spencer Co.	0	0.0	0	0.0
Taylor Co.	0	0.0	0	0.0
Campbellsville Ind.	0	0.0	0	0.0
Todd Co.	0	0.0	2	*
Trigg Co.	0	0.0	0	0.0
Trimble Co.	0	0.0	0	0.0
Union Co.	0	0.0	0	0.0
Warren Co.	0	0.0	0	0.0
Bowling Green Ind.	0	0.0	0	0.0
Washington Co.	0	0.0	0	0.0
Wayne Co.	2	*	1	*
Monticello Ind.	51	6.3	16	1.8
Webster Co.	0	0.0	0	0.0
Providence Ind.	0	0.0	**	**
Whitley Co.	56	1.2	27	0.6
Corbin Ind.	0	0.0	0	0.0
Williamsburg Ind.	17	2.2	8	1.0
Wolfe Co.	0	0.0	0	0.0
Woodford Co.	0	0.0	0	0.0

* Rates were not calculated for districts with fewer than 6 occurrences.
** District merged with Webster County School District.

Teacher Quality and Ratios

Definition

Courses taught by highly qualified teachers is the percent of all courses requiring a highly qualified teacher that are taught by a teacher who meets the highly qualified criteria for the subject matter. *Pupil-teacher ratio* is the number of enrolled students divided by the number of full-time equivalent (FTE) teachers.

Data in context

All children benefit from having qualified, talented teachers whose classroom size allows for individual attention to students. Research shows that students who have high-quality teachers not only learn more, but they also see increased gains in achievement after several consecutive years of having such teachers.[1] Models of effective teaching range from those embedded in research-based best practices to those that include immeasurable intrinsic factors that are not always adequately recognized.

The Kentucky Department of Education has outlined characteristics of high-quality teachers, which include: fostering a safe learning climate, assessing learning with students and reflecting on that insight, emphasizing instructional rigor and student empowerment, relating learning experiences to students in a meaningful way, and exhibiting superior knowledge of content.[2]

Recruiting and hiring high-quality teachers can be especially difficult for low-performing schools. High-quality teachers may avoid working at low-performing schools, at higher risk of being sanctioned by accountability systems, out of concern for job stability.[3] Children in low-income families and children of color disproportionately attend low-performing schools and therefore have more teachers with little experience and weaker academic backgrounds, contributing to lower student performance.[4,5] Research indicates that students of color in low-income schools are 3 to 10 times more likely to have unqualified teachers than students in predominantly white schools.[6] The opportunity gap in U.S. students' access to qualified teachers across income levels is among the largest in the world.[7]

Kentucky ranks 5th in the nation for policies that ensure accountability, incentives, and capacity building to improve the teaching profession.[8] Kentucky is a leader on a number of measures, including being one of seven states that ban or cap the number of out-of-field teachers, and one of seventeen states that offer incentives to teachers working in difficult-to-staff teaching assignments.[9] However, Kentucky is one of 20 states that do not offer incentives to teachers working in targeted schools, which could help recruit high-quality teachers to low-performing schools.[10]

The vast majority of courses were taught by highly qualified teachers in Kentucky in SY 2009-2010 (98 percent). A number of districts demonstrated marked improvement in the percent of courses taught by highly qualified teachers between

SY 2004-2005 and SY 2009-2010. Rates improved by more than 10 percentage points in Breathitt, Casey, Christian, Hart, Henry, and Metcalfe County School Districts, and in the Fulton Independent School District.

In combination with other factors, the number of children in a classroom can impact student outcomes. Studies using historical data, and those using randomized experiments, have found that students in smaller classes tend to outperform their peers in larger classes, with children in kindergarten through third grade, students of color, and students eligible for free or reduced-price meals experiencing the greatest positive effects.[11]

One measure of class size is student-teacher ratio. Nationally, the student-teacher ratio has declined over the past two decades.[12] In Kentucky, there were 16.2 students per full-time teacher in SY 2009-10. Anchorage Independent, Livingston County, and Owsley County School Districts had the smallest ratios (less than 11 students per teacher), while Science Hill and Williamstown Independent School Districts had ratios that exceeded 20 students per teacher. Between SY 2004-05 and SY 2009-10, 131 school districts saw a decrease in their ratio.

Reducing class sizes is a very expensive initiative for a state to undertake,[13] and no experiments in U.S. students' access class size reduction to other specific education investments.[14] This leaves policymakers to wrangle with the difficult question of how to use limited funds in the most productive way. Kentucky should use its newly created longitudinal data system, the P-20 Data Collaborative, to assess the relationships between student achievement, class size, and teacher effectiveness and determine the optimum combinations.[15]

Data Sources: Kentucky Education Professional Standards Board and the National Center for Education Statistics, Common Core of Data.
Data Note: Independent school districts are listed after the school district for the county in which they are located.
Rate Calculation: (number of courses taught by a highly qualified teacher in SY 2004-2005 * 100) / (total number of courses requiring a highly qualified teacher in SY 2004-2005)
(number of courses taught by a highly qualified teacher in SY 2009-2010 * 100) / (total number of courses requiring a highly qualified teacher in SY 2009-2010)

Courses Taught by Highly-qualified Teachers & Pupil/Teacher Ratio

(percent of all courses & ratio of students to teachers)

	SY 2004-2005		SY 2009-2010	
	Percent	Ratio	Percent	Ratio
Kentucky	**97**	**16.3**	**98**	**16.2**
Adair Co.	96	14.2	98	15.0
Allen Co.	99	17.7	97	16.5
Anderson Co.	97	19.2	97	16.3
Ballard Co.	93	16.8	100	14.8
Barren Co.	98	16.6	99	16.6
Caverna Ind.	97	15.8	96	13.7
Glasgow Ind.	100	15.4	100	15.0
Bath Co.	97	17.0	100	15.7
Bell Co.	99	13.2	99	14.6
Middlesboro Ind.	100	15.4	98	13.5
Pineville Ind.	100	16.1	98	13.4
Boone Co.	98	17.6	100	16.4
Walton Verona Ind.	100	16.6	100	16.8
Bourbon Co.	93	17.6	97	15.7
Paris Ind.	95	14.1	98	13.6
Boyd Co.	93	14.1	99	13.5
Ashland Ind.	99	16.0	96	16.4
Fairview Ind.	100	18.0	100	16.7
Boyle Co.	95	15.7	100	15.2
Danville Ind.	90	15.1	95	12.9
Bracken Co.	100	16.8	95	16.3
Augusta Ind.	100	13.0	100	13.0
Breathitt Co.	88	15.0	100	13.1
Jackson Ind.	93	15.7	100	15.0
Breckinridge Co.	98	19.0	97	17.7
Cloverport Ind.	100	14.6	100	15.9
Bullitt Co.	96	18.0	100	16.1
Butler Co.	95	16.2	100	16.5
Caldwell Co.	98	15.1	97	16.0
Calloway Co.	99	14.8	100	16.0
Murray Ind.	96	16.1	100	14.7
Campbell Co.	93	16.9	99	16.8
Bellevue Ind.	100	17.3	100	15.4
Dayton Ind.	96	16.8	100	14.7
Fort Thomas Ind.	100	15.9	100	16.8
Newport Ind.	94	14.6	98	13.3
Silver Grove Ind.	98	14.1	99	11.3
Southgate Ind.	100	14.6	100	15.7
Carlisle Co.	98	15.8	100	13.8
Carroll Co.	98	17.0	99	17.0
Carter Co.	96	15.2	99	14.5
Casey Co.	86	16.5	98	14.8
Christian Co.	83	17.5	100	15.8
Clark Co.	99	16.5	100	15.1
Clay Co.	99	13.4	98	12.3
Clinton Co.	99	16.3	98	15.0
Crittenden Co.	100	16.0	100	17.3
Cumberland Co.	100	15.6	100	14.2
Daviess Co.	98	17.5	98	14.6
Owensboro Ind.	97	14.8	97	13.4
Edmonson Co.	99	14.7	99	16.0
Elliott Co.	98	14.8	99	14.0
Estill Co.	98	15.2	98	15.9
Fayette Co.	97	14.0	99	13.8
Fleming Co.	99	16.2	100	14.9
Floyd Co.	89	15.6	94	14.9
Franklin Co.	97	16.6	96	15.8
Frankfort Ind.	99	13.7	98	11.5
Fulton Co.	98	13.0	100	12.2
Fulton Ind.	88	12.4	100	12.6
Gallatin Co.	91	17.2	96	16.2
Garrard Co.	92	15.9	98	15.3
Grant Co.	98	18.6	99	17.4
Williamstown Ind.	100	16.7	100	20.8
Graves Co.	98	16.8	100	16.1
Mayfield Ind.	97	16.2	99	15.1
Grayson Co.	96	16.3	96	15.5
Green Co.	97	15.2	97	14.3
Greenup Co.	97	15.9	87	15.2
Raceland Ind.	100	18.3	83	16.7
Russell Ind.	100	18.2	100	16.7
Hancock Co.	100	16.9	100	16.0
Hardin Co.	87	16.0	96	15.9
Elizabethtown Ind.	95	17.4	99	11.9
West Point Ind.	100	12.3	100	11.8
Harlan Co.	94	15.6	100	15.5
Harlan Ind.	99	16.7	100	16.2
Harrison Co.	98	18.8	99	16.7
Hart Co.	88	15.7	100	13.1
Henderson Co.	97	16.4	99	16.4
Henry Co.	83	17.5	97	16.3
Eminence Ind.	90	16.3	100	14.9
Hickman Co.	97	15.0	100	12.9
Hopkins Co.	89	15.3	93	14.3
Dawson Springs Ind.	98	14.9	100	15.5
Jackson Co.	96	14.9	100	13.3
Jefferson Co.	98	17.2	96	15.4
Anchorage Ind.	100	12.4	100	10.3
Jessamine Co.	98	16.2	100	15.5
Johnson Co.	98	15.3	100	13.7
Paintsville Ind.	100	17.1	100	14.3
Kenton Co.	96	17.7	100	17.7
Beechwood Ind.	100	16.4	94	14.9
Covington Ind.	95	14.1	95	14.1
Erlanger-Elsmere Ind.	100	17.1	100	15.3
Ludlow Ind.	100	15.9	100	15.5
Knott Co.	100	16.6	100	15.2
Knox Co.	99	15.7	92	13.8
Barbourville Ind.	100	17.2	99	18.1
LaRue Co.	94	16.1	96	15.5
Laurel Co.	96	17.8	98	17.7
East Bernstadt Ind.	100	19.4	100	17.7
Lawrence Co.	100	14.8	98	14.3
Lee Co.	97	16.1	100	15.2
Leslie Co.	98	17.6	98	15.9
Letcher Co.	99	15.7	99	14.1
Jenkins Ind.	96	22.0	97	13.8
Lewis Co.	92	15.8	100	14.9
Lincoln Co.	97	15.2	100	14.2
Livingston Co.	98	14.8	100	10.8
Logan Co.	95	16.2	100	15.5
Russellville Ind.	100	16.7	86	15.8
Lyon Co.	92	16.9	96	11.5
McCracken Co.	100	17.9	100	16.9
Paducah Ind.	98	13.9	100	13.7
McCreary Co.	93	14.9	100	15.0
McLean Co.	94	15.9	99	14.9
Madison Co.	100	17.1	100	13.1
Berea Ind.	96	17.2	100	15.4
Magoffin Co.	100	14.9	100	13.7
Marion Co.	99	15.9	100	15.4
Marshall Co.	98	15.5	100	15.4
Martin Co.	96	19.2	100	13.8
Mason Co.	100	16.4	100	15.1
Meade Co.	98	17.9	100	17.6
Menifee Co.	95	13.5	100	13.7
Mercer Co.	100	16.8	100	11.9
Burgin Ind.	97	14.6	100	13.7
Harrodsburg Ind.	100	16.0	*	*
Metcalfe Co.	88	13.7	100	15.0
Monroe Co.	97	14.9	100	15.0
Montgomery Co.	100	16.6	100	16.1
Morgan Co.	93	14.4	94	15.6
Muhlenberg Co.	99	15.0	98	13.8
Nelson Co.	100	17.2	100	17.0
Bardstown Ind.	96	17.8	99	18.0
Nicholas Co.	96	17.3	100	14.7
Ohio Co.	98	16.2	99	15.9
Oldham Co.	97	17.6	97	17.6
Owen Co.	97	18.4	100	15.5
Owsley Co.	100	11.1	100	10.0
Pendleton Co.	92	16.7	98	15.0
Perry Co.	98	15.2	99	14.9
Hazard Ind.	100	16.9	100	14.1
Pike Co.	99	15.4	99	16.4
Pikeville Ind.	100	16.4	100	14.0
Powell Co.	98	14.8	100	15.4
Pulaski Co.	92	16.7	99	15.9
Science Hill Ind.	100	20.3	100	20.3
Somerset Ind.	95	16.5	100	14.6
Robertson Co.	90	16.1	100	12.1
Rockcastle Co.	100	15.3	100	15.8
Rowan Co.	99	15.5	99	15.6
Russell Co.	98	14.2	99	14.2
Scott Co.	98	16.8	99	17.7
Shelby Co.	94	16.8	98	16.4
Simpson Co.	93	17.4	97	16.9
Spencer Co.	95	19.1	100	19.1
Taylor Co.	95	16.5	100	17.3
Campbellsville Ind.	94	15.2	99	12.9
Todd Co.	99	18.4	100	15.5
Trigg Co.	91	14.9	100	16.7
Trimble Co.	86	15.9	96	16.6
Union Co.	92	16.0	93	15.2
Warren Co.	92	17.2	98	16.0
Bowling Green Ind.	97	16.4	100	14.6
Washington Co.	96	15.7	100	14.7
Wayne Co.	100	17.1	100	16.8
Monticello Ind.	94	14.7	100	15.2
Webster Co.	96	17.3	99	15.5
Providence Ind.	95	14.3	*	*
Whitley Co.	98	15.6	100	14.2
Corbin Ind.	100	17.2	100	16.8
Williamsburg Ind.	99	14.2	98	12.1
Wolfe Co.	100	14.3	100	14.5
Woodford Co.	100	18.0	100	16.9

* School district merged with county school district.

Student Achievement

Definition

Students scoring proficient/distinguished is the percentage of students who performed at or above proficiency in reading and math on the Kentucky Performance Rating for Education Progress tests in elementary and middle school or in End-of-Course exams for high school.

Data in context

All children need a high-quality education and the opportunity to perform at their highest academic level. Assessing student knowledge in core academic subjects provides a measure of student learning and preparedness for the transition to a career or postsecondary education.

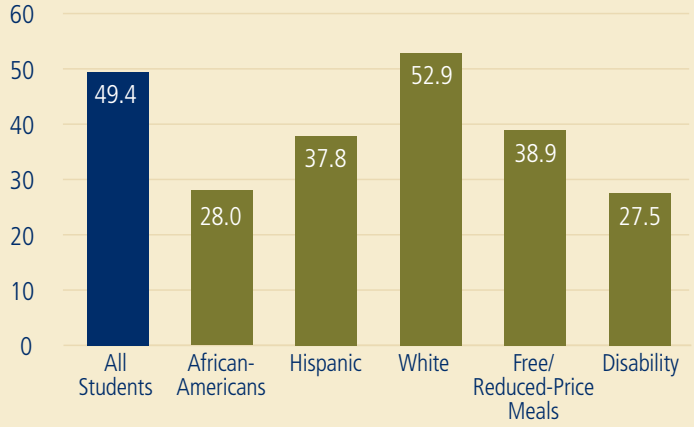
The No Child Left Behind Act (NCLB) was signed into law in 2002 to increase accountability in the education system by allowing the U.S. Department of Education to set academic achievement standards that states must meet in order to secure federal funding for public K-12 schools. In 2012, Kentucky was among ten states that received waivers allowing them to adopt flexible approaches to raise achievement for all students and close performance gaps among students.[1]

The waiver allows Kentucky to use its new assessment and accountability model – Unbridled Learning: College/Career Readiness for All – for reporting on state and federal accountability goals. The new model measures schools and districts on student achievement in core content areas; the percentage of students in combined subgroups that score proficient or distinguished; growth in reading and mathematics; college and career readiness; and high school graduation rates. Kentucky's NCLB waiver allows the state to combine "subgroups", including African-American, Hispanic, American Indian or Alaskan Native students, students with disabilities, students eligible for free/reduced-price meals, and students with Limited English Proficiency, into a "gap group" on which schools and districts will be assessed.[2] While this addresses the problem of some subpopulations being too small for meaningful analysis, it raises a concern that disparities among the subpopulations will be masked.[3]

Kentucky's new accountability system tests students on the recently-adopted Common Core State Standards in English and math, which were incorporated into classroom teaching in the 2011-12 school year. The standards set a higher bar for student achievement than in previous years.[4] Across Kentucky, fewer than half of elementary and middle school students scored proficient or distinguished in reading or math in the 2011-2012 school year. High school students took End-of-Course exams in key subject areas; 52.2 percent scored proficient or distinguished in reading and 40.0 percent in math.

Students in the subgroups listed earlier often face significant barriers to academic success, creating an achievement gap between them and their peers. Factors within the school, the home and school connection, and other home factors are correlated with differences in achievement.[5] Also, fewer African-American and low-income infants, toddlers, and preschoolers attend high-quality early childhood programs compared to their White and middle-class peers. These early learning experiences can help avoid achievement gaps that already appear by the time children are 3 years old.[6]

Percentage of Kentucky 3rd Graders Scoring Proficient or Distinguished in Reading, SY 2011-12



Source: *Kentucky Department of Education.*

While the gap has begun to close at the national level in recent years for students of color,[7] there is still room for improvement. In Kentucky in the 2011-12 school year, African-American students, American Indian or Alaskan Native students, Hispanic students, and students of two or more races scored lower than Asian and White students at each school level in reading and math. Statewide, the percentage of students receiving free or reduced-price meals who scored proficient or distinguished on reading and math was significantly lower than the percentages for all students at each school level.

Students with disabilities must overcome the impact of their disability on the learning process to succeed in school. Factors such as type of disability, parental expectations, and school absenteeism and disciplinary problems (which could be attributable to the disabling condition) may contribute to poorer performance on assessments for students with disabilities.[8] Students with disabilities in Kentucky scored much lower than their peers in reading and math, and the gap was more pronounced for middle and high school scores.[9]

Kentucky's future economic prospects depend on a strong, well-educated workforce. Out-of-school time programs play a role in helping students achieve, and effective program characteristics include involving teachers, frequent and intense student involvement, and academic supports.[10] Within schools, research suggests going beyond the traditional focus of curriculum, assessment, and staff development to also focus on culture, abilities, resilience, and effort as ways to close achievement gaps.[11]

Data Source: Kentucky Department of Education website.
Data Note: Independent school districts are listed after the school district for the county in which they are located.

Students Scoring Proficient/Distinguished in Reading and Math

(percent of elementary, middle and high school students)

	SY 2011-2012					
	Reading			Math		
	Elem.	Middle	High	Elem.	Middle	High
Kentucky	**48.0**	**46.8**	**52.2**	**40.4**	**40.6**	**40.0**
Adair Co.	49.3	42.2	44.4	39.9	52.9	38.9
Allen Co.	48.8	47.2	42.7	35.3	47.2	27.9
Anderson Co.	52.6	47.7	48.3	47.6	45.8	38.4
Ballard Co.	53.4	49.5	42.4	40.2	50.2	27.3
Barren Co.	48.1	51.8	46.5	44.3	54.1	19.1
Caverna Ind.	36.2	46.1	29.3	30.9	35.5	31.7
Glasgow Ind.	49.4	55.8	61.7	37.8	59.0	52.4
Bath Co.	46.2	49.6	36.9	39.3	41.5	22.3
Bell Co.	46.0	50.1	55.5	36.5	31.5	21.6
Middlesboro Ind.	35.6	38.6	55.0	13.6	19.4	32.0
Pineville Ind.	35.6	48.2	29.3	22.0	20.2	21.1
Boone Co.	58.5	57.3	66.1	50.0	54.0	53.0
Walton Verona Ind.	59.0	60.1	72.5	44.1	46.1	63.0
Bourbon Co.	53.7	52.5	57.3	42.8	41.1	55.0
Paris Ind.	31.0	32.7	58.3	29.7	16.4	41.2
Boyd Co.	51.7	47.6	45.7	36.2	34.8	25.0
Ashland Ind.	55.4	52.7	59.2	38.9	40.1	40.8
Fairview Ind.	38.0	42.1	39.4	42.7	24.0	22.2
Boyle Co.	63.2	57.0	63.6	46.9	55.5	37.7
Danville Ind.	48.3	50.7	42.2	46.8	33.2	46.8
Bracken Co.	46.6	50.0	70.4	37.1	30.3	63.9
Augusta Ind.	31.7	35.1	42.4	35.0	28.1	16.1
Breathitt Co.	42.1	42.5	40.6	29.5	36.5	12.0
Jackson Ind.	46.5	59.5	76.9	35.6	53.6	63.3
Breckinridge Co.	50.7	44.8	52.4	48.8	44.8	43.3
Cloverport Ind.	33.7	52.6	50.0	41.9	51.3	70.0
Bullitt Co.	45.8	46.2	48.7	41.4	41.9	46.5
Butler Co.	42.5	42.5	38.9	23.2	29.6	51.1
Caldwell Co.	47.4	50.5	56.3	39.3	55.0	38.3
Calloway Co.	57.2	53.0	58.0	51.9	50.9	45.2
Murray Ind.	69.0	71.5	65.7	64.5	67.6	82.0
Campbell Co.	59.2	51.8	53.2	50.2	55.4	49.3
Bellevue Ind.	51.5	36.3	43.9	42.3	23.5	33.3
Dayton Ind.	35.6	33.5	32.6	34.5	28.4	***
Fort Thomas Ind.	75.1	72.5	87.4	67.5	69.4	81.1
Newport Ind.	17.2	19.8	24.3	16.7	24.2	25.7
Silver Grove Ind.	21.6	19.5	30.0	10.8	22.0	8.3
Southgate Ind.	42.6	36.8	*	18.0	29.8	*
Carlisle Co.	40.6	45.6	46.6	34.3	34.1	29.3
Carroll Co.	38.1	41.8	46.3	29.9	39.7	17.8
Carter Co.	46.7	45.5	48.1	36.3	47.1	28.9
Casey Co.	50.0	50.4	45.7	48.1	51.3	63.1
Christian Co.	42.3	37.4	41.2	39.5	30.7	34.3
Clark Co.	51.9	42.4	54.1	46.8	50.1	32.7
Clay Co.	42.3	34.0	34.4	28.5	26.4	26.8
Clinton Co.	36.5	49.1	53.8	29.6	26.1	55.3
Crittenden Co.	46.8	45.9	56.0	46.4	47.0	25.7
Cumberland Co.	35.7	50.2	32.5	25.8	36.0	35.5
Daviess Co.	57.2	56.7	56.3	53.1	48.7	39.9
Owensboro Ind.	43.7	38.7	39.3	31.6	30.8	12.1
Edmonson Co.	48.2	51.9	46.0	40.7	46.3	26.0
Elliott Co.	37.1	33.8	27.4	23.6	29.9	17.8
Estill Co.	37.0	39.5	31.1	29.6	33.5	28.7
Fayette Co.	52.9	54.9	60.0	47.1	49.9	47.3
Fleming Co.	44.5	34.9	47.1	34.1	29.1	38.6
Floyd Co.	49.4	44.8	41.5	39.3	37.7	27.1
Franklin Co.	47.0	48.2	52.0	40.2	33.1	36.9
Frankfort Ind.	40.1	45.9	54.1	29.1	36.5	42.6

	SY 2011-2012					
	Reading			Math		
	Elem.	Middle	High	Elem.	Middle	High
Fulton Co.	35.7	43.6	17.5	19.0	28.2	24.1
Fulton Ind.	28.4	46.9	44.8	23.0	24.7	13.5
Gallatin Co.	36.8	35.6	33.9	20.3	34.2	18.2
Garrard Co.	48.6	41.4	45.5	44.0	35.8	20.0
Grant Co.	38.9	46.8	54.3	29.2	36.8	36.3
Williamstown Ind.	45.5	41.0	58.6	52.0	38.9	49.1
Graves Co.	53.6	52.0	56.4	44.1	53.8	43.4
Mayfield Ind.	46.0	41.7	45.9	37.1	34.2	44.6
Grayson Co.	48.5	43.3	43.8	37.5	35.8	56.3
Green Co.	48.0	41.4	43.4	40.2	28.3	36.2
Greenup Co.	44.3	40.2	39.9	28.5	31.5	37.5
Raceland Ind.	56.8	43.3	56.0	44.5	30.3	46.7
Russell Ind.	57.9	65.4	64.7	52.9	51.5	64.3
Hancock Co.	51.0	47.5	49.1	38.7	53.3	43.2
Hardin Co.	49.1	49.1	48.0	44.3	43.0	34.2
Elizabethtown Ind.	55.5	55.9	65.9	43.9	39.6	46.3
West Point Ind.	56.8	43.8	*	37.8	37.5	*
Harlan Co.	40.0	45.2	45.0	23.2	35.8	27.5
Harlan Ind.	54.3	58.6	80.0	45.2	54.8	47.4
Harrison Co.	42.2	47.1	41.4	38.2	40.0	27.4
Hart Co.	46.1	53.4	45.6	44.8	51.7	85.0
Henderson Co.	53.0	44.5	59.4	49.4	39.6	5.6
Henry Co.	40.4	42.3	41.8	39.0	36.8	48.5
Eminence Ind.	35.1	49.6	66.7	14.9	40.7	41.4
Hickman Co.	36.4	51.9	55.6	25.8	42.6	60.0
Hopkins Co.	48.4	45.5	52.3	45.6	39.0	51.6
DawsonSpringsInd.	48.3	47.9	47.8	25.2	47.3	42.9
Jackson Co.	37.9	32.0	48.1	34.0	26.2	0.0
Jefferson Co.	42.4	38.0	51.3	35.4	32.8	46.4
Anchorage Ind.	73.7	83.7	*	68.4	89.9	*
Jessamine Co.	48.6	49.0	59.3	38.3	37.6	51.6
Johnson Co.	49.5	54.2	50.0	45.9	43.2	17.8
Paintsville Ind.	46.7	58.7	66.1	27.5	50.5	47.4
Kenton Co.	54.3	52.6	51.2	51.5	46.6	35.9
Beechwood Ind.	74.9	73.8	93.1	66.9	61.6	72.6
Covington Ind.	33.2	23.1	28.9	24.0	14.0	6.4
Erlanger-ElsmereInd.	46.8	27.6	59.7	42.4	19.6	30.3
Ludlow Ind.	35.5	40.1	50.0	31.3	28.1	28.4
Knott Co.	50.1	46.2	40.0	40.3	41.3	62.2
Knox Co.	36.6	35.9	48.9	30.5	27.0	19.7
Barbourville Ind.	38.2	46.6	57.8	17.1	30.1	22.0
LaRue Co.	49.0	60.0	58.8	45.4	55.6	47.9
Laurel Co.	48.0	48.8	55.4	41.6	44.7	37.4
East Bernstadt Ind.	37.1	33.9	*	24.9	21.0	*
Lawrence Co.	45.4	40.1	50.3	39.0	23.9	25.5
Lee Co.	52.1	38.1	48.8	33.6	28.0	35.0
Leslie Co.	38.0	48.3	39.3	22.8	38.8	15.8
Letcher Co.	36.5	40.8	46.3	24.3	39.0	21.0
Jenkins Ind.	46.6	38.7	41.2	35.0	30.2	22.8
Lewis Co.	35.1	38.3	39.5	26.6	33.9	36.5
Lincoln Co.	44.7	47.3	55.1	30.2	35.1	44.5
Livingston Co.	39.4	45.5	57.3	36.2	42.0	18.9
Logan Co.	56.5	54.6	64.2	53.3	55.7	37.4
Russellville Ind.	31.8	31.3	39.4	29.7	23.0	29.2
Lyon Co.	46.1	61.3	48.3	41.7	66.3	28.2
McCracken Co.	58.6	58.6	59.0	47.5	51.3	39.6
Paducah Ind.	39.0	38.3	51.5	34.9	33.7	34.9
McCreary Co.	40.1	35.8	41.0	31.5	37.1	29.2
McLean Co.	50.3	51.6	45.8	39.8	50.8	42.6

	SY 2011-2012					
	Reading			Math		
	Elem.	Middle	High	Elem.	Middle	High
Madison Co.	51.2	52.5	58.9	40.9	44.1	43.7
Berea Ind.	44.1	50.4	51.2	41.3	29.4	28.1
Magoffin Co.	47.9	39.0	37.8	26.4	29.7	4.2
Marion Co.	50.9	41.5	54.3	47.3	51.0	43.0
Marshall Co.	57.1	57.5	57.5	49.4	50.5	48.5
Martin Co.	41.3	41.1	34.7	24.3	34.4	30.3
Mason Co.	45.9	48.0	55.9	43.5	47.4	92.9
Meade Co.	54.8	54.2	59.3	55.7	55.1	40.4
Menifee Co.	35.6	49.3	34.4	25.4	19.8	33.8
Mercer Co.	45.4	50.9	50.9	31.3	32.4	**
Burgin Ind.	44.6	41.0	65.0	31.3	26.5	36.7
Metcalfe Co.	49.0	44.6	55.0	45.9	50.6	47.7
Monroe Co.	52.7	31.8	48.5	53.2	24.9	62.0
Montgomery Co.	55.6	49.3	60.5	47.6	33.4	39.7
Morgan Co.	50.6	43.9	40.3	46.6	37.0	46.8
Muhlenberg Co.	48.3	49.2	44.5	46.7	38.3	14.6
Nelson Co.	44.3	43.8	51.2	40.3	38.0	6.3
Bardstown Ind.	39.0	42.8	54.8	26.5	28.4	**
Nicholas Co.	43.8	38.9	27.1	27.2	24.4	26.8
Ohio Co.	44.9	48.2	41.0	40.1	51.7	37.7
Oldham Co.	62.4	62.5	79.5	50.4	58.9	50.6
Owen Co.	45.7	40.5	41.7	31.6	35.1	28.6
Owsley Co.	24.5	37.2	51.7	23.9	25.6	13.9
Pendleton Co.	46.1	44.4	51.1	41.8	44.2	40.6
Perry Co.	43.7	40.7	37.8	28.8	27.9	25.2
Hazard Ind.	48.6	53.7	72.2	36.6	47.8	39.4
Pike Co.	47.0	45.2	41.1	35.4	29.6	16.6
Pikeville Ind.	63.4	66.7	72.8	50.9	54.6	33.3
Powell Co.	46.4	41.2	40.2	41.7	34.5	26.3
Pulaski Co.	55.3	47.2	58.8	53.5	45.2	48.3
Science Hill Ind.	62.8	67.0	*	47.0	52.2	*
Somerset Ind.	58.7	60.5	66.2	47.3	44.9	72.5
Robertson Co.	34.2	20.0	29.2	21.1	20.0	10.3
Rockcastle Co.	47.2	48.6	54.3	32.1	32.2	32.4
Rowan Co.	46.6	42.9	52.7	31.8	34.6	53.3
Russell Co.	52.1	51.7	50.2	37.2	45.6	32.8
Scott Co.	56.4	52.1	69.1	48.4	44.0	38.8
Shelby Co.	49.5	50.1	50.5	46.7	37.9	24.1
Simpson Co.	47.7	49.9	61.6	44.6	37.1	45.4
Spencer Co.	55.0	49.6	59.5	52.8	40.2	19.3
Taylor Co.	46.7	55.7	53.7	35.3	50.1	44.3
Campbellsville Ind.	42.5	43.6	32.8	30.5	44.0	20.0
Todd Co.	45.1	44.1	36.2	46.2	41.0	59.5
Trigg Co.	48.6	45.8	52.1	49.1	40.9	33.3
Trimble Co.	45.9	37.8	53.3	35.2	31.1	18.1
Union Co.	46.3	42.3	38.3	38.0	38.6	11.8
Warren Co.	46.0	51.5	56.7	38.7	46.3	46.5
Bowling Green Ind.	54.0	56.4	63.9	42.8	47.2	58.8
Washington Co.	46.2	41.6	39.6	34.5	33.4	7.7
Wayne Co.	47.0	42.7	54.1	35.1	30.7	38.2
Monticello Ind.	40.2	31.1	50.7	27.7	33.3	8.6
Webster Co.	43.1	44.5	43.8	37.5	43.4	30.7
Whitley Co.	50.1	48.0	42.6	49.2	43.9	22.9
Corbin Ind.	57.4	61.6	73.1	47.5	57.2	49.0
Williamsburg Ind.	41.9	49.4	43.9	40.1	32.5	13.3
Wolfe Co.	43.2	47.9	62.4	20.3	37.3	35.9
Woodford Co.	54.2	50.6	66.6	48.5	42.3	61.2

*District contains no high school.
**Data not available due to insufficient student population.
***Data not provided by the source.

Students with Disabilities

Definition

Students with disabilities is the number of students ages 3-21 receiving special education services in public schools under the Individuals with Disabilities Education Act (IDEA). *Students with 504 Plans* is the number of students receiving educational accommodations who are not eligible for services under IDEA.

Data in context

All children do better when they have the resources and supports they need to thrive. For children with disabilities, the identification of the disability and access to appropriate resources are critical. Early identification and intervention can reduce the need for future services and even prevent additional disabling conditions in some circumstances.[1]

IDEA guarantees the right to a public education for students with disabilities, requires states to identify and serve students in the least restrictive environment, and also creates a federal funding stream. To be eligible a child must have "at least one of a list of specific impairments, and they must need special education and related services by reason of such impairments."[2]

In the 2009-10 school year, 6.5 million children (13.1 percent of all students) received special education services in the United States. Among those students, the most common disabilities were specific learning disability (38 percent) and speech or language impairment (22 percent).[3]

In Kentucky, 102,201 students with disabilities received special education services under IDEA in Kentucky's public schools in December 2010, representing 15.1 percent of all Kentucky students. The percent of students served under IDEA in school districts ranged from less than 10 percent in Beechwood Independent, Eminence Independent, Fort Thomas Independent, McCracken County, and Raceland Independent school districts to more than a quarter of students in Jackson County, Silver Grove Independent, and Southgate Independent school districts. The variation, which also occurs across states, could exist due to actual differences in the prevalence of disabilities or because of differences in how students are identified.[4] In Kentucky, most children served under IDEA had a speech or language impairment, followed by developmental delay, other health impairment, and specific learning disability (see chart).

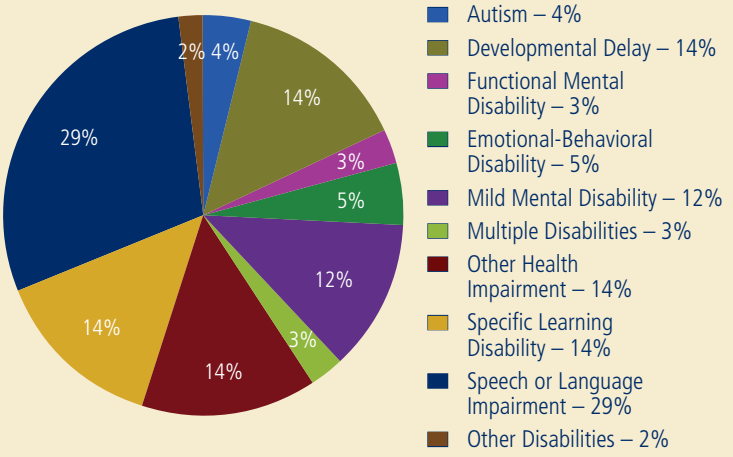
Section 504 of the Rehabilitation Act of 1973 covers children with disabilities not covered under IDEA through a ban on discrimination by entities that receive federal funds, which most public schools receive. Schools create a 504 Plan that specifies accommodations that will be made for the student related to the disability, and the plan is updated annually.[5] In Kentucky, an estimated 5,740 students received accommodations related to their disabilities under a 504 Plan in the 2009-10 school year.

Multiple factors, such as poverty or biases in testing or school practices, likely contribute to the overidentification of disabilities among some populations of students nationally.[6] The proportion by race of Kentucky students with disabilities is generally in line with student enrollment statewide, but African-American students are overrepresented among children receiving services under IDEA in many school districts.[7]

While IDEA and Section 504 have greatly expanded access to education services for children with disabilities, little research has been done to evaluate the effectiveness of specific special education services in helping students with disabilities achieve educational goals. Yet promising interventions exist for effectively working with children with disabilities. These include early identification and connection with services and applying positive behavioral interventions and supports (PBIS).

PBIS has also been identified as an effective way to preemptively address behavior issues and avoid having to use tactics such as restraint and seclusion.[8] The Kentucky Department of Education has been working to implement administrative regulations that limit the use of restraint and seclusion in schools, a practice that is disproportionately used on students with disabilities.[9]

Students with Disabilities by Type in Kentucky Public Schools, December 2010



Source: *Kentucky Department of Education.*

Data Sources: Students with disabilities data from the Kentucky Department of Education. Students with 504 Plans from the United States Department of Education, Civil Rights Data Collection.
Data Notes: Data on students with 504 Plans are not captured for every school district due to the source's collection methodology and limitations associated with survey size. Independent school districts are listed after the school district for the county in which they are located.
Rate Calculation: (number of students with disabilities in December 2010 * 100) / (number of students during school year 2010-11)
Rate for students with 504 Plans completed by the data source.

Students with Disabilities

(number & percent of all students)

	Students with disabilities, Dec. 2010		Students with 504 Plans, SY 2009-10	
	Number	Percent	Number	Percent
Kentucky	**102,201**	**15.1**	**5,740**	**1.0**
Adair Co.	395	15.1	5	*
Allen Co.	361	11.9	0	0.0
Anderson Co.	691	17.7	45	1.1
Ballard Co.	226	16.1	**	**
Barren Co.	780	16.2	10	0.2
Caverna Ind.	183	23.1	**	**
Glasgow Ind.	327	16.8	10	0.5
Bath Co.	232	11.3	**	**
Bell Co.	522	17.5	10	0.3
Middlesboro Ind.	259	16.6	5	*
Pineville Ind.	97	17.6	**	**
Boone Co.	2,529	12.9	350	1.8
Walton Verona Ind.	173	11.1	15	1.0
Bourbon Co.	389	14.8	**	**
Paris Ind.	85	11.2	0	0.0
Boyd Co.	571	17.2	20	0.6
Ashland Ind.	515	15.9	15	0.5
Fairview Ind.	106	12.5	**	**
Boyle Co.	511	19.0	90	3.1
Danville Ind.	351	19.6	**	**
Bracken Co.	210	17.4	**	**
Augusta Ind.	45	14.8	**	**
Breathitt Co.	522	23.6	**	**
Jackson Ind.	73	18.2	**	**
Breckinridge Co.	381	13.6	**	**
Cloverport Ind.	75	22.7	**	**
Bullitt Co.	1,719	13.5	90	0.7
Butler Co.	329	15.4	**	**
Caldwell Co.	235	11.6	15	0.7
Calloway Co.	466	14.5	20	0.6
Murray Ind.	195	13.6	20	1.4
Campbell Co.	1,008	20.0	65	1.3
Bellevue Ind.	129	16.8	15	1.7
Dayton Ind.	220	24.6	**	**
Fort Thomas Ind.	240	9.0	5	*
Newport Ind.	292	15.3	**	**
Silver Grove Ind.	74	38.7	**	**
Southgate Ind.	60	27.0	5	*
Carlisle Co.	133	16.5	10	1.2
Carroll Co.	231	11.6	**	**
Carter Co.	815	16.8	85	1.7
Casey Co.	421	17.9	**	**
Christian Co.	1,259	13.2	30	0.3
Clark Co.	756	13.5	60	1.0
Clay Co.	681	19.4	160	4.6
Clinton Co.	279	16.1	15	0.8
Crittenden Co.	201	15.1	5	*
Cumberland Co.	172	16.3	0	0.0
Daviess Co.	1,987	17.9	180	1.6
Owensboro Ind.	781	18.4	65	1.5
Edmonson Co.	357	17.1	**	**
Elliott Co.	148	13.1	45	4.0
Estill Co.	318	12.7	**	**
Fayette Co.	4,018	10.5	655	1.8
Fleming Co.	322	13.6	**	**
Floyd Co.	1,240	19.8	75	1.2
Franklin Co.	827	13.6	55	0.9
Frankfort Ind.	125	16.6	15	1.9
Fulton Co.	105	19.3	15	2.8
Fulton Ind.	91	21.9	**	**
Gallatin Co.	269	16.1	**	**
Garrard Co.	440	17.1	**	**
Grant Co.	503	13.1	65	1.7
Williamstown Ind.	113	12.9	**	**
Graves Co.	671	14.3	55	1.1
Mayfield Ind.	311	20.5	5	*
Grayson Co.	638	14.9	20	0.5
Green Co.	229	13.5	**	**
Greenup Co.	429	13.9	15	0.5
Raceland Ind.	94	8.8	**	**
Russell Ind.	317	14.0	55	2.4
Hancock Co.	263	15.6	15	0.9
Hardin Co.	2,625	17.4	50	0.4
Elizabethtown Ind.	283	11.4	**	**
West Point Ind.	23	19.3	**	**
Harlan Co.	810	19.2	5	*
Harlan Ind.	183	22.2	**	**
Harrison Co.	515	16.6	35	1.1
Hart Co.	419	18.0	**	**
Henderson Co.	1,139	15.8	165	2.3
Henry Co.	356	16.1	30	1.3
Eminence Ind.	67	8.3	0	0.0
Hickman Co.	169	21.5	**	**
Hopkins Co.	1,416	20.2	275	3.8
Dawson Springs Ind.	155	22.1	**	**
Jackson Co.	556	25.1	**	**
Jefferson Co.	13,495	13.7	210	0.2
Anchorage Ind.	60	16.7	**	**
Jessamine Co.	1,147	14.9	115	1.5
Johnson Co.	706	18.5	40	1.0
Paintsville Ind.	115	12.3	5	*
Kenton Co.	2,255	15.7	70	0.5
Beechwood Ind.	114	9.9	**	**
Covington Ind.	881	22.8	10	0.2
Erlanger-Elsmere Ind.	408	17.5	**	**
Ludlow Ind.	176	19.9	10	1.1
Knott Co.	423	16.8	30	1.2
Knox Co.	873	18.6	30	0.6
Barbourville Ind.	76	11.1	**	**
LaRue Co.	426	17.4	20	0.8
Laurel Co.	1,638	17.1	110	1.2
East Bernstadt Ind.	110	21.7	5	*
Lawrence Co.	451	17.9	**	**
Lee Co.	171	14.7	**	**
Leslie Co.	390	21.7	10	0.5
Letcher Co.	722	21.5	20	0.6
Jenkins Ind.	127	21.4	**	**
Lewis Co.	308	12.9	**	**
Lincoln Co.	765	18.7	20	0.5
Livingston Co.	203	15.8	**	**
Logan Co.	530	14.7	35	0.9
Russellville Ind.	188	17.4	**	**
Lyon Co.	99	11.3	**	**
McCracken Co.	664	9.0	60	0.8
Paducah Ind.	424	15.0	90	3.0
McCreary Co.	624	19.6	20	0.6
McLean Co.	297	18.3	30	1.8
Madison Co.	1,792	16.2	40	0.4
Berea Ind.	196	18.0	**	**
Magoffin Co.	471	20.5	**	**
Marion Co.	547	16.9	45	1.4
Marshall Co.	612	12.5	25	0.5
Martin Co.	409	18.6	**	**
Mason Co.	474	16.6	**	**
Meade Co.	673	13.1	55	1.1
Menifee Co.	152	11.9	**	**
Mercer Co.	500	16.2	40	1.1
Burgin Ind.	76	16.4	5	*
Metcalfe Co.	288	17.4	5	*
Monroe Co.	259	13.0	**	**
Montgomery Co.	651	13.8	25	0.5
Morgan Co.	348	16.3	**	**
Muhlenberg Co.	749	13.7	145	2.7
Nelson Co.	704	14.9	90	1.7
Bardstown Ind.	403	16.3	110	4.2
Nicholas Co.	148	12.7	**	**
Ohio Co.	487	12.2	30	0.7
Oldham Co.	1,696	14.2	205	1.7
Owen Co.	253	13.1	5	*
Owsley Co.	153	19.1	**	**
Pendleton Co.	478	18.4	**	**
Perry Co.	794	18.6	60	1.4
Hazard Ind.	161	16.9	**	**
Pike Co.	1,439	14.5	10	0.1
Pikeville Ind.	153	12.8	**	**
Powell Co.	478	19.4	0	0.0
Pulaski Co.	1,216	14.7	25	0.3
Science Hill Ind.	67	13.6	**	**
Somerset Ind.	214	14.2	**	**
Robertson Co.	65	17.7	**	**
Rockcastle Co.	620	21.1	20	0.7
Rowan Co.	581	17.9	40	1.2
Russell Co.	422	14.2	5	*
Scott Co.	1,311	15.7	195	2.4
Shelby Co.	1,179	17.6	35	0.5
Simpson Co.	486	15.8	30	1.0
Spencer Co.	396	14.1	30	1.1
Taylor Co.	296	10.9	**	**
Campbellsville Ind.	226	20.1	**	**
Todd Co.	427	20.3	10	0.5
Trigg Co.	236	11.3	**	**
Trimble Co.	180	11.6	**	**
Union Co.	393	16.5	**	**
Warren Co.	1,805	12.9	60	0.5
Bowling Green Ind.	463	11.6	50	1.3
Washington Co.	321	19.6	10	0.9
Wayne Co.	395	15.8	**	**
Monticello Ind.	129	14.6	**	**
Webster Co.	362	16.4	30	1.2
Whitley Co.	890	19.4	80	1.7
Corbin Ind.	320	11.5	**	**
Williamsburg Ind.	135	17.7	**	**
Wolfe Co.	281	21.2	85	6.4
Woodford Co.	539	13.3	130	3.1

* Percentages are not calculated for fewer than 6 students.
** Data are not provided for the district.

High School Graduation

Definition

High school graduation is the number and rate of students graduating within four years of entering high school and for students with an Individual Education Plan (IEP), graduation in more than four years.

Data in context

All young people need a strong education to succeed in today's economy, and graduating from high school is a critical step to success. Over the past two decades, the percentage of workers in the U.S. without a high school diploma or with a diploma but no college has dropped. Meanwhile, the share of workers with at least some college has increased from 52 to 63 percent.[1] Despite improvements in recent years, more than one in four high school students in the U.S. fail to graduate on time, including an estimated 1.1 million students from the Class of 2012.[2]

Communities benefit when young people stay in school and attain a high school diploma. High school graduates have higher incomes, earning a median annual salary of $26,349 compared to only $18,413 for workers without high school diplomas.[3] Additionally, high school graduates contribute about twice as much in taxes, are less likely to access public assistance, are much less likely to serve time in prison, and have better health outcomes and life expectancies than young adults who do not complete high school.[4]

A 2008 update to the Federal No Child Left Behind Act required states to adopt a uniform graduation rate formula beginning in the 2010-11 school year to track students over the course of their high school careers and give a more accurate picture of educational outcomes.[5] Kentucky, along with Idaho and Puerto Rico, received extensions and is not yet reporting data using the standard formula.[6]

Beginning with the graduating class of 2010, Kentucky adopted a transitional method called the Averaged Freshman Graduation Rate (AFGR) in order to produce an estimate of students graduating on time.[7] The Kentucky Department of Education retroactively calculated AFGR from school year 2007-2008 to allow for comparison of the latest rates with some prior school years. Kentucky's AFGR increased from 75.0 percent in 2007-08 to 77.8 percent in 2010-11. During that same timeframe, rates improved in 69 percent of Kentucky's school districts, led by Boyle County, Burgin Independent, and Monroe County School Districts. While four school districts reported a 100 percent graduation rate, 41 school districts reported that at least one quarter of their students did not graduate on time.

Dropout rates are influenced by multiple factors at the individual level and at the community, school, and family levels.[8] Students who struggle academically and who are disengaged from school work and extracurricular activities are at risk of dropping out.[9] Disproportionate access to quality schools means students who are low-income and students of color are disproportionately impacted.[10] For example, 70 percent of African-American youth graduated on time in Kentucky in 2011, compared to 79 percent of non-Hispanic White youth.[11] Asian and Hispanic youth posted higher graduation rates than White youth (98 and 83 percent, respectively).[12] There are a couple of factors that could have affected the rate for Hispanic youth in particular, meriting the use of caution when interpreting the data. The Kentucky Department of Education has stated that "the implementation of new ethnicity data collection requirements in 2011 impacted the students identified in the Hispanic group," and that the "AFGR formula is based on the assumption that membership is consistent over time."[13] The significant annual growth in Kentucky's population of Hispanic youth could contribute to an inflation of the rate.

Research shows that three key factors can predict the likelihood of a student dropping out of school: attendance, behavior, and course performance. The tipping point thresholds for these factors are: "missing 20 days of school or being absent 10 percent of school days; two or more mild or more serious behavior infractions; an inability to read at grade level by the end of third grade; failure in English or math in sixth through ninth grade; a GPA of less than 2.0; two or more failures in ninth grade courses; and failure to earn on-time promotion to the tenth grade."[14]

Early warning systems can use data to identify students at risk of not graduating and provide schools an opportunity to intervene and get students back on track.[15] For students who are struggling, high-quality alternative education programs and accelerated learning opportunities can provide the supports students need to graduate on time.[16]

Data Source: Kentucky Department of Education website.
Data Note: Independent school districts are listed after the school district for the county in which they are located.
Rate Calculation: (2007-08 graduates with standard diploma in 4 years + 2007-08 graduates with standard diploma and an IEP specifying more than 4 years to graduate) / ((Students in Grade 9 in fall 2004 + Students in Grade 10 in fall 2005)/2)
(2010-11 graduates with standard diploma in 4 years + 2010-11 graduates with standard diploma and an IEP specifying more than 4 years to graduate) / ((Students in Grade 9 in fall 2007 + Students in Grade 10 in fall 2008)/2)

Kentucky's Averaged Freshman Graduation Rate

Over the years Kentucky has changed the way it officially calculates the high school graduation rate. Currently, Kentucky uses the Averaged Freshman Graduation Rate (AFGR), a transitional method approved by the U.S. Department of Education (USED). Beginning with the class of 2013, the USED expects all states to use the Cohort graduation formula, the most accurate method of measuring graduation rates. Until Kentucky shifts to the cohort model, caution should be used when interpreting rates for school districts and the state as a whole. The AFGR uses a graduating class's average student enrollment during their freshman and sophomore years as the denominator in the calculation, assuming that membership over the four years of high school is consistent. If a student population significantly declines during the junior and senior years of school, the rate may be impacted negatively, whereas if a student population significantly increases during the junior and senior years of school, the rate may be impacted positively.

Averaged Freshman Graduation Rate

(number & percent of students graduating on time)

	SY 2007-2008		SY 2010-2011	
	Number	Percent	Number	Percent
Kentucky	**40,094**	**75.0**	**42,140**	**77.8**
Adair Co.	161	69.1	181	76.4
Allen Co.	192	78.7	210	76.8
Anderson Co.	264	88.0	285	84.7
Ballard Co.	87	77.3	98	88.3
Barren Co.	314	78.0	301	79.5
Caverna Ind.	40	64.5	51	68.5
Glasgow Ind.	109	71.2	134	86.7
Bath Co.	110	71.9	123	77.6
Bell Co.	160	63.4	184	73.8
Middlesboro Ind.	112	69.8	89	69.5
Pineville Ind.	37	91.4	46	77.3
Boone Co.	1,025	78.2	1,164	80.3
Walton Verona Ind.	84	100.0	105	92.9
Bourbon Co.	179	77.3	180	81.1
Paris Ind.	46	92.0	44	66.2
Boyd Co.	230	92.7	227	90.3
Ashland Ind.	194	76.1	208	86.1
Fairview Ind.	61	91.7	70	100.0
Boyle Co.	172	72.3	180	92.1
Danville Ind.	119	75.1	110	75.9
Bracken Co.	72	69.6	87	77.3
Augusta Ind.	25	96.2	27	100.0
Breathitt Co.	124	58.6	132	63.3
Jackson Ind.	33	82.5	24	82.8
Breckinridge Co.	178	85.4	200	87.9
Cloverport Ind.	19	100.0	20	88.9
Bullitt Co.	745	76.8	798	76.0
Butler Co.	145	79.2	114	69.1
Caldwell Co.	135	75.2	128	83.9
Calloway Co.	220	94.6	235	90.9
Murray Ind.	97	81.2	103	86.2
Campbell Co.	334	71.2	333	82.3
Bellevue Ind.	56	65.1	56	81.8
Dayton Ind.	62	75.6	42	63.2
Fort Thomas Ind.	203	91.2	182	89.7
Newport Ind.	86	57.0	101	64.1
Silver Grove Ind.	19	77.6	23	93.9
Southgate Ind.	*	*	*	*
Carlisle Co.	64	82.1	65	76.5
Carroll Co.	116	76.1	125	74.2
Carter Co.	341	80.7	345	80.8
Casey Co.	149	74.5	169	76.3
Christian Co.	502	72.5	563	78.9
Clark Co.	304	71.1	351	73.2
Clay Co.	187	59.3	207	67.8
Clinton Co.	82	61.0	96	68.6
Crittenden Co.	88	77.5	110	86.3
Cumberland Co.	85	80.6	71	75.1
Daviess Co.	794	88.7	710	84.3
Owensboro Ind.	218	71.6	215	82.5
Edmonson Co.	141	84.2	129	81.4
Elliott Co.	61	67.8	75	74.3
Estill Co.	136	72.3	151	70.9
Fayette Co.	1,926	69.8	2,252	77.8
Fleming Co.	142	69.6	171	84.2
Floyd Co.	411	72.5	417	86.3
Franklin Co.	338	70.3	410	78.0
Frankfort Ind.	72	77.0	65	83.3
Fulton Co.	50	80.0	31	70.5
Fulton Ind.	37	100.0	21	56.0
Gallatin Co.	100	73.3	102	75.6
Garrard Co.	151	68.6	154	73.9
Grant Co.	208	70.3	246	77.7
Williamstown Ind.	54	71.5	55	84.0
Graves Co.	308	72.9	285	73.3
Mayfield Ind.	91	71.7	89	87.7
Grayson Co.	274	77.8	296	83.1
Green Co.	110	84.9	117	83.9
Greenup Co.	186	67.3	214	81.1
Raceland Ind.	66	79.0	62	77.0
Russell Ind.	178	98.3	159	90.3
Hancock Co.	119	82.4	120	84.2
Hardin Co.	1,023	82.7	1,017	84.6
Elizabethtown Ind.	137	69.7	161	83.4
West Point Ind.	*	*	*	*
Harlan Co.	272	67.2	249	71.6
Harlan Ind.	43	78.2	47	79.0
Harrison Co.	209	77.6	222	86.2
Hart Co.	149	77.6	154	85.8
Henderson Co.	457	70.3	469	82.0
Henry Co.	133	70.0	140	72.0
Eminence Ind.	34	90.7	24	76.2
Hickman Co.	46	76.0	53	75.7
Hopkins Co.	461	79.8	438	81.0
Dawson Springs Ind.	46	74.8	44	71.5
Jackson Co.	150	70.8	114	73.8
Jefferson Co.	5,236	67.7	5,468	67.8
Anchorage Ind.	*	*	*	*
Jessamine Co.	427	70.0	460	68.4
Johnson Co.	247	81.5	239	85.1
Paintsville Ind.	46	77.3	46	82.9
Kenton Co.	817	76.8	898	80.0
Beechwood Ind.	84	100.0	81	100.0
Covington Ind.	156	56.2	161	55.0
Erlanger-Elsmere Ind.	121	67.4	143	69.4
Ludlow Ind.	62	83.2	58	85.3
Knott Co.	149	70.1	183	77.1
Knox Co.	251	62.4	286	65.5
Barbourville Ind.	52	91.2	46	94.8
LaRue Co.	161	82.8	167	88.6
Laurel Co.	516	68.0	526	67.8
East Bernstadt Ind.	*	*	*	*
Lawrence Co.	164	66.7	174	69.2
Lee Co.	73	72.6	49	67.1
Leslie Co.	115	64.6	115	66.5
Letcher Co.	193	65.8	194	74.2
Jenkins Ind.	38	71.7	30	65.2
Lewis Co.	152	77.8	149	74.9
Lincoln Co.	249	77.5	280	84.7
Livingston Co.	94	72.3	85	81.7
Logan Co.	254	89.3	254	84.4
Russellville Ind.	82	80.8	68	90.7
Lyon Co.	77	87.5	74	91.4
McCracken Co.	447	78.0	466	77.4
Paducah Ind.	167	76.8	143	68.6
McCreary Co.	193	64.3	224	78.0
McLean Co.	108	85.7	110	79.1
Madison Co.	613	80.3	690	78.8
Berea Ind.	71	86.6	74	80.0
Magoffin Co.	139	66.8	139	76.0
Marion Co.	195	73.7	210	78.7
Marshall Co.	332	78.3	313	78.4
Martin Co.	115	63.9	149	70.1
Mason Co.	179	79.9	185	85.5
Meade Co.	330	82.1	391	88.6
Menifee Co.	81	72.7	77	84.2
Mercer Co.	228	100.0	227	84.5
Burgin Ind.	34	78.2	35	100.0
Metcalfe Co.	104	71.2	137	84.8
Monroe Co.	103	70.8	164	93.2
Montgomery Co.	247	69.7	286	76.2
Morgan Co.	129	72.3	131	68.8
Muhlenberg Co.	354	82.8	351	89.9
Nelson Co.	367	74.6	361	76.6
Bardstown Ind.	113	75.3	113	81.3
Nicholas Co.	74	75.5	62	67.4
Ohio Co.	225	76.3	233	75.3
Oldham Co.	725	89.6	793	85.6
Owen Co.	127	71.4	116	77.1
Owsley Co.	64	89.5	45	79.6
Pendleton Co.	184	81.1	209	86.7
Perry Co.	263	75.3	251	78.3
Hazard Ind.	63	90.7	60	83.3
Pike Co.	593	71.8	675	80.4
Pikeville Ind.	85	73.3	85	88.1
Powell Co.	146	76.2	154	78.0
Pulaski Co.	541	75.7	564	80.2
Science Hill Ind.	*	*	*	*
Somerset Ind.	108	75.5	101	92.2
Robertson Co.	25	65.8	34	79.1
Rockcastle Co.	209	79.6	198	81.3
Rowan Co.	204	76.8	184	70.9
Russell Co.	181	84.4	174	85.3
Scott Co.	396	75.7	473	76.9
Shelby Co.	346	83.9	415	82.4
Simpson Co.	200	73.1	216	82.8
Spencer Co.	159	89.6	188	80.2
Taylor Co.	198	86.5	187	87.4
Campbellsville Ind.	57	67.9	59	77.1
Todd Co.	140	79.3	137	85.4
Trigg Co.	135	82.3	144	83.2
Trimble Co.	111	80.7	86	65.9
Union Co.	161	77.0	171	82.6
Warren Co.	826	86.2	845	86.1
Bowling Green Ind.	250	76.2	212	79.3
Washington Co.	135	71.1	142	86.9
Wayne Co.	151	81.0	181	83.2
Monticello Ind.	51	78.5	57	95.8
Webster Co.	121	77.1	149	89.2
Whitley Co.	236	66.6	272	69.6
Corbin Ind.	147	90.2	178	92.7
Williamsburg Ind.	53	100.0	55	89.4
Wolfe Co.	88	83.8	86	91.5
Woodford Co.	282	82.8	287	84.7

* No high school in the district.

Young Adults

Definition

College/career readiness is the number and percent of high school graduates meeting standards of preparedness for college or career. *Students with academic needs* is the percent of students who enter Kentucky public postsecondary institutions underprepared in one or more subjects after graduating from high school within the previous two years. *Six-year college graduation rate* is the percent of entering college freshmen who graduate from a four-year college within six years.

Data in context

All youth need preparation and supports from communities and schools to make a successful transition into independent adults. The efforts of schools, teachers, community-based programs, and families to engage and educate youth ensures they develop the tools to be successful in college or in the career they pursue.

Graduating from college is an increasingly important milestone that benefits both the graduate and the greater public. College graduates enjoy a higher likelihood of employment, higher personal income, better health, and improved quality of life.[1] Federal, state, and local governments gain increased tax revenues from college graduates and spend less on work support programs for them.[2]

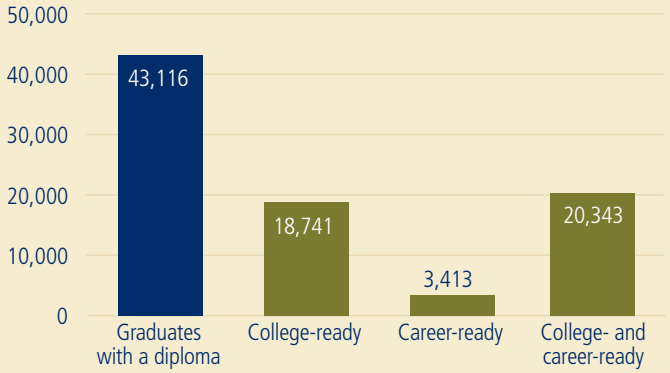
According to estimates, between 2008 and 2018, new jobs in Kentucky for high school graduates and dropouts will grow by 49,000, while jobs requiring postsecondary education and training will grow by 137,000.[3] An estimated 54 percent of all jobs in Kentucky will require postsecondary education by 2018.[4]

Among Kentucky high school graduates, 47.2 percent left high school prepared for college or a career. The college-ready indicator reflects meeting benchmarks on the ACT in reading, English, and mathematics, while the career-ready indicator reflects students meeting academic or technical standards of career-readiness.[5] The percent of students who were college- and/or career-ready ranged across counties from fewer than 30 percent in Bath, Elliott, Floyd, Lawrence, Magoffin, McCreary, and Perry Counties to more than 70 percent in Hickman and Oldham Counties.

To succeed in college, students need to be prepared for the heightened demands, and challenging studies of college. Nearly 60 percent of first-year college students in the U.S. are not prepared for postsecondary studies.[6] In 2010 in Kentucky, nearly 50 percent of students entered college unprepared in at least one subject. In 19 Kentucky counties, two-thirds or more of students entering college were underprepared in one or more subjects, and no county had fewer than 30 percent of students entering college with academic needs.

The rising cost of college tuition makes it increasingly important that young people pursuing a college education remain engaged and complete their degree program in as few years as possible. Nationally, about 66 percent of students beginning college as full-time freshmen will graduate within six years.[7] Kentucky falls far below this national average, with a six-year college graduation rate of 48.7 percent in 2010. At the county level, fewer than one in four college students from Fulton, Leslie, Letcher, and Wolfe Counties graduated within six years, and only three counties (Hancock, Muhlenberg and Union Counties) saw over two-thirds of students graduate within that time frame.

Career/College Readiness among Kentucky High School Graduates, 2012



Source: *Kentucky Department of Education, Briefing Packet, Unbridled Learning: College and Career Readiness for All, 2011-2012 Results.*

Data note: *College/career ready reflects an unduplicated count of students who may have met standards for both categories..*

Not all students have access to schools and supports that build up students and prepare them for college. Data shows that students of color are less likely to have experienced teachers and are more likely to receive harsher school discipline than White students.[8] Less than a third of high schools serving high percentages of students of color offer calculus and only 40 percent offer physics – classes that help prepare students for college-level math and science.[9]

While going to college after high school is likely to provide more well-paying job opportunities, there are other available paths to becoming a productive adult, such as employment in a skilled trade or joining the military. In Kentucky, 94 percent of high school graduates in 2010 successfully transitioned into work, school, or the military within six months after graduation. All but 23 Kentucky counties had at least 90 percent of recent high school graduates making a successful transition. Statewide, more than two-thirds of graduating students reported that they were attending college, vocational/technical school, or attending school and working (69.4 percent).[10] More than 20 percent were employed but not attending a school, and 2.4 percent were in the military.[11] While only 6 percent failed to make a successful transition into work, school, or the military, they represented more than 2,600 youth.[12]

Youth who are neither in school nor employed are at risk of becoming adults unable to achieve financial stability and without strong employment prospects. They also can present a significant cost to taxpayers, as government spends more to support them.[13] These disconnected young people need multiple, flexible pathways to success. Communities need to create opportunities for youth to gain early job experience though such avenues as community service, internships, and summer and part-time work. In Kentucky, policymakers and advocates can work to streamline public benefits by creating a single application for several public programs – making it easier on young people to gain financial stability while searching for work or going back to school.

Data Source: Kentucky Department of Education website and Kentucky Council on Postsecondary Education Comprehensive Database.
Data Note: Successful transition data for Independent school districts and County school districts were merged to create county-level data.

College/Career Preparation & College Outcomes

(percent of students prepared for college/career , entering college with academic needs & graduating college within six years)

	2012	2010	2010
	Students prepared for college/career	Students with academic needs	Six-year college graduation rate
Kentucky	**47.2**	**49.9**	**48.7**
Adair	54.5	50.0	54.1
Allen	42.1	50.6	51.0
Anderson	56.7	45.4	45.1
Ballard	52.1	52.2	58.8
Barren	42.3	49.0	54.3
Bath	28.5	62.7	31.4
Bell	46.5	77.3	36.0
Boone	62.0	36.0	48.2
Bourbon	43.0	50.7	60.5
Boyd	46.3	51.6	41.0
Boyle	63.4	54.7	43.2
Bracken	43.3	58.0	50.0
Breathitt	38.0	77.8	47.1
Breckinridge	40.1	60.8	45.5
Bullitt	41.8	50.9	44.6
Butler	41.6	66.1	37.5
Caldwell	51.0	55.7	58.6
Calloway	60.1	51.6	60.6
Campbell	53.5	36.7	47.7
Carlisle	61.2	53.8	54.5
Carroll	58.0	47.2	36.8
Carter	46.9	58.1	37.5
Casey	47.2	64.2	37.0
Christian	45.9	61.3	42.0
Clark	47.9	53.5	58.2
Clay	39.1	61.9	35.0
Clinton	58.8	79.3	42.9
Crittenden	48.8	66.7	60.0
Cumberland	52.3	52.6	55.6
Daviess	43.7	49.8	52.3
Edmonson	34.0	49.0	43.6
Elliott	27.2	66.7	41.7
Estill	40.9	53.2	42.0
Fayette	52.5	43.4	55.6
Fleming	56.7	54.8	54.0
Floyd	29.7	75.9	35.9
Franklin	43.8	53.7	41.9
Fulton	39.4	55.8	21.1
Gallatin	44.8	60.0	33.3
Garrard	42.7	53.4	40.5
Grant	59.2	44.4	37.9
Graves	57.2	40.2	49.4
Grayson	40.6	49.2	43.3
Green	40.4	63.6	35.3
Greenup	50.4	52.7	38.7
Hancock	68.8	36.0	69.2
Hardin	56.2	51.7	51.6
Harlan	35.8	68.8	43.3
Harrison	51.9	52.0	52.4
Hart	45.0	60.0	36.2
Henderson	53.3	56.0	46.7
Henry	52.3	42.6	50.0
Hickman	77.6	56.0	50.0
Hopkins	43.9	54.3	64.8
Jackson	35.6	60.0	41.7
Jefferson	45.2	49.7	51.7
Jessamine	48.5	36.1	54.5
Johnson	55.4	54.0	57.1
Kenton	45.1	36.3	45.2
Knott	40.3	60.3	30.8
Knox	33.9	68.5	33.9
LaRue	51.1	50.0	55.2
Laurel	42.9	52.4	42.3
Lawrence	28.4	67.7	40.0
Lee	51.3	51.4	38.1
Leslie	50.0	71.2	20.0
Letcher	43.3	74.7	8.3
Lewis	40.8	56.0	48.5
Lincoln	42.9	60.0	41.5
Livingston	35.0	53.7	60.0
Logan	41.6	53.3	44.4
Lyon	58.8	60.0	55.6
McCracken	54.2	46.3	56.1
McCreary	29.3	75.3	50.0
McLean	50.5	62.3	56.5
Madison	45.5	43.9	49.7
Magoffin	25.4	68.3	40.0
Marion	40.5	45.8	47.5
Marshall	54.7	46.9	58.3
Martin	51.0	80.6	25.0
Mason	39.9	48.0	51.2
Meade	65.2	46.8	61.5
Menifee	39.8	78.1	45.0
Mercer	37.1	60.8	43.8
Metcalfe	51.3	51.4	48.3
Monroe	49.6	39.7	39.1
Montgomery	49.6	53.3	31.5
Morgan	45.2	51.9	25.9
Muhlenberg	42.9	58.5	71.2
Nelson	45.9	54.0	55.0
Nicholas	30.0	52.5	57.9
Ohio	51.6	51.0	43.5
Oldham	70.6	32.0	50.6
Owen	47.2	55.6	43.5
Owsley	38.0	84.4	53.8
Pendleton	57.4	44.6	29.7
Perry	28.2	73.3	48.8
Pike	36.4	56.5	53.1
Powell	40.7	48.0	45.9
Pulaski	61.7	52.6	47.4
Robertson	36.4	80.0	50.0
Rockcastle	50.3	58.8	35.0
Rowan	45.8	57.4	33.7
Russell	52.8	59.7	40.0
Scott	55.8	51.5	51.2
Shelby	56.9	46.2	45.3
Simpson	30.5	48.1	58.3
Spencer	46.9	57.1	51.9
Taylor	46.8	48.5	46.2
Todd	36.4	51.7	44.4
Trigg	54.1	47.5	51.7
Trimble	31.3	61.3	42.9
Union	44.0	46.9	71.9
Warren	55.3	45.2	45.5
Washington	42.3	58.5	65.2
Wayne	50.7	61.1	55.6
Webster	52.5	56.5	50.0
Whitley	52.4	55.8	38.6
Wolfe	41.6	57.9	19.0
Woodford	58.6	35.2	58.2

Endnotes & References

Data Sources and Notes

Child population

Data Sources: U.S. Census Bureau, 2010 Decennial Census, and estimates prepared by the Kentucky State Data Center.

Child population by race & ethnicity

Data Source: Estimates prepared by the Kentucky State Data Center.

Data Note: Race and ethnicity categories are mutually exclusive.

School district enrollment by race & ethnicity

Data Source: Kentucky Department of Education, Superintendent's Annual Attendance Report, Ethnic Membership.

Data Note: Race and ethnicity categories are mutually exclusive.

Children living in poverty

Data Source: U.S. Census Bureau, 2000 Decennial Census and 2006-2010 American Community Survey Estimates.

Data Notes: Census 2000 data reflect income earned in the previous year, 1999. The poverty threshold for a family of four with two children in 1999 was $16,895. The American Community Survey 5-year estimates reflect data collected from 2006 to 2010. The average poverty threshold for 2006-2010 for a family of four with two children was $$21,435. The poverty universe is persons for whom the U.S. Census Bureau can determine poverty status.

Rate Calculation: (number of children living in poverty in 1999 * 100) / (total number of children in the poverty universe in 2000)
(average of children living in poverty in 2006-2010 * 100) / (total number of children in the poverty universe in 2006-2010

Essay

Creating Alternative Education Programs That Ensure All Students Succeed

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