



Legislative Research Commission

Compendium of State Education Rankings 2008

Research Report No. 362

Prepared by

Marcia Ford Seiler, Director; Brenda Landy; Ken Chilton, Ph.D.; Al Alexander;
Deborah Nelson, Ph.D.; Sabrina Olds; and Pam Young

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Project Staff

Marcia Ford Seiler, Director
Brenda Landy
Ken Chilton, Ph.D.
Al Alexander
Deborah Nelson, Ph.D.
Sabrina Olds
Pam Young

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Foreword

In November 2007, the Education Assessment and Accountability Review Subcommittee approved this second annual edition of the *Compendium of State Education Rankings* as part of the 2008 research agenda for the Office of Education Accountability.

This publication is intended to offer legislators and the public a convenient source of information about how Kentucky compares to other states on a wide variety of public elementary and secondary education indicators. Included are ranking tables, information about the authors and data sources, and discussions of data limitations and other issues intended to enhance readers' use of the report. Future compendiums will be updated and issued annually.

Robert Sherman
Director

Legislative Research Commission
Frankfort, Kentucky
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Summary

The second annual compendium of public elementary and secondary education data offers legislators and the public a convenient source of information about how Kentucky's education system compares to those in other states. Included are rankings, historical trends, information about data sources, and discussions of data limitations and other issues intended to enhance readers' use of the report.

In the spirit of continuous improvement, several changes were made to this year's compendium to make it more user friendly. While tables in the first compendium spanned two pages in order to rank all states, this year's more compact tables focus on Southern Regional Education Board and bordering states. Rankings for all 50 states and the District of Columbia are provided in Appendix A. In addition, this year's compendium examines more trends and organizes all information by the following topics:

- Chapter 1: Introduction
- Chapter 2: Outcomes (graduation rates and achievement and college-readiness tests)
- Chapter 3: Student, family, and community characteristics
- Chapter 4: School and staff characteristics
- Chapter 5: Finances (revenues, expenditures, and equity)
- Chapter 6: Multitopic indices that combine a wide variety of measures

As in the first compendium, this second edition discusses some data limitations that are helpful to bear in mind when interpreting the information presented. Some are summarized below.

- Rankings are often quoted out of context; it is essential to examine the measures on which rankings are based and the context, such as state differences in poverty, urbanization, and funding.
- A rank, as an isolated number, does not indicate how far apart states are from each other.
- Ranks indicate whether a state is better or worse than Kentucky but not whether this performance is good or bad in absolute terms.
- Rankings treat educational progress as a zero-sum game. A state's movement upward in rankings comes at the expense of other states, even if those states are also improving.
- Improvements in one area can have unintended and unanticipated consequences in other areas. For example, when dropout prevention programs are successful, achievement scores and college-going rates may stagnate or decline.
- This compendium contains multiple indicators of how Kentucky compares to other states. Rather than choosing one measure to gauge Kentucky's success or failure, readers are encouraged to weigh all of the available evidence.

Highlights

Graduation Rates. Policy makers' efforts to monitor high school completion are complicated by data quality issues and competing formulas. Nevertheless, across multiple measures, Kentucky's graduation rate recently rose slightly above the national rate, after hovering slightly below for several years. As in the nation as a whole, Kentucky's graduation rates are higher for females than for males and higher for whites than for African Americans and Hispanics. Compared to the total U.S., Kentucky's gender gaps are larger, but racial/ethnic gaps are smaller.

Achievement. In the most recent National Assessment of Educational Progress (NAEP) exams, Kentucky students performed above the national average in grades 4 and 8 science and grade 4 reading, equal to the national average in grade 4 writing, and below the national average in grades 4 and 8 math and grade 8 writing. Compared to previous years, the latest NAEP results show improvements for the Commonwealth in all above-mentioned areas except for one: grade 8 reading declined, indicating a need for more focus on reading skills in middle schools. As in the nation as a whole, Kentucky's female students scored higher than males in reading and writing, males scored higher in math and science, whites scored higher than African Americans in all subjects, and impoverished students scored lower than others in all subjects. Compared to the nation, Kentucky's gender gaps are larger, but racial and poverty gaps are smaller.

Students. Kentucky students face more socioeconomic barriers to achievement than those in most other states. Their parents typically have lower incomes, education, and employment rates. Disabilities, teen parenthood, and teen death rates are above the national average. On the other hand, Kentucky has fewer students with limited English proficiency.

Teachers. For many years, in Kentucky and the nation as a whole, the number of teachers employed in schools has increased faster than enrollment, a trend attributed to schools' increasingly complex and diverse offerings. Kentucky's student-teacher ratio is better (lower) than the national average in elementary schools but slightly worse in middle and high schools. In terms of teachers as a percentage of all staff, Kentucky is again ranked last in the nation, due to high percentages of instructional aides and support staff. *Education Week* gives Kentucky high marks for policies relating to the teaching profession. Among all states, Kentucky has the 3rd highest percentage of teachers with advanced degrees.

Schools. Compared to the nation, a higher percentage of Kentucky students attend rural schools, which have special challenges as well as some advantages. The Commonwealth continues to perform well with regard to technology access, use, and capacity. School climates are generally better than average in Kentucky, with students less likely to report being in fights, being threatened with weapons, having drugs available, or using alcohol.

Finance. Even after adjusting for Kentucky's lower cost of living, Kentucky's teacher salaries and per-pupil revenues and expenditures are below the national average. The exception is per-pupil preschool spending which, due to a \$25 million budget increase, spiked above the national average in fiscal year 2007. Notwithstanding Kentucky's below-average education funding, the Commonwealth is a national leader in allocating those funds equitably among districts.

Chapter 1

Introduction to the 2008 Compendium

This second annual compendium of P-12 education rankings and related information is meant to provide a convenient reference tool. Changes to this year's compendium include focusing on a subset of peer states, examining more trends, and arranging all data by topic.

This second annual compendium published by the Office of Education Accountability (OEA) presents a broad array of elementary and secondary public education data from federal, state, and nonprofit sources. The No Child Left Behind Act (NCLB) has increased the visibility of education, prompting a number of organizations to publish state rankings on education spending, performance, and other indicators. Frequently, legislators are asked about these rankings and Kentucky's education standing in general. The purpose of this compendium is to provide a convenient reference tool.

Changes From the 2007 Compendium

The first annual compendium was published in 2007. This year's compendium provides updated tables and a wider array of topics. In addition, some changes were made in order to make it more user friendly. Changes include focusing analyses on a subset of peer states, examining more trends, and arranging all data by topic.

Peer States

In the 2007 compendium, each ranking of the 50 states and the District of Columbia spanned two pages. Tables in this edition are more compact, comparing Kentucky to surrounding states and member states of the Southern Regional Education Board, as listed in Table 1.1. Appendix A provides rankings for all 50 states and the District of Columbia.

Table 1.1
Peer States Used for Comparison in Body of Report

Southern Regional Education Board States			Bordering States Not in Southern Regional Education Board
Alabama (AL)	West Virginia (WV)	Georgia (GA)	
Mississippi (MS)	Delaware (DE)	South Carolina (SC)	Illinois (IL)
Virginia (VA)	North Carolina (NC)	Louisiana (LA)	Indiana (IN)
Arkansas (AR)	Florida (FL)	Tennessee (TN)	Missouri (MO)
Maryland (MD)	Oklahoma (OK)	Texas (TX)	Ohio (OH)

Source: Staff compilation of information from the Southern Regional Education Board.

The revised format is intended to make the report concise and focused on states facing challenges similar to those in Kentucky. Many southern and bordering states share similar geographic, demographic, cultural, and rural characteristics.

Trends

For some topics, charts are used to display trends for Kentucky and the United States. The graphics highlight distinct differences between Kentucky and the nation.

Organization of This Compendium

Most rankings in this compendium use data from the National Center for Education Statistics. They are grouped by topic, with graduation rates and test scores in Chapter 2, student and family characteristics in Chapter 3, school and staff data in Chapter 4, finances in Chapter 5, and multitopic indices in Chapter 6. Appendices provide rankings for all states and other information.

Rankings are organized by topic. Most rankings are based on data from the National Center for Education Statistics (NCES), the primary federal entity for collecting, analyzing, and reporting data related to education in the United States. Some rankings are from other sources, which are profiled briefly in Appendix B.

The remainder of Chapter 1 discusses how to use the compendium. It includes important issues to consider when interpreting the rankings.

Chapter 2 presents information on education outcomes, specifically graduation rates, dropout rates, assessments, and college-readiness exams. Extra attention is devoted to summarizing opposing positions taken in the highly controversial debates surrounding graduation rates and proficiency levels.

Chapter 3 focuses on characteristics of students, their families, and their communities. Topics include enrollment growth, racial/ethnic composition, income, and participation in selected programs.

Chapter 4 presents characteristics of schools and staff, including the student-teacher ratio, instructors as a percentage of all staff, Title I eligibility, technology, and school safety.

Chapter 5 reports education revenues and expenditures data, such as revenues by source, spending per pupil, spending by function, teacher salaries, and measures of equity.

Chapter 6 discusses several multitopic indices that combine a wide variety of measures, including noneducation measures.

Appendices A, B, C, and D contain rankings for all 50 states and the District of Columbia, information about data sources, a key to state abbreviations, and National Assessment of Educational Progress (NAEP) achievement level definitions, respectively.

How To Use This Compendium

Comparing Kentucky's education system to those in other states provides insights into progress made, potential for further progress, and Kentucky's competitive position.

State rankings give legislators and other policy makers multiple perspectives on how Kentucky's education system compares to those in other states. Such comparisons provide insights into the state's current situation, progress made in the recent past, and potential for progress in the future. They also shed light on issues related to educational performance, such as Kentucky's ability to compete with other states in attracting and retaining skilled workers and business investments.

A state can perform well on one ranking and poorly on another, depending on the measures and methods chosen. Simply choosing what measures to report is a subjective judgment, which should be considered by those who read and use rankings.

Rankings may be controversial because they depend on the measures chosen, the statistical methods used, and the ways in which measures are standardized. The same state can appear to perform well on one ranking and poorly on another (Olson. "An 'A'").

Rankings that seem to support or oppose controversial policies often stimulate debates about possible biases on the part of the publishers and sponsors. Bias is not always blatant or deliberate. Those who read and use rankings should bear in mind that the simple act of choosing which indicators to report is a subjective judgment.

All rankings are subject to reliability and validity limitations. Data based on samples are tested statistically to determine whether observed differences are likely to be real or due to sampling error.

All rankings are subject to data and methodology issues that can limit their reliability and validity. When interpreted with their limitations in mind, they can offer valuable insights. This compendium provides caveats with some of the rankings to aid in their interpretation.

Some data, such as results from NAEP and the Census Bureau's annual American Community Survey, are based on randomly selected samples instead of entire populations; therefore, they are subject to sampling error. Compendium tables based on such sample data indicate whether each state is significantly higher than Kentucky, significantly lower, or not statistically different, assuming a 95 percent significance level. A statistically significant difference between another state and Kentucky indicates a 95 percent likelihood that the difference is real and not simply due to random sampling error. In compendium tables based on sample data, states are listed in descending order but are not ranked.

Rankings in Context

The underlying measures and context of ranks should always be considered. As an isolated number, a rank does not indicate how far apart states are or whether a state is good or bad in absolute terms.

Ranks should be used with caution. It is essential to examine the measures on which the ranks are based and the context affecting the measures. For instance, education outcomes are influenced by state-to-state variations in poverty levels, urbanization, taxes, and funding. The following caveats are other factors to consider when analyzing rankings.

Magnitude of Differences

A rank, as an isolated number, does not indicate how far apart states are from each other. For example, in 2005, Kentucky ranked 42nd on gender equity in grade 4 math scores (U.S. Dept. of Ed. Inst. Natl. *NAEP Data*). At first glance, Kentucky seems to perform poorly with respect to gender equity. In reality, the spread of scores from the top-ranked state to the lowest-ranked state is miniscule, and none of the differences is statistically significant. In contrast, states that are only one rank apart can differ considerably. For example, New Mexico was ranked 2nd after North Carolina in terms of the increase in preschool enrollment from 2004 to 2005. Although the two states were only one rank apart, North Carolina's growth rate was nearly three times that of New Mexico's (Natl. Inst. *The State* 17). It should be noted that this compendium reserves the terms "significantly" and "significant" for differences that are statistically significant.

Relative Versus Absolute Levels of Quality

A rank indicates whether Kentucky's performance is better or worse than performances of other states, but not whether this performance is "good" or "bad" in absolute terms. If every state were performing well on a measure, then even a low-ranked state may be meeting student needs. Conversely, if all states performed poorly, the top-ranked state may not be meeting student needs.

Zero-sum Game Among States

It is possible for Kentucky to improve steadily on a measure and yet lose ground in the rankings if other states improve at faster rates.

In effect, rankings treat educational progress as a zero-sum game among states. A state's movement upward in rankings comes at the expense of another state. Education reform is an ongoing process across the country. It is possible for Kentucky to improve steadily on a measure and yet lose ground in the rankings when other states improve more rapidly.

Drawing Policy Implications

Different Indicators Address Different Policy Questions

Different indicators are useful for different purposes and insights.

Different indicators are useful for different purposes, and each offers unique insights into Kentucky's challenges and outcomes. For example, education spending per pupil indicates the resources available to help each child, whereas education spending per \$1,000 in personal income reflects taxpayers' efforts relative to their ability to pay for education. Neither measure indicates the cost effectiveness of education systems. High levels of spending are often commended as a sign of extraordinary commitment to education, but they can also indicate wasteful spending, needier students, and/or simply a higher cost of living (Natl. Forum 4).

Unintended and Unanticipated Consequences

Policy initiatives to improve one indicator can cause side effects for other indicators.

Policy implementation does not occur in a vacuum. Attempts to improve one indicator have impacts on other indicators within the system (Natl. Forum 5). For example, many states are striving for more participation in ACT or Advanced Placement tests. Success at this endeavor is usually associated with lower average scores as the pool of test takers expands beyond the highest achieving students. Similarly, raising graduation rates by preventing at-risk students from dropping out is usually accompanied by declines in test scores and college-going rates. This phenomenon was recently observed in Kentucky (Commonwealth. Dept. of Ed. *Briefing 1*; Innes. *Is Kentucky*).

Simpson's Paradox

Rankings on the overall group may mask important differences between subgroups.

Aggregate rankings may mask important differences between subgroups when the composition of the overall group is shifting over time. For example, between 1981 and 2005, the national average SAT verbal score rose only 4 points for all test takers. However, scores for each ethnic group rose faster than the total (see Table 1.2). Underlying the paradox is the shift in the composition of test takers; whites, the highest-scoring subgroup, made up 85 percent of test takers in 1981, but only 63 percent in 2005 (Bracey 64-65).

Table 1.2
Simpson’s Paradox: SAT Verbal Scores by Ethnic Group and
Composition of Test Takers, 1981-2005

Gains for Ethnic Groups—SAT Verbal			Percent Composition of Test-taking Pool		
Ethnic Group	1981	2005	Gain	1981	2005
White	519	529	10	85	63
Black	412	433	21	9	12
Asian	474	511	37	3	11
Mexican	438	453	15	2	5
Puerto Rican	437	460	23	1	1
American Indian	471	489	18	0	1
<i>All Groups</i>	<i>504</i>	<i>508</i>	<i>4</i>		

Source: Bracey 64-65.

Steady Gains on Multiple Measures

Measures fluctuate over time. It is best to track them over a number of years. Successful policies should achieve steady gains in multiple measures over time.

Most rankings are snapshots of performance at a given time. Measures tend to vary from year to year, and sometimes these changes are not statistically significant. Test scores, in particular, can be very volatile. When possible, researchers analyze multiple years of data in order to smooth out random fluctuations (Way).

A large increase in funding can boost per-pupil spending substantially from one year to the next. However, most performance variables, such as graduation rates, do not improve immediately. Successful policies should achieve steady gains in multiple measures over time. Gains should be consistent and reinforcing rather than episodic and inconsistent.

This compendium contains multiple indicators of how Kentucky compares to other states. Rather than choosing one measure to gauge Kentucky’s success or failure, readers are encouraged to weigh all of the available indicators.

Data Comparability

Rankings on the same measure may seem to contradict if they use slightly different points in time or assumptions.

Indicators from different sources may appear to be the same but may differ in the ways variables are defined, collected, analyzed, and reported. Even rankings that appear to use exactly the same source can conflict if they reflect different points in time.

Terms Used in This Compendium

Rank

Unless otherwise noted, rankings and U.S. totals refer to the 50 states and the District of Columbia. Fiscal year is synonymous with school year; “n.a.” indicates data that are not available; and “--” indicates “does not apply.”

Unless otherwise noted, ranks reported in this compendium are out of 51—the 50 states and the District of Columbia. When two or more states have the same value, they are assigned the same rank and are listed in alphabetical order.

Fiscal and School Years

Since most districts’ fiscal years correspond to school years, usually starting July 1 and ending June 30, this compendium refers to fiscal years only. The only exceptions are in Alabama, which follows the federal fiscal year ending September 30; and in Nebraska and Texas where fiscal years end August 31. The federal government usually does not adjust data for states that have fiscal years different from July 1 to June 30 (U.S. Dept. of Ed. Inst. Natl. *An Historical Overview*). This compendium identifies fiscal year by the ending year, for example, the 2005-2006 fiscal year is referred to as FY 2006.

States and United States Totals

Unless otherwise noted, U.S. totals reported in tables refer to the 50 states and the District of Columbia. If data are not available for all states, the U.S. entry summarizes all available data.

Data Not Available or Inapplicable

The abbreviation “n.a.” indicates data were not available because they were not collected, not reported, or not reliable. In contrast, two dashes (--) indicate that a measure does not apply. For the U.S. as a whole, two dashes appear in place of a state rank.

Conclusion

Despite their limitations, state education rankings provide a useful summary of Kentucky’s educational progress and challenges. This chapter discussed some of the issues to consider when interpreting rankings. The following chapters present measures of student performance, demographic trends, school characteristics, and finances. For each table in the body of the report, Appendix A provides a corresponding table ranking all states.

Chapter 2

Education Outcomes

This chapter examines graduation rates, dropout rates, and test scores, including an examination of differences between state-reported information and information from other sources.

This chapter examines graduation rates, dropout rates, and test scores. These indicators frequently stimulate national debate. Graduation rates vary depending upon data quality and the formulas used to calculate them. State-reported graduation rates often disagree with rates produced by other sources. Results of state tests often disagree with national test results. This chapter devotes special attention to examining possible reasons for discrepancies between different measurements.

Graduation Rates

High school graduation is correlated with a wide range of benefits to the student and to society. Compared to dropouts, high school graduates have steadier employment and higher incomes. In addition, they report better health, are more likely to vote, and are less likely to go to prison (U.S. Dept. of Ed. Inst. Natl. *Dropout* 1; U.S. Dept. of Commerce. Census. *Voting*. Table 5).

Across multiple measures, Kentucky's graduation rate recently rose slightly above the national rate, after hovering slightly below for years. Compared to the nation, Kentucky's gender gaps are larger, but racial/ethnic gaps are smaller.

Across multiple measures, Kentucky's graduation rate recently rose slightly above the national rate, after hovering slightly below for several years. Like other states, Kentucky's graduation rates are higher for females than for males and higher for whites than for African Americans and Hispanics. Compared to the nation, Kentucky's gender gaps are larger, but racial/ethnic gaps are smaller.

Data Quality Issues

Policy makers' efforts to monitor high school completion are complicated by data quality issues and competing formulas. Kentucky's state-reported graduation rates are higher than those from sources using alternative methodologies.

Policy makers' efforts to monitor high school completion are complicated by data quality issues and competing formulas. Recent reviews suggest that the Kentucky Department of Education's formula may overstate graduation rates (Commonwealth. Auditor). As Table 2.1 shows, while the department has reported rates above 80 percent since 2004, sources using alternative methodologies reported rates that range from 5-20 percentage points lower. It is important to note, however, that Kentucky is improving on multiple measures.

Table 2.1
Graduation Rates Using Various Formulas, Kentucky and U.S.
FY 2002-FY 2005

Calculation Method	2002		2003		2004		2005	
	KY	U.S.	KY	U.S.	KY	U.S.	KY	U.S.
Kentucky Department of Education calculation	80.8	n.a.	79.2	n.a.	81.3	n.a.	82.9	n.a.
NCES Averaged Freshman Graduation Rate	69.8	72.6	71.7	73.9	73.0	74.3	75.9	74.7
<i>Education Week</i> /Urban Institute Cumulative Promotion Index	72.1	68.7	69.7	69.6	70.0	69.9	71.5	70.6
Manhattan Institute/Greene rate	68.0	71.0	68.9	69.9	n.a.	n.a.	n.a.	n.a.
National Center for Higher Education Management Systems Cohort Survival Rate	62.3	68.2	65.4	69.7	64.8	69.7	71.3	68.8

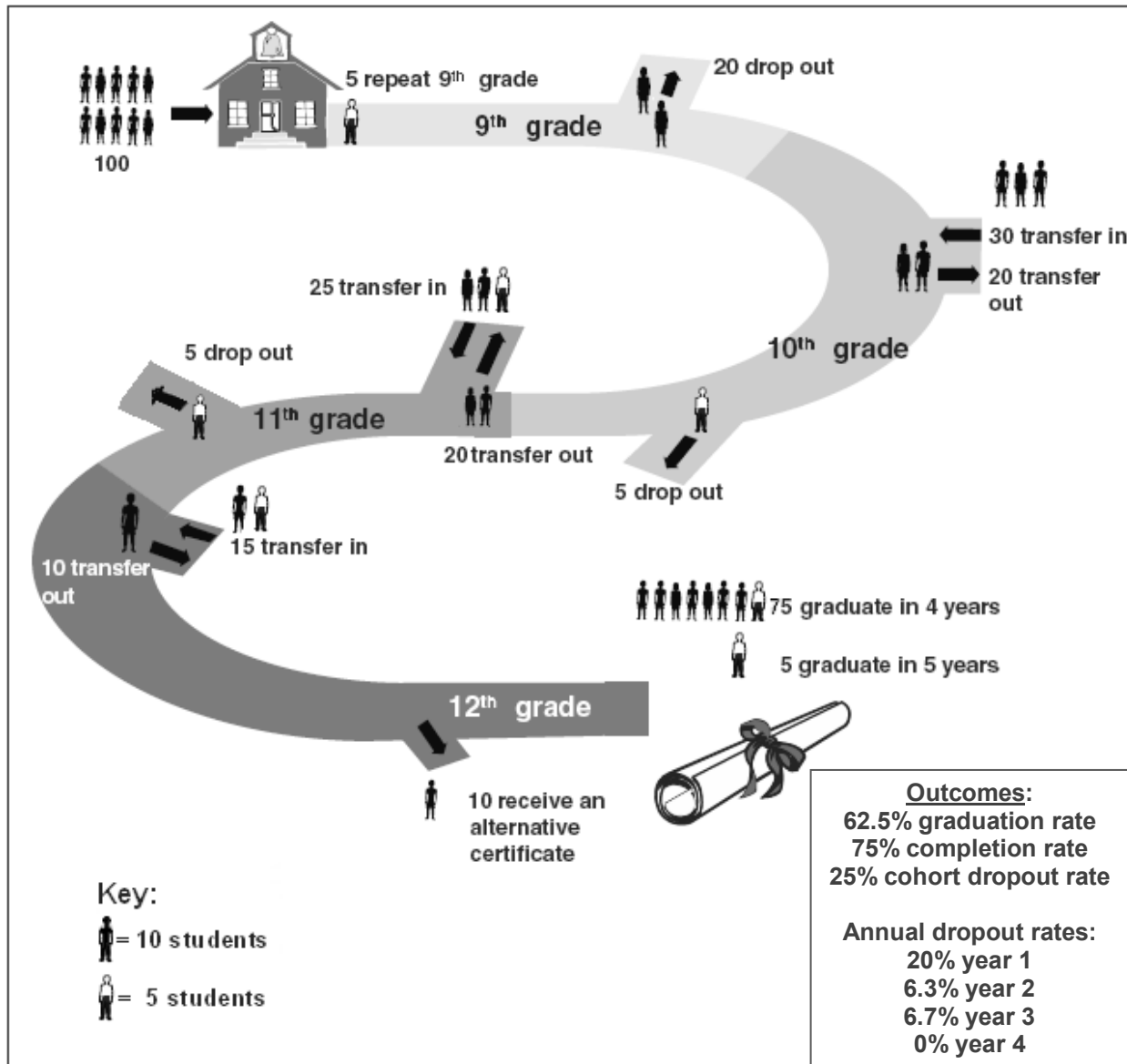
Note: The Kentucky Department of Education definitions changed slightly in 2005 to comply with National Center of Education Statistics requirements.

Sources: Commonwealth. Dept. of Ed. *Briefing 16*; U.S. Dept. of Ed. *Inst. Natl. Digest 2007 Table 102*; Editorial Projects in Education. *Education Week's Diplomas*; Greene; Natl. Ctr. for Higher Ed. *Preparation*.

Accurate graduation rates require careful tracking of students. In addition to graduating with a standard diploma in 4 years, students take many other paths throughout their high school years.

Challenges of Tracking High School Students. Kentucky is not alone in reporting rates that conflict with other sources. The reporting of graduation rates is controversial throughout the nation. Accurate graduation rates require careful tracking of students throughout their high school years. The U.S. Department of Education (USDOE) defines graduation as completing a standard diploma within 4 years. In addition, Kentucky and some other states have permission from the USDOE to include in graduation rates students earning standard diplomas in more than 4 years if the students have Individualized Education Programs (IEPs) that stipulate more time (Commonwealth. Dept. of Ed. *Approved 17*; U.S. Government. *Education Could 4*). As Figure 2.A illustrates, student progress can be interrupted by repeating a grade; needing more than 4 years to graduate; transferring between schools, districts, or states; dropping out and sometimes returning and then dropping out for a second time; or earning an alternative credential by passing the General Educational Development (GED) tests or by some other means.

Figure 2.A
Outcomes for a Hypothetical High School Class



Source: Staff adaptation of example from U.S. Government. *Education Could* 13.

Most states are only beginning to implement systems for accurate tracking, and few conduct audits of the data on which graduation rates are based.

Most states are only beginning to implement systems that track transfers within their own boundaries, and a national system for confirming transfers from one state to another has not been developed. Data inaccuracies can raise or lower a school's graduation rate, yet fewer than half of states audit the data used to calculate rates (U.S. Government. *Education Could* 25-27).

Recommended Formula Using Longitudinal Data

A federal task force recommends tracking individual students over time and calculating the graduation rate by dividing the number of 4-year standard diplomas by the number of grade 9 students 4 years earlier, adjusted for transfers and deaths.

Accurate graduation rates require tracking individuals within each cohort of students for 4 years starting from the day they enter grade 9. Using such longitudinal data, the graduation rate can be calculated by dividing the number of 4-year standard diplomas by the number of grade 9 students 4 years earlier, adjusted for transfers into and out of the cohort and deaths during those 4 years (U.S. Dept. of Ed. Inst. Natl. *National Institute* 12). This formula, which USDOE will require all states to adopt in the near future, is shown in Figure 2.B.

Figure 2.B
Graduation Rate Formula Preferred by U.S. Department of Education Task Force Using Longitudinal Individual Student Data

$$\text{Graduation Rate for year G} = \frac{\text{Number of students receiving standard 4-year diplomas in year G}^*}{\begin{aligned} &\text{Number of students entering grade 9 for the first time in fall of year G-3} \\ &+ \text{Number of students transferring into grade 9 during year G-3} \\ &- \text{Number of students excluded from grade 9 in G-3} \\ &+ \text{Number of students transferring into grade 10 during G-2} \\ &- \text{Number of students excluded from grade 10 during year G-2} \\ &+ \text{Number of students transferring into grade 11 during G-1} \\ &- \text{Number of students excluded from grade 11 during year G-1} \\ &+ \text{Number of students transferring into grade 12 during G} \\ &- \text{Number of students excluded from grade 12 during year G} \end{aligned}}$$

Notes: *The USDOE also allows the definition of graduation to include students who require more than 4 years to earn standard diplomas if their IEPs specify more time. Year G refers to the year of the graduation rate. Year G-1 is the previous year, G-2 is two years previous, and G-3 is three years previous. For example, to calculate the graduation rate for the class of 2008, the denominator starts with the count of first-time 9th graders in 2005 and follows that cohort through their high school years from 2005 to 2008. The number of students transferring into the cohort during that time is added and the number excluded (usually because they transferred out to another school) is subtracted.

Source: Staff adaptation from U.S. Dept. of Ed. Inst. Natl. *National Institute* 12.

The number of states using cohort graduation rates grew from 12 in FY 2005 to 16 in FY 2007. All states have pledged to work toward such a rate. However, Kentucky and 31 other states still use a rate that depends on dropout data.

All states have pledged to work toward implementing individual-level longitudinal data systems that will yield accurate graduation rates for each cohort (Natl. Governors). The number of states that had implemented some type of cohort method was 12 in FY 2005 and 16 by FY 2007 (U.S. Dept. of Ed. Inst. Natl. *National Institute* 18; Editorial. *Implementing*). As of FY 2007, Kentucky and 31 other states still used a “departure classification” rate, which depends on dropout data. The USDOE helped to develop the departure classification rate formula but recently instructed states to transition to a cohort rate by FY 2011 (U.S. Dept. of Ed. *High School* 1).

KDE Departure Classification Rate

Kentucky's graduation rate calculation depends on accurate dropout rates.

Kentucky's departure classification formula is shown in Figure 2.C. The denominator includes annual dropout rates, graduates needing more than 4 years, and other measures. Thus, an accurate graduation rate depends on the accuracy of other reported data.

Figure 2.C
Kentucky's Departure Classification Graduation Rate Formula

Graduation Rate for year G =	Graduates in year G (Number of students receiving standard diplomas within 4 years, or longer if the individualized education program specifies a longer time)
	$\frac{\begin{aligned} &\text{Graduates in year G as defined above} \\ &+ \text{"Graduates Plus"} \text{ (standard diplomas earned in more than 4 years without IEP) in year G} \\ &+ \text{Certificates of Completion in year G} \\ &\quad + \text{Grade 12 Dropouts in year G} \\ &\quad + \text{Grade 11 Dropouts in year G-1} \\ &\quad + \text{Grade 10 Dropouts in year G-2} \\ &\quad + \text{Grade 9 Dropouts in year G-3} \end{aligned}}{\text{Graduates in year G (Number of students receiving standard diplomas within 4 years, or longer if the individualized education program specifies a longer time)}}$

Note: Certificates of completion include students earning GEDs through in-school programs. They also include those earning GEDs outside the school setting by October 1 of the year after they dropped out.
Source: Commonwealth. Dept. of Ed. *Approved State Accountability Plan*.

The method used by Kentucky and 31 other states tends to yield higher graduation rates than the cohort method.

Although the departure classification method is still used in 31 states, the U.S. Government Accountability Office (GAO) estimates that it yields a graduation rate that is 12 percent greater than the cohort method (*Education Could* 16).

The Kentucky Department of Education should have cohort data by the spring of 2009, but conversion to a new student identification system may cause delays.

The Kentucky Department of Education's implementation of a unique student identifier in FY 2005, which began tracking students entering grade 9 in FY 2006, was expected to provide the first true cohort measures of graduation rates in the spring of 2009. However, the conversion to a new student identification system may cause delays until the spring of 2014.

Formulas Independent of State Education Systems

The National Center of Education Statistics (NCES) and other organizations have developed formulas that do not depend on accurate dropout rates. However, being less effective at adjusting for student transfers, they can under- or overestimate graduation rates.

Several organizations have attempted to develop graduation rate formulas that are comparable across states and not dependent on the accuracy of individual schools' record keeping on dropout rates. The most widely accepted among these is the Averaged Freshman Graduation Rate (AFGR) developed and used by NCES. Another well-known measure is the Cumulative Promotion Index, which was developed by the Urban Institute and is used in *Education Week* publications. These measures do not depend on the accuracy of dropout rates, but they are less effective than

departure classification rates at adjusting for student mobility. They can underestimate graduation rates in areas or subgroups that are losing population and overestimate rates in areas or subgroups that are gaining population. For example, in 2005, the AFGR for Asians in Kentucky was over 100 percent and the AFGR for Hispanics was 91 percent.

The averaged freshman graduation rate introduced by NCES in 2005 adjusts somewhat for the impact of student transfers.

NCES Averaged Freshman Graduation Rate. In July of 2005, NCES introduced the AFGR, an estimate of the percentage of an entering freshman class graduating in 4 years. For FY 2005, the AFGR equals the total number of diploma recipients in 2005 divided by the average membership of the grade 8 class in FY 2001, the grade 9 class in FY 2002, and the grade 10 class in FY 2003. Averaging the membership of the three classes adjusts somewhat for the impact of transfers in and out of the cohort over time. The AFGR formula is shown in Figure 2.D.

Figure 2.D
Averaged Freshman Graduation Rate Formula

$$\text{AFGR for year G} = \frac{\text{Number of students receiving standard 4-year diplomas in year G}}{\text{Average of Grade 8 membership in year G-4, Grade 9 membership in year G-3, and Grade 10 membership in year G-2}}$$

Source: Staff compilation based on U.S. Dept. of Ed. Inst. Natl. *Dropout 9*.

Using NCES graduation rates, Kentucky ranks 29th and is slightly above the national average. Kentucky's racial and ethnic gaps are smaller than those for the nation as a whole.

As Table 2.2 shows, Kentucky ranks 29th, with an AFGR slightly above the national rate. Gaps by race and ethnicity are smaller in Kentucky than in the nation. This reflects not only higher graduation rates for minorities but also lower rates for whites in Kentucky, perhaps due to higher rates of poverty in Kentucky than in most other states. The Hispanic AFGR is likely distorted by the group's small size and relatively rapid migration into the state, which can cause the AFGR to overestimate the graduation rate.

It should be noted that the graduation rate is higher for females than for males, yet NCES does not publish separate male and female graduation rates at the state level.

Table 2.2
NCES Averaged Freshman Graduation Rate, FY 2005

All Races/Ethnicities			White Non-Hispanic			Black Non-Hispanic			Hispanic		
Rank	State	%	Rank	State	%	Rank	State	%	Rank	State	%
15	MO	80.6	8	IL	87.5	8	MD	71.1	2	KY	91.0
16	OH	80.2	14	OH	83.6	10	KY	69.9	3	MO	86.4
18	VA	79.6	15	MD	83.5	12	WV	69.5	5	AR	79.6
19	IL	79.4	16	MO	82.9	12	AR	69.5	6	MD	78.6
20	MD	79.3	18	VA	82.3	14	VA	69.0	9	VA	76.7
25	WV	77.3	22	TX	81.5	17	TX	68.6	13	LA	71.9
26	OK	76.9	--	U.S.	80.4	18	OK	68.2	15	OH	71.3
29	KY	75.9	30	OK	77.9	22	MO	67.5		OK	
30	AR	75.7	31	WV	77.4	26	NC	65.7	20	TN	69.4
--	U.S.	74.7	32	DE	77.3	27	DE	64.4	21	MS	69.0
35	TX	74.0	33	AR	76.9	34	OH	61.3	22	NC	66.9
36	IN	73.2	34	KY	76.8	35	TN	59.8		IL	
37	DE	73.1	36	NC	76.4	36	MS	59.7	24	TX	66.3
39	NC	72.6	37	IN	76.3	37	IL	58.6	--	U.S.	64.2
41	TN	68.5	40	LA	72.2	--	U.S.	58.1	30	IN	63.7
42	AL	65.9	43	TN	71.0	39	AL	57.2	33	FL	62.7
45	FL	64.6	44	AL	70.5	40	LA	54.1	34	DE	62.4
47	LA	63.9	45	FL	70.2	42	GA	52.4	37	AL	59.9
48	MS	63.3	46	GA	66.6	43	IN	52.2	42	GA	51.2
49	GA	61.7		MS		44	FL	51.8	n.a.	SC	n.a.
50	SC	60.1	n.a.	SC	n.a.	n.a.	SC	n.a.		WV	

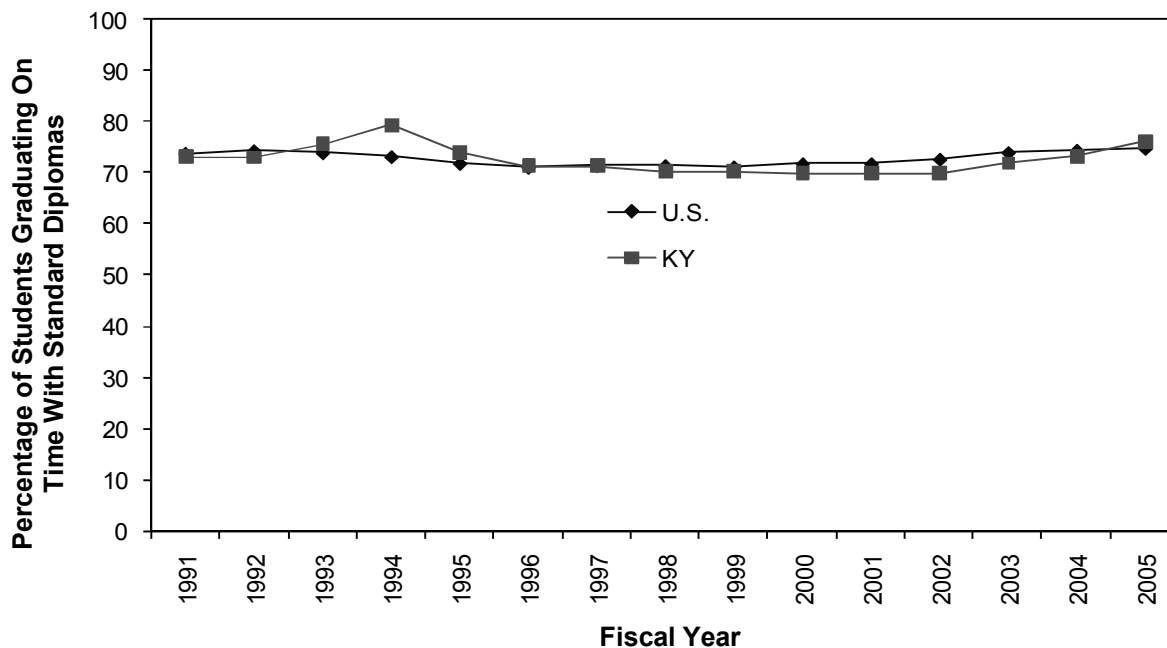
Notes: The averaged freshman graduation rate estimates the percentage of an entering freshman class that graduates with a standard diploma in 4 years. For FY 2005, it equals the total number of diploma recipients in FY 2005 divided by the average membership of the 8th-grade class in FY 2001, the 9th-grade class in FY 2002, and the 10th-grade class in FY 2003. Rates for Asian students are not reported because Kentucky's AFGR exceeded 100%; this can happen for small, growing subgroups.

Source: U.S. Dept. of Ed. Inst. Natl. "Data Tables."

Kentucky's graduation rate has risen slightly each year since 2002.

Figure 2.E illustrates trends in AFGRs. Rates have not changed substantially over the past 15 years, although Kentucky's rate shows a slight increase each year since 2002.

Figure 2.E
NCES Averaged Freshman Graduation Rate Trends, FY 1991-FY 2005



Source: U.S. Dept. of Ed. Inst. Natl. *Digest 2006* 165 and *Digest 2007* 165.

The Cumulative Promotion Index (CPI) uses the most up-to-date data for each of high school transition point. It does not reflect the experiences of a real cohort, but it describes current conditions.

Education Week Cumulative Promotion Index. The Cumulative Promotion Index (CPI), shown in Figure 2.F, resembles a cohort estimate because it combines measures for each of the critical transitions a cohort makes during high school: promotion from grade 9 to grade 10, from grade 10 to grade 11, and from grade 11 to 12, culminating in graduation at the end of grade 12. However, while cohort estimations like the AFGR use measures going back several years to reconstruct the experience of a cohort, the CPI uses a “snapshot” of all high school cohorts at approximately the same point in time. As a composite of several cohorts, the CPI does not accurately capture the true experiences of any one cohort, but it has the advantage of better describing current conditions, since it uses the most up-to-date data for each of the high school transition points.

Figure 2.F
Formula for the Cumulative Promotion Index

$$\text{CPI for year G} = \frac{\text{Grade 10 enrollment in fall of year G+1}}{\text{Grade 9 enrollment in fall of year G}} \times \frac{\text{Grade 11 enrollment in fall of year G+1}}{\text{Grade 10 enrollment in fall of year G}} \times \frac{\text{Grade 12 enrollment in fall of year G+1}}{\text{Grade 11 enrollment in fall of year G}} \times \frac{\text{Graduates in year G}}{\text{Grade 11 enrollment in fall of year G}}$$

Source: Swanson 7.

From 2001 to 2005, Kentucky's CPI showed the 3rd fastest improvement, rising above the national rate. However, gender gaps are larger than the nation's; females have graduation rates 9.8 percentage points higher than males.

As Table 2.3 shows, while Kentucky's CPI was below the national average in 2001, it was above the national average by 2005. In terms of improvement, Kentucky ranks 3rd nationally in positive CPI change between 2001 and 2005. However, the gender gap grew during this time. For the nation as a whole, the graduation rate for boys is 7.5 percentage points lower than the rate for girls. In Kentucky, this gap is 9.8 percentage points.

Table 2.3
Cumulative Promotion Index for All Students and by Gender, FY 2001 and FY 2005

All Students									Gender						
2001			2005			Change (2005 Minus 2001)			Males 2005			Females 2005			
Rank	State	%	Rank	State	%	Rank	State	%	Rank	State	%	Rank	State	%	
14	MD	75.3	13	IL	76.7	1	TN	7.9	11	MO	73.5	11	MO	79.0	
15	IL	74.8	15	MO	76.5	2	FL	7.8	16	OH	72.6	13	MD	78.4	
20	MO	73.0	16	OH	75.9	3	KY	6.2	17	IL	72.0	17	OH	78.1	
21	VA	72.6	23	IN	73.6	8	OH	5.0	21	OK	70.0	18	IL	77.9	
22	IN	72.5		MD		10	SC	4.9		WV		22	VA	76.7	
27	OH	70.9	26	AR	73.2	13	MS	3.8	26	AR	69.2	23	AR	76.5	
28	AR	70.8	27	VA	72.9	14	TX	3.6	28	VA	68.9	24	IN	76.3	
29	WV	70.7	28	WV	72.8	16	MO	3.5	29	MD	68.3		WV		
30	OK	70.1	29	KY	71.5				NC		--	U.S.	67.8	26	KY
--	U.S.	68.0	31	OK	70.8	20	GA	2.6	30	IN	67.7	--	U.S.	75.3	
35	KY	65.3	--	U.S.	70.6	--	U.S.	2.6	33	KY	66.2	35	NC	73.3	
37	TX	64.9	36	TX	68.5	21	AR	2.4	35	TX	64.9		OK		
38	DE	64.3	40	NC	67.0	24	WV	2.1	39	NC	61.3	37	TX	72.7	
39	LA	64.1	41	TN	65.4	25	IL	1.9	40	FL	56.1	40	MS	68.6	
41	NC	63.5	42	MS	61.8	30	IN	1.2	41	MS	55.4	41	FL	65.5	
44	AL	61.6	43	AL	61.3	32	OK	0.7	42	DE	55.0	42	DE	64.0	
46	MS	58.0	44	FL	60.8	33	VA	0.3	43	GA	52.8	43	GA	63.8	
47	TN	57.5	45	DE	60.1	37	AL	-0.4	46	LA	48.3	44	LA	60.5	
48	GA	55.5	46	GA	58.1	41	MD	-1.7	n.a.	AL	n.a.	n.a.	AL	n.a.	
50	FL	53.0	48	SC	55.6	46	DE	-4.2		SC			SC		
51	SC	50.8	49	LA	54.7	51	LA	-9.4		TN			TN		

Notes: Ranks for males are out of 44; data are not available for NH, NV, NY, OR, PA, SC, and TN. Ranks for females are out of 43; data are not available for DC, NH, NV, NY, OR, PA, SC, and TN.

Source: Editorial Projects in Education. *Education Week's Diplomas Count*.

Racial and ethnic gaps are smaller in Kentucky than in most other states. This may reflect Kentucky's smaller income gaps and more equitable school funding because income is related to educational attainment.

Table 2.4 breaks down the CPI for various racial and ethnic groups. In both Kentucky and the nation, Asians are the most likely to graduate, followed in order by whites, Hispanics, and blacks. In Kentucky, the gaps between whites and minorities are smaller; while Kentucky's white students graduate at rates below the national average, all other racial groups graduate at rates above the national average.

Researchers attribute racial graduation gaps, in part, to economic disadvantages among minorities. Kentucky's smaller graduation gaps may stem from smaller gaps in economic opportunity. Black-white differences in income are smaller in Kentucky than in most other states. In addition, Kentucky's Support Education Excellence in Kentucky (SEEK) formula minimizes school funding gaps between high-minority/high-poverty districts and low-minority/low-poverty districts, as will be discussed in Chapter 5.

Table 2.4
Cumulative Promotion Index by Race and Ethnicity, FY 2005

Asian			Hispanic			Black/African American			White		
Rank	State	%	Rank	State	%	Rank	State	%	Rank	State	%
1	MD	91.8	2	KY	66.5	3	AR	64.1	11	IL	82.5
2	TX	86.9	3	MD	64.9	6	MD	62.0	13	MD	81.8
3	LA	85.0	4	LA	62.5	7	TX	61.7	18	OH	78.8
5	KY	84.5	7	WV	59.9	8	VA	61.0	20	VA	78.2
7	IL	83.4	9	IL	59.8	9	WV	60.7	--	U.S.	76.2
8	VA	83.0	10	FL	59.0	11	KY	59.2	21	MO	78.0
9	FL	82.2	11	TX	57.9	13	MS	58.0	27	TX	75.6
--	U.S.	80.2	--	U.S.	57.8	18	NC	57.0	28	OK	75.0
13	OK	79.3	12	MO	57.4		OK		29	AR	74.9
19	NC	75.5	13	VA	57.1	21	MO	55.8	30	IN	74.6
20	GA	75.4	22	NC	53.8	22	LA	54.6	32	WV	72.6
22	OH	75.3	25	OK	52.6	--	U.S.	53.4	33	NC	71.7
26	WV	70.8	28	IN	50.2	27	IL	51.8	36	KY	70.3
27	IN	69.8	32	MS	47.5	28	AL	49.9	38	DE	69.0
30	AL	66.2	34	OH	46.8	29	OH	48.0	40	LA	66.2
34	MS	63.4	37	DE	41.4	32	FL	46.7	41	FL	66.0
n.a.	AR	n.a.	39	GA	38.6	36	GA	44.4	42	MS	65.6
	DE		41	AL	36.5	38	IN	41.6	43	AL	65.2
	MO		n.a.	AR	n.a.	n.a.	DE	n.a.	45	GA	59.2
	SC			SC			n.a.		SC	n.a.	
	TN			TN			n.a.		TN	n.a.	

Notes: Ranks for Asians are out of 38; data are not available for AR, DE, ID, IA, MO, MT, ND, SD, NH, NV, NY, SC, and TN. Ranks for Hispanics are out of 42; data are not available for AR, ME, MN, VT, NV, NH, NY, SC, and TN. Ranks for blacks/African Americans are out of 40; data are not available for DE, ID, ME, MT, SD, VT, NV, NH, NY, SC, and TN. Ranks for whites are out of 46; data are not available for NV, NH, NY, SC, and TN.

Source: Editorial Projects in Education. *Education Week's Diplomas Count*.

State-reported Rates

State-reported graduation rates are often higher than alternative measures. These discrepancies are smaller in Kentucky than in many other states.

The graduation rates that states report for purposes of No Child Left Behind are often higher than the AFGR, CPI, and other alternative measures, as shown in Table 2.5. Some critics argue that states deliberately obscure their true graduation rates in order to avoid embarrassment and sanctions (Dillon; Hall). GAO attributes discrepancies to inadequacies of data systems, coding errors, and the use of different formulas (U.S. Government. *Education Could* 24-27). In response to criticism for its lack of guidance to states, the USDOE recently proposed requiring all states to use the same formula (U.S. Dept. of Ed. *U.S. Secretary*). It is important to note that gaps between the Kentucky Department of Education’s graduation rate and alternative methodologies are smaller than in many peer states.

Table 2.5
State-reported Graduation Rates Compared to AFGR and CPI, FY 2005

State-reported Graduation Rate			NCES Averaged Freshman Graduation Rate (AFGR)			<i>Education Week</i> Cumulative Promotion Index (CPI)			State-AFGR Percentage Point Difference			State-CPI Percentage Point Difference		
Rank	State	%	Rank	State	%	Rank	State	%	Rank	State	%	Rank	State	%
1	NC	95.0	15	MO	80.6	13	IL	76.7	1	NC	22.4	2	NC	28.0
7	IN	89.9	16	OH	80.2	15	MO	76.5	2	MS	21.7	3	DE	23.6
13	IL	87.4	18	VA	79.6	16	OH	75.9	4	SC	17.0	4	MS	23.2
19	OH	86.2	19	IL	79.4	23	IN	73.6	5	IN	16.7	5	SC	21.5
20	MO	85.8	20	MD	79.3		MD		9	DE	10.6	8	IN	16.3
21	MS	85.0	25	WV	77.3	26	AR	73.2	12	TX	10.0	10	TX	15.5
25	MD	84.8	26	OK	76.9	27	VA	72.9	13	TN	9.4	15	TN	12.5
27	WV	84.3	29	KY	75.9	28	WV	72.8	16	IL	8.0	19	OK	11.6
28	TX	84.0	30	AR	75.7	29	KY	71.5	17	GA	7.7	20	WV	11.5
29	DE	83.7	35	TX	74.0	31	OK	70.8	19	WV	7.0	21	GA	11.3
30	KY	82.8	36	IN	73.2	36	TX	68.5	20	KY	6.9		KY	
31	OK	82.4	37	DE	73.1	40	NC	67.0	25	OH	6.0	24	MD	11.2
35	AR	81.3	39	NC	72.6	41	TN	65.4	26	AR	5.6	25	IL	10.7
38	VA	79.5	41	TN	68.5	42	MS	61.8	28	MD	5.5	27	OH	10.3
40	TN	77.9	42	AL	65.9	43	AL	61.3		OK		31	MO	9.3
41	SC	77.1	45	FL	64.6	44	FL	60.8	30	MO	5.2	36	FL	8.2
45	GA	69.4	47	LA	63.9	45	DE	60.1	34	FL	4.4	37	AR	8.1
46	FL	69.0	48	MS	63.3	46	GA	58.1	45	VA	-0.1	44	VA	6.6
n.a.	AL	n.a.	49	GA	61.7	48	SC	55.6	n.a.	AL	n.a.	n.a.	AL	n.a.
	LA		50	SC	60.1	49	LA	54.7		LA				

Note: A positive difference indicates that the state reports a rate that is higher than the rate to which it is compared (the AFGR or the CPI).

Sources: Editorial Projects in Education. *Implementing and Education Week’s Diplomas*; U.S. Dept. of Ed. Inst. Natl. *Public* 13-14.

Policy Implications of Graduation Rate Calculations

Instead of the United States Department of Education's definition of "graduation"—earning a standard diploma in 4 years—some advocate giving credit for late and alternative diplomas.

In calculating graduation rates, the USDOE defines graduation strictly as earning a standard diploma within 4 years. Some question this approach, which gives no more credit for late diplomas, GEDs, and certificates of completion than it does for dropouts. Some advocate using the U.S. Census Bureau's definition of high school completion, which counts all standard diplomas, alternative diplomas, and GEDs. Policy makers and think tanks will continue to debate the merits of various measurement tools. However, until data systems using unique student identifiers are fully implemented, all graduation and dropout rates will remain flawed. Moreover, the GAO study suggests that even after these systems are in place, there will be flaws unless school personnel are trained to input data correctly and data are audited periodically (U.S. Government. *Education Could* 24-27).

Dropout Rates

A student is considered a dropout if he or she was enrolled in school at some time during the previous school year but was not enrolled at the beginning of the current year; has not graduated from high school or completed a state- or district-approved education program; and does not meet any conditions for exclusion. The conditions for exclusion are the documented transfer to another public school district, private school, or a state- or district-approved education program; temporary absence due to suspension or school-approved illness; or death (U.S. Dept. of Ed. Inst. Natl. *Numbers and Rates* 8).

Data Quality Issues

Kentucky and California have been found to underreport dropout rates. The full magnitude of underreporting in these states and others is unknown because the data are rarely audited.

Although NCES collects and publishes state-reported dropout rates, it does not audit the accuracy of these rates. A recent review by Kentucky's Auditor of Public Accounts found that the student information system was not tracking all dropouts. The full magnitude of the underreporting is unknown (Commonwealth Auditor; U.S. Government. *Education Could*). Other states have had similar issues. California's new student-tracking system found a dropout rate of 24 percent, instead of the 13 percent estimated by an older method that had been used for years (Asimov).

Annual Dropout Rate

Kentucky's state-reported dropout rates are below the national average except for students in grade 11.

Table 2.6 shows state-reported dropout rates. Kentucky's annual dropout rates are below the national average for all grades except grade 11.

Table 2.6
Annual State-reported High School Dropout Rate by Grade, FY 2005

Total Grades 9-12			Grade 9			Grade 10			Grade 11			Grade 12						
Rank	State	%	Rank	State	%	Rank	State	%	Rank	State	%	Rank	State	%				
3	LA	7.5	1	LA	8.1	4	LA	6.6	3	LA	6.7	5	LA	8.3				
7	GA	5.6	2	DE	7.2	5	GA	5.9	5	GA	5.8	11	AR	6.3				
8	DE	5.3	5	GA	5.6	6	NC	5.6	7	NC	5.4	16	TX	5.0				
9	NC	5.2	6	NC	5.2	9	DE	5.2	9	AR	5.3	17	GA	4.9				
12	IL	4.5	8	MD	4.4	12	WV	4.4	14	DE	4.5		IL		4.9			
15	AR	4.3	9	IL	4.3	16	IL	4.3		IL		4.9	--	U.S.	4.9			
17	WV	4.1	15	OH	3.7	17	AR	4.0		MO		4.7	20	NC	4.7			
19	MD	3.9	16	SC	3.6	18	MD	3.9		WV		4.6	22	OH	4.6			
--	U.S.	3.9	17	WV	3.4		MO		3.9	22	KY	4.0	23	FL	4.3			
22	MO	3.7	19	FL	3.3	21	KY	3.8	24	OK	3.9	MO		4.3				
24	TX	3.6	20	OK	3.1	--	U.S.	3.8	--	U.S.	3.8	WV		4.6				
25	FL	3.5	--	U.S.	3.1	23	OK	3.7	27	MD	3.6	27	KY	4.1				
	KY		25	TX	2.6	25	SC	3.6		TX		4.0	28	TN	4.0			
	OH		26	MO	2.5		TX		3.5	29	FL	3.9	31	IN	3.9			
	OK		28	AR	2.4	27	FL	3.3	32	OH	3.3	36	DE	3.5				
31	SC	3.3		29		AL	3.1	IN		3.5		MD	3.5					
35	AL	2.8	31	MS	2.3	30	MS	3.0	34	TN	3.2	40	VA	3.4				
	MS			37		OH	2.3	AL		3.4		42	AL	3.0				
38	TN	2.7	35	VA	1.8	39	IN	2.2	37	AL	3.1	45	MS	2.7				
41	IN	2.5		TN			1.8			TN		2.7	46	VA	2.1	46	SC	2.4
	VA			41			IN			1.3		VA	2.1	46	VA	2.1	46	SC

Notes: Ranks for the Total and Grade 9 are out of 46; data are not available for CT, DC, MN, NJ, and OR. Ranks for Grade 10 are out of 48; data are not available for DC, NJ, and OR. Ranks for Grades 11 and 12 are out of 49; data are not available for DC and OR. Ungraded students (those not in a standard grade) who drop out are assigned by the local education agency to the dropout count that most closely matches the grade they would have been in based on age. Ungraded student enrollments are prorated into grades based on graded enrollments to calculate denominators for dropout rates. Individual state total dropout rates are included only if the state reports dropouts and membership for each grade 9-12.

Source: U.S. Dept. of Ed. Inst. Natl. *Numbers and Rates 7*.

Over the past 3 years, dropout rates have not changed significantly for Kentucky or for the nation.

Table 2.7 presents annual dropout rates for FY 2003-FY 2005, the three most recent years available. During this time, rates have fluctuated but not changed significantly for Kentucky or for the nation as a whole.

Table 2.7
Annual High School Dropout Rate Trends, FY 2003 to FY 2005

FY 2003			FY 2004			FY 2005		
Rank ^a	State	%	Rank ^b	State	%	Rank ^c	State	%
3	LA	7.5	1	LA	7.9	3	LA	7.5
6	GA	5.8	5	DE	6.1	7	GA	5.6
7	IL	5.7	8	GA	5.4	8	DE	5.3
8	DE	5.5	10	IL	5.3	9	NC	5.2
10	NC	5.2	11	NC	5.2	12	IL	4.5
13	AR	4.6	14	AR	4.7	15	AR	4.3
17	OK	4.0	17	WV	4.3	17	WV	4.1
--	U.S.	3.9	19	MD	4.1	19	MD	3.9
23	MS	3.7	--	U.S.	4.1	--	U.S.	3.9
	WV		20	OK	3.9	22	MO	3.7
25	MD	3.6	24	TX	3.6	24	TX	3.6
	TX		25	FL	3.4	25	FL	3.5
28	AL	3.5		KY				
31	FL	3.4	29	AL	3.3		OH	
32	KY	3.3		KY		31	OK	
	MO			MO			31	SC
36	SC	3.2	OH	35	AL	2.8		
	TN		TN		35		MS	
41	OH	3.0	36	MS	2.9	38	TN	2.7
	VA		38	VA	2.8	41	IN	2.5
45	IN	2.2	42	IN	2.5		VA	

Notes: ^aRank out of 50; data not available for DC. ^bRank out of 44; data not available for CT, DC, IA, MN, NJ, OR and WI. ^cRank out of 46; data not available for CT, DC, MN, NJ, and OR.

Source: U.S. Dept. of Ed. Inst. Natl. *Numbers and Rates 9*.

Status Dropout Rate

The Census Bureau's status dropout rate reflects the cumulative impact of annual dropout rates. The percentage of teenagers who have no type of high school credential and are not enrolled in school is 2.2 points higher in Kentucky than in the nation as a whole. Kentucky ranks 8th with respect to this measure.

The status dropout rate, available from the Census Bureau, provides an overall measure of the cumulative impact that annual dropout rates have on educational attainment. Annual American Community Surveys, conducted by the Census Bureau, provide estimates of the percentage of high school-aged teenagers who are neither enrolled in school nor have attained a high school credential. It is important to note that the Census Bureau uses a much broader definition of high school credential, including not only standard diplomas earned within 4 years but also standard diplomas requiring more than 4 years, certificates of completion, GEDs, and other alternatives. As Table 2.8 shows, Kentucky's

status dropout rate is ranked 8th in the nation and is 2.2 percentage points above the national average.

Table 2.8
Teenagers Aged 16-19 Not Enrolled in School and Having No High School Credential, 2006

Rank	State	%
1	Louisiana	11.4%
2	Mississippi	10.4%
5	Georgia	9.1%
8	Alabama, Kentucky	8.8%
11	West Virginia	8.3%
12	Florida	7.9%
13	Indiana, South Carolina	7.6%
15	Oklahoma	7.5%
16	Texas	7.4%
17	North Carolina	7.3%
22	Delaware	6.9%
--	United States	6.6%
26	Maryland	6.4%
29	Arkansas, Missouri, Tennessee	6.1%
37	Illinois	5.5%
39	Ohio	5.4%
40	Virginia	5.2%

Source: U.S. Dept. of Commerce. Census. "American Community Survey."

Achievement Assessments

Tests are designed for different purposes. Achievement tests measure student mastery of a broad array of learning goals. College-readiness exams focus on measures that predict success in postsecondary education.

Achievement tests determine the degree to which students have accomplished the broad array of high school learning goals. Tests may be norm-referenced (comparing a student's performance to a distribution of other students' scores) or criterion-referenced (comparing a student's performance to specific standards and goals) or both. They may be nationally standardized or customized to a particular state and its unique core content.

While testing is indispensable to accountability, all tests have limitations. They are estimates, rather than exact measures, of a student's knowledge and skills.

While testing is indispensable to accountability, all tests have limitations, which users of test results should take into account. Even the most rigorously designed and administered tests are estimates, rather than exact measures, of a student's knowledge and skills. Some measurement error is inevitable. For example, a test is a sample of student abilities on one day, but student performance varies from day to day, depending on such factors as motivation, health, and distractions. Similarly, questions on any given test are only a sample of the entire domain of knowledge and

skills that could be tested. The constraints of a test environment make it impossible to adequately assess certain skills, such as the design and execution of complex projects (Way; Natl. Research).

National Assessment of Educational Progress

The National Assessment of Educational Progress (NAEP) remains the only nationally representative and continuing assessment of American students' performance in reading, mathematics, science, writing, U.S. history, civics, geography, and the arts.

The National Assessment of Educational Progress was created in 1964 to provide a national picture of student achievement. Today, NAEP remains the only nationally representative assessment of student achievement. NAEP assesses reading, mathematics, science, writing, U.S. history, civics, geography, and the arts (U.S. Dept. of Ed. Inst. Natl. *NAEP Overview*). Although it has limitations, which will be discussed below, NAEP is widely respected for its history as a national indicator, the quality of its design, its ability to assess both content and critical thinking, and the rigor of its standards (Barth; Pellegrino "Should"; Standard & Poor's).

Participation in state-level NAEP tests was voluntary until 2003, when the No Child Left Behind Act (NCLB) began requiring all states to participate every 2 years in grades 4 and 8 math and reading tests.

NAEP assessments have been conducted at the national level since 1969, but state-level NAEP tests were not implemented until the early 1990s (U.S. Dept. of Ed. Inst. Natl. "About"). Since 2003, the No Child Left Behind Act has mandated biennial participation in NAEP grade 4 and grade 8 reading and math tests, for the stated purposes of comparing states' academic achievement and evaluating states' accountability systems (PL 107-110 Sec. 1501(a)(1)-(3); U.S. Dept. of Ed. Inst. Natl. "More About").

NAEP scores are not reported for individual students or schools because they are based on a sample of approximately 2,500 students in 100 public schools per grade, per subject in each state.

NAEP scores are not reported for individual students or schools because the tests are administered to samples of approximately 2,500 students in 100 public schools per grade per subject in each state. Samples are supplemented as needed to ensure representation of unique areas such as the state's only large city or only large concentration of minorities (U.S. Dept. of Ed. Inst. Natl. *How*).

Statistical testing indicates the likelihood that differences are real rather than due to sampling error. Because these tests take into account each state's sample size and variations in scores, two states with the same average score can have different levels of significance when compared to Kentucky.

Because NAEP results are based on samples of students, USDOE provides statistical tests that indicate, with 95 percent certainty, whether differences are likely real or simply due to random sampling error. In this compendium, statistical significance is shown in table columns headed "Sig.," with > indicating states that are significantly better than Kentucky, = indicating states that are not significantly different, and < indicating states that are significantly worse. Since statistical tests use unrounded percentages and take into account each state's sample size and variations in scores, two states with the same average score can have different levels of significance when compared to Kentucky.

NAEP policies are set by the National Assessment Governing Board (NAGB), an independent group of state, local, and federal officials, educators, business representatives, and members of the general public appointed by the U.S. Secretary of Education (U.S. Dept. of Ed. Natl. Assessment. *What*). NAGB oversees the testing frameworks and definitions of achievement levels. The Below Basic, Basic, Proficient, and Advanced achievement levels correspond to specified ranges of scores in each subject and grade. The general policy definitions shown in Table 2.9 are generic versions that provide the basis for more detailed definitions. Detailed definitions for each content area and grade can be found in Appendix D.

Table 2.9
General Policy Definitions of NAEP Achievement Levels

Advanced	Superior performance
Proficient	Solid academic performance for the grade tested; demonstrated competency over challenging subject matter, including subject-matter knowledge, application of such knowledge to real world situations, and analytical skills appropriate to the subject matter
Basic	Partial mastery of prerequisite knowledge and skills that are fundamental for proficient work at the grade tested

Notes: The “Below Basic” level is reported but not defined. See Appendix D for definitions tailored to each content area and grade.

Source: U.S. Dept. of Ed. Inst. Natl. “Interpreting.”

NAEP assesses four aspects of students’ reading abilities in three contexts.

Reading. The most recent state-level NAEP reading assessment took place in 2007. NAEP assesses four aspects of students’ reading abilities in three contexts. These are described in Table 2.10, arranged in order of increasing difficulty for students.

Table 2.10
Framework for NAEP Reading Assessment, 2007

Aspects of Reading as a Percentage of Test Items, By Grade	Grade 4	Grade 8
	Percent	
Form a general understanding: Consider the text as a whole and provide a global understanding of it	60%	55%
Develop interpretation: Extend initial impressions to develop a more complete understanding; focus on specific parts of the text and link information across those parts		
Make reader/text connections: Think beyond the text, applying it to real-world situations, and own knowledge and experience	15%	15%
Examine content and structure: Consider why and how the text was developed; consider content, organization, and form; critically evaluate, compare and contrast, and understand the effect of such features as irony, humor, and organization	25%	30%
Contexts as a Percentage of Test Time, by Grade		
Read for literary experience: Explore events, characters, themes, settings, plots, actions, and the language of literary works by reading novels, short stories, poems, plays, legends, biographies, myths, and folktales	55%	40%
Read for information: Gain information to understand the world by reading materials such as magazines, newspapers, textbooks, essays, and speeches	45%	40%
Read to perform a task: Apply what is learned from reading materials such as bus or train schedules, directions for repairs or games, classroom procedures, tax forms (grade 12), maps, and so on (not assessed in grade 4)	0%	20%

Source: Staff compilation based on U.S. Dept. of Ed. Inst. Natl. "Reading"; U.S. Dept. of Ed. Natl. Assessment. *Reading* vi, 6.

Reading proficiency of Kentucky's students in grades 4 and 8 is on par with the nation and compares favorably to peer states.

As Table 2.11 shows, the reading proficiency of Kentucky's grade 4 and grade 8 students is on par with the nation.¹ With about one-third scoring at levels considered proficient, Kentucky's grade 4 students performed well relative to those in peer states. None of the peer states had significantly higher grade 4 proficiency levels than Kentucky, while 10 had significantly lower levels.

In Kentucky, as in most other states, fewer grade 8 students than grade 4 students were deemed proficient. Kentucky's grade 8 reading proficiency level was significantly better than that in four peer states but significantly worse than the level in three other peer states.

¹ Appendix D contains a description of the knowledge and skills that correspond to proficiency and other achievement levels for reading at each grade.

Table 2.11
Students At or Above Proficient on NAEP Reading Assessment, 2007

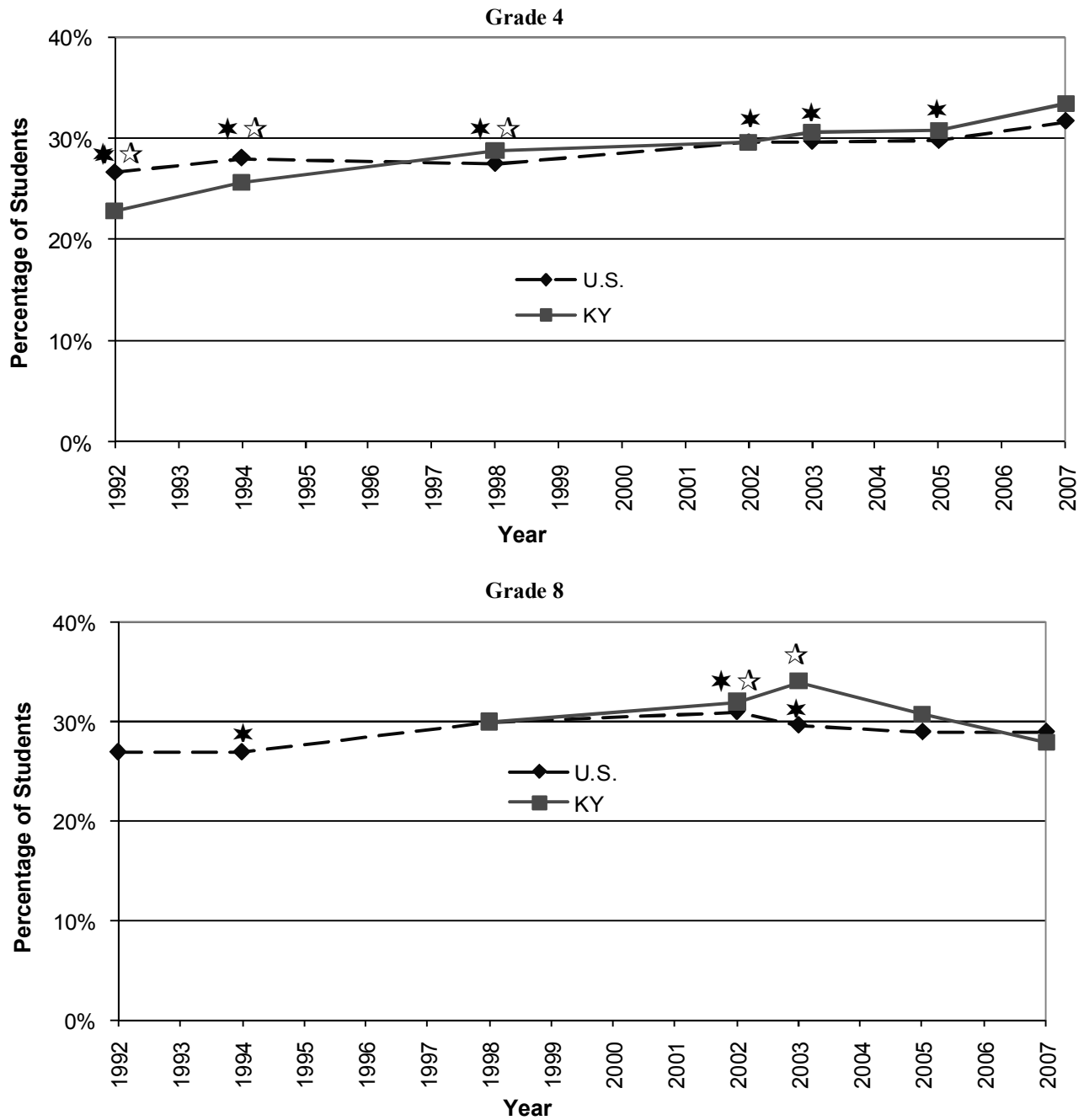
Grade 4			Grade 8			
State	%	Sig.	State	%	Sig.	
VA	38	=	OH	36	>	
OH	36		VA	34		
MD			MD	33		
FL	34		IN	31	=	
DE			DE			
KY			33			MO
IN	32		U.S.	29		
IL			FL	28		
MO	NC					
U.S.	32		KY			
TX	30		TX	26		<
NC	29		OK			
AL		GA				
AR		TN	25			
GA	28	AR				
WV	27	SC				
TN		WV	23			
OK	26	AL	21			
SC		LA	19			
LA		20	MS	17		
MS	19					

Note: > indicates states with proficiency levels significantly better than Kentucky's, = indicates states not significantly different, and < indicates states scoring significantly worse, with 95 percent certainty. Source: U.S. Dept. of Ed. Inst. Natl. *NAEP Data*.

Reading proficiency rates are lower and improving at a slower rate for grade 8 students than for grade 4. Some attribute this to a lack of focus on reading in middle and high schools. Some point to a "middle school slump."

Figure 2.G shows reading score trends for Kentucky and the U.S. Grade 4 scores have improved significantly since the first state-level test in 1992, with Kentucky improving faster than the nation's. Grade 8 proficiency rates improved until 2003 but then fell lower than the first year tested. Critics attribute the lack of sustained improvement in grade 8 reading to educators' deeply rooted belief that students should "learn to read" in primary grades but then "read to learn" in later grades. Middle and high schools are urged to teach reading skills (Kuersten; Robb). Some believe a "middle school slump" occurs in most subjects, although the causes and very existence of this slump are debated (Herszenhorn; Leischer).

Figure 2.G
NAEP Reading, Percent Proficient, U.S. and Kentucky, 1992 to 2007



Notes: ☆ indicates Kentucky’s percent proficient in the indicated year was significantly different from Kentucky’s percent proficient in 2007. ★ indicates the U.S. percent proficient in the indicated year was significantly different from 2007. Statistical tests assumed a 95 percent level of significance, used unrounded percentages, and took into account the sample size and variance. No state-level grade 8 reading test was administered before 1998.

Source: U.S. Dept. of Ed. Inst. Natl. *NAEP Data* and *NAEP State*.

NAEP writing assessments attempt to address as many facets of writing as possible within time constraints.

Writing. The most recent state-level NAEP writing assessment took place in 2007, but it was only for grade 8. Grades 4 and 8 were tested at the state level in 2002.² In an effort to address as many facets of writing as possible within the time constraints of the NAEP writing test, NAGB defines six objectives, shown in Table 2.12.

**Table 2.12
Framework for NAEP Writing Assessment, 2007**

Testing Objectives		
<ul style="list-style-type: none"> • Writing for a variety of purposes (narrative, informative, and persuasive) • Writing for a variety of tasks and for many different audiences • Writing with a variety of stimulus materials and within various time constraints • Generating a draft, revising, and editing ideas and forms of expression • Making effective choices in the organization of writing, including details to illustrate and elaborate ideas, and using appropriate conventions of written English • Valuing writing as a communicative activity 		
Writing Purposes as a Percentage of Test Time, by Grade	Grade	
	4	8
	Percent	
Narrative: Emphasizes the writer’s experiences, perceptions, and imagination; includes fictional or nonfictional stories, poems, plays, or personal essays; offers an opportunity to analyze and understand the emotions and actions of oneself and others	40%	33%
Informative: Emphasizes the subject matter that is being explained; shares knowledge and conveys messages, instructions, and ideas; may be based on personal experience or secondary information and may involve recall, analysis, or evaluation	35%	33%
Persuasive: Emphasizes the readers, in particular, influencing them and prompting them to take some action; requires awareness of arguments that most affect the audience being addressed and critical thinking skills, such as analysis, inference, synthesis, and evaluation	25%	33%

Source: Staff compilation based on U.S. Dept. of Ed. Natl. Assessment. *Writing* 7, 11-14, 54.

Kentucky’s grade 8 students performed significantly below the nation in 1998, 2002, and 2007. Kentucky’s grade 4 students, tested only in 2002, performed on par with the nation.

Table 2.13 presents the percentage of students found to be proficient or advanced in writing. Kentucky’s grade 4 students performed on par with the nation in 2002. However, Kentucky’s grade 8 students performed significantly below the nation in both 2002 and 2007. As figure 2.I shows, grade 8 writing scores have increased since the first NAEP writing assessment in 1998. However, they improved less between 2002 and 2007 than between 1998 and 2002. Trends are not available for grade 4 writing because it was assessed at the state level only once in 2002.

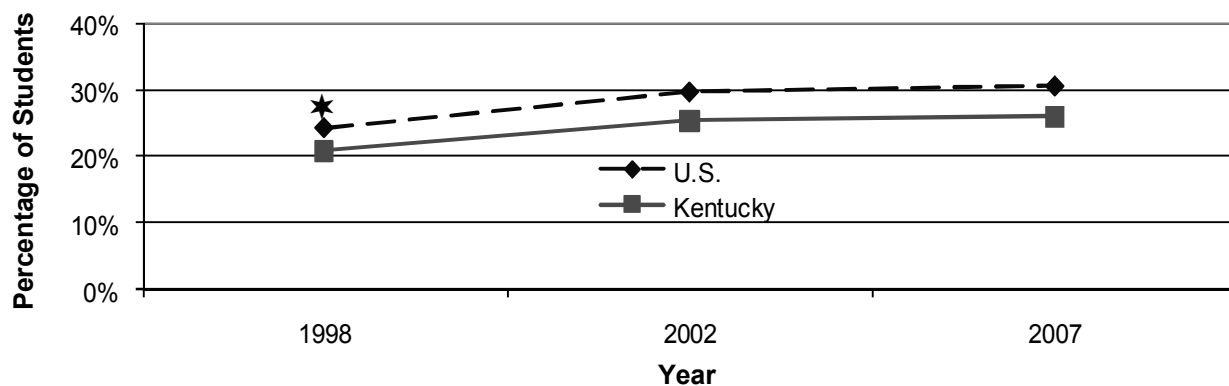
²The 2002 and 2007 NAEP writing tests were based on the same framework.

Table 2.13
Students At or Above Proficient on NAEP Writing Assessment, 2002 and 2007

Grade 4			Grade 8					
2002			2002			2007		
State	%	Sig.	State	%	Sig.	State	%	Sig.
DE	35	>	OH	38	>	IL	37	>
FL	33		DE	35		FL	36	
NC	32	MD	34	DE		34		
MD	30	NC	34	OH		32		
TX	29	FL	32	VA		31		
VA	29	VA	32	U.S.		31		
OH	28	TX	31	IN		30		
KY	27	=	U.S.	30	TN	29	=	
U.S.	27		MO	27	GA	29		
IN	26	OK	26	NC	27			
GA	23	IN	26	AR	27			
TN	23	GA	25	MO	27			
MO	22	KY	25	KY	26			
AR	19	TN	24	OK	26			
WV	19	<	WV	21	TX	26	<	
SC	17		AL	20	AL	24		
OK	16		SC	20	SC	23		
AL	15		AR	19	WV	22		
LA	14		LA	18	LA	17		
MS	13		MS	13	MS	15		
IL	n.a.		n.a.	IL	n.a.	n.a.		MD

Notes: > indicates states with proficiency levels significantly better than Kentucky's, = indicates states not significantly different, and < indicates states scoring significantly worse, with 95 percent certainty. Source: U.S. Dept. of Ed. Inst. Natl. *NAEP Data*.

Figure 2.H
NAEP Grade 8 Writing, Percent Proficient, U.S. and Kentucky
1998, 2002, and 2007



Notes: ★ indicates the U.S. percent proficient in 1998 was significantly different from 2007. Changes in Kentucky's percent proficient were not statistically significant. Statistical tests assumed a 95 percent level of significance, used unrounded percentages, and took into account the sample size and variance. Source: U.S. Dept. of Ed. Inst. Natl. *NAEP Data*.

NAEP tests five math content areas at three levels of complexity.

Mathematics. The most recent NAEP math assessment took place in 2007. Grades 4 and 8 had sufficiently large sample sizes for reporting at the state level. As shown in Table 2.14, NAEP tests five mathematics content areas, at three levels of complexity (U.S. Dept. of Ed. Natl. Assessment. *Mathematics 9*, 35).

Table 2.14
Framework for NAEP Mathematics Assessment, 2007

Content Areas as a Percentage of Test Items, by Grade	Grade	
	4	8
	Percent	
Number Properties and Operations	40	20
Measurement	20	15
Geometry	15	20
Data Analysis and Probability	10	15
Algebra	15	30
Levels of Complexity as a Percentage of Test Items (same for all grades)		
Low-complexity item may ask a student to recall a property.	25	
Moderate-complexity item may ask a student to make a connection between two properties.	50	
High-complexity item may ask a student to analyze the assumptions made in a mathematical model.	25	

Source: Staff compilation based on U.S. Dept. of Ed. Inst. Natl. "Mathematics"; U.S. Dept. of Ed. Natl. Assessment. *Mathematics 9*, 35-42.

In 2007, Kentucky's grade 4 and grade 8 students performed significantly below the national average in math. In both Kentucky and the nation, proficiency is lower for grade 8 than for grade 4.

Kentucky's grade 4 and grade 8 students performed significantly below the national average on the 2007 NAEP math test, as evident in Table 2.15. For both Kentucky and the nation, proficiency levels are consistently lower for grade 8 students than for grade 4 students.

Table 2.15
Students At or Above Proficient on NAEP Math Assessment, 2007

Grade 4			Grade 8		
State	%	Sig.	State	%	Sig.
IN	46	>	MD	37	>
OH			VA		
VA			IN	35	
NC			OH		
DE	TX		NC	34	
FL	40		SC	32	
MD			U.S.	31	
TX			DE	31	
U.S.			39		
MO	38		MO	30	
AR	37	FL	27		
IL	36	KY			
SC		33	GA	25	
OK	=		AR	24	
WV			TN	23	
GA			32	OK	21
KY		31	LA	19	
TN	29	WV			
AL		<	AL	18	
LA			24	MS	14
MS			21		

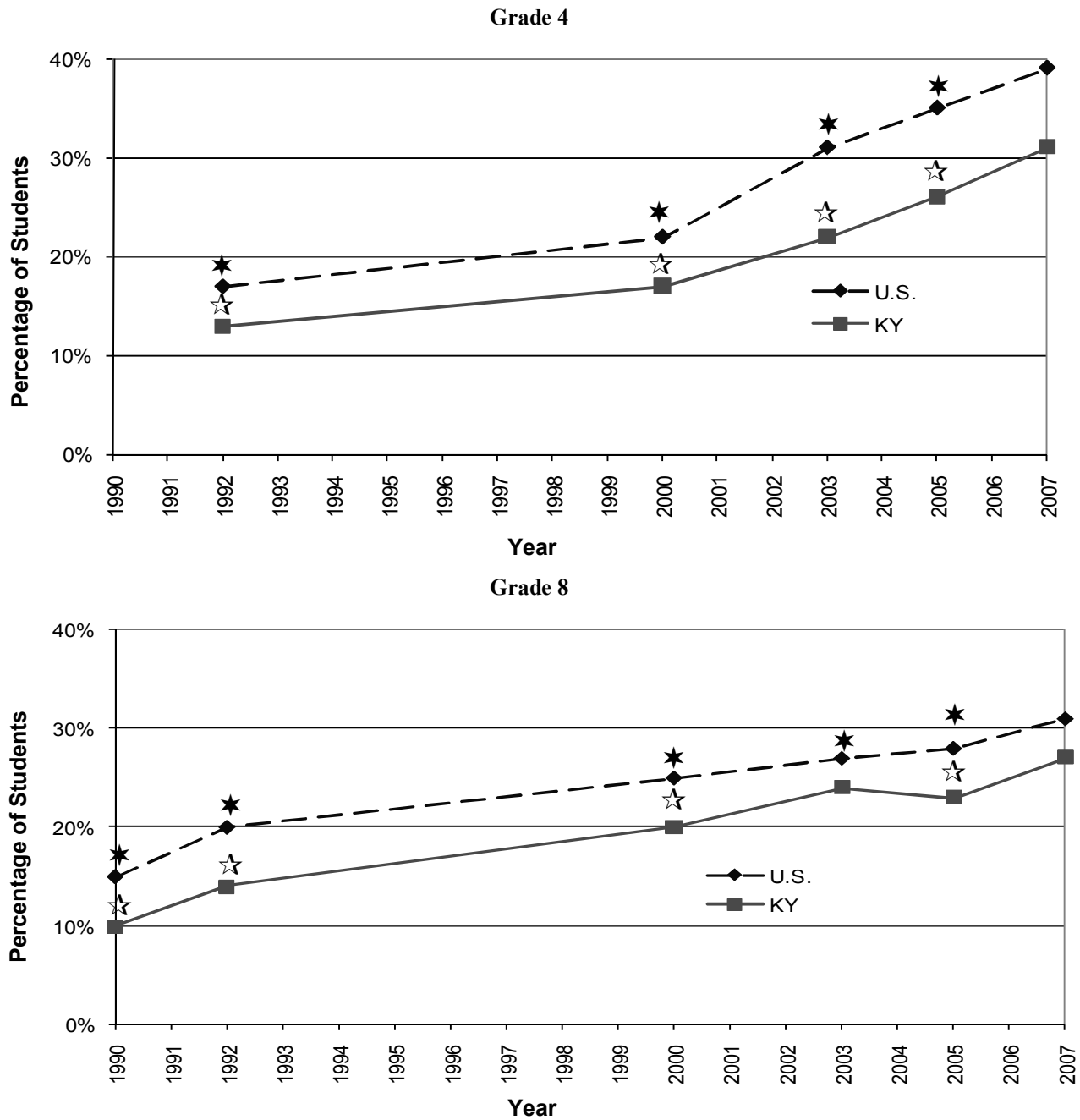
Notes: > indicates states with achievement levels significantly better than Kentucky's, = indicates states that are not significantly different, and < indicates states that are significantly worse than Kentucky, based on statistical testing with a 95 percent significance level.

Source: U.S. Dept. of Ed. Inst. Natl. *NAEP Data*.

Kentucky has made steady progress in math but remains below national proficiency rates.

Figure 2.J presents trends in math proficiency levels from 1992 to 2007 for grade 4 and 1990 to 2007 for grade 8. In Kentucky, both grades made steady progress every year except for a 1-year drop for grade 8 students in 2005. The national proficiency rate for grade 4 rose even faster than Kentucky's, widening the gap between Kentucky and the nation. For grade 8 students, the gap narrowed slightly between Kentucky and the nation.

Figure 2.I
NAEP Math, Percent Proficient, U.S. and Kentucky, 1990 to 2007



Notes: State-level NAEP math assessments started in 1992 for grade 4 and 1990 for grade 8. ☆ indicates Kentucky's percent proficient in the indicated year was significantly different from Kentucky's percent proficient in 2007.

★ indicates the U.S. percent proficient in the indicated year was significantly different from 2007. Statistical tests assumed a 95 percent level of significance, used unrounded percentages, and took into account the sample size and variance.

Source: U.S. Dept. of Ed. Inst. Natl. *NAEP Data*.

Science. After a review of curriculum guides, frameworks, and other course outlines from around the nation, NAGB noted that the traditional approach to teaching science tends to emphasize rote memorization of facts without connection or organization. While acknowledging the value of factual knowledge, NAGB argues that science is easier to remember and more useful when information is organized into broad conceptual understandings and when knowledge and skills are applied to practical situations (U.S. Dept. of Ed. Natl. Assessment. *Science* 11-12). The NAEP science assessment reflects this position.

Each NAEP science exercise measures one of the elements of knowing and doing within one of the fields of science. In addition, a few interdisciplinary exercises integrate the sciences, along with technology topics.

Table 2.16 summarizes the content of the NAEP science assessment, in which each exercise measures one of the elements of knowing and doing within one of the fields of science. In addition, every grade level is given a few interdisciplinary exercises that integrate earth, physical, and life sciences, along with content pertaining to technology (U.S. Dept. of Ed. Natl. Assessment. *Science* 13-14). Half of the students in each school receive one of three hands-on tasks and related questions. These students conduct actual experiments using materials provided to them and record their observations and conclusions in their test booklets by responding to multiple-choice and open-response questions (U.S. Dept. of Ed. Inst. Natl. “Science”).

Table 2.16
Framework for NAEP Science Assessment, 2005

Percentage of Test Items Devoted to Each Element, by Grade	Grade	
	4	8
Fields of Science	Percentage	
Earth Science (such as geology, meteorology)	33.3%	30%
Physical Science (physics)	33.3%	30%
Life Science (biology, ecology)	33.3%	40%
Knowing and Doing Science (exercises often combine more than one)		
Conceptual Understanding: Demonstrate knowledge and skills relating to facts learned in class and in nature; scientific concepts, principles, laws, and theories; procedures for conducting scientific inquiries; application of knowledge in practical tasks; and interactions between science, technology, and society	45%	45%
Scientific Investigation: Demonstrate abilities to acquire new information, plan investigations, use scientific tools, and communicate results to a variety of audiences	45%	30%
Practical Reasoning: Demonstrate abilities to think abstractly, consider hypothetical situations, consider several factors simultaneously, take an objective view, and realize the importance of practical reasoning and experience	10%	25%
Nature of Science: Themes of Systems, Models, and Patterns of Change (interdisciplinary exercises integrating the three sciences, along with technology topics)	A few exercises at each grade level	

Source: U.S. Dept. of Ed. Inst. Natl. “Science”; U.S. Dept. of Ed. Natl. Assessment. *Science* 11-27.

In 2000, Kentucky's science scores were on par with the nation. Five years later, Kentucky performed significantly above the national average, with science scores unsurpassed by any other state

NAEP assessed science at the state level in 2000 and 2005. Proficiency rates are shown in Table 2.17. In 2000, Kentucky's grade 4 and grade 8 students performed on par with the nation. Five years later, Kentucky's grade 4 and grade 8 students performed significantly above the national average. When statistical significance is considered, no other state surpassed Kentucky's performance on grade 4 science in 2005.

Table 2.17
Students At or Above Proficient on NAEP Science Assessment, 2005

2000						2005					
Grade 4			Grade 8			Grade 4			Grade 8		
State	%	Sig.	State	%	Sig.	State	%	Sig.	State	%	Sig.
MO	34	>	OH	39	>	VT	38	=	SD	41	>
IN	32	=	IN	33		KY	36		VT		
VA			MO	SD		35					
IL	31		=	IL	29	UT	33	OR	32		
OH		VA		DE	27	KY	31	=			
KY	28	U.S.		29		IL	29				
OK	26	KY	28	IN		27					
U.S.	26	=	MD	27	IN	27	IL	27			
MD	24		NC	25	MD		26	U.S.	27		
TN			TN		24			FL	25	MD	26
WV	23	<	WV	23	OR	25		GA		25	
AR			AL		GA		AR	23		<	
GA	22		TX	23	OK		TX		24		OK
NC		AR	22	AR	20	WV	21				
TX	20	<	SC	20	AR	21	NC	22			
AL			LA	18	WV		20	FL	21		
SC	18		<	MS	15	AL	20	AL	19		
LA		DE		n.a.	LA	20		LA		14	
MS	13	FL			n.a.	n.a.	MS	12	MS		14
DE	n.a.	n.a.	DE	n.a.	n.a.	LA	20	LA	19		
FL			FL			n.a.		MS		12	MS

Notes: The NAEP science test remains voluntary. The number of states choosing to participate was 39 in the 2000 grade 4 test, 38 in the 2000 grade 8 test, and 44 in the 2005 grades 4 and 8 tests. Statistical significance can differ for states with the same average score because statistical tests use unrounded percentages and take into account each state's sample size and variation in scores. > indicates states scoring significantly better than Kentucky, = indicates states that are not significantly different, and < indicates states scoring significantly worse than Kentucky, based on statistical testing with a 95 percent significance level.

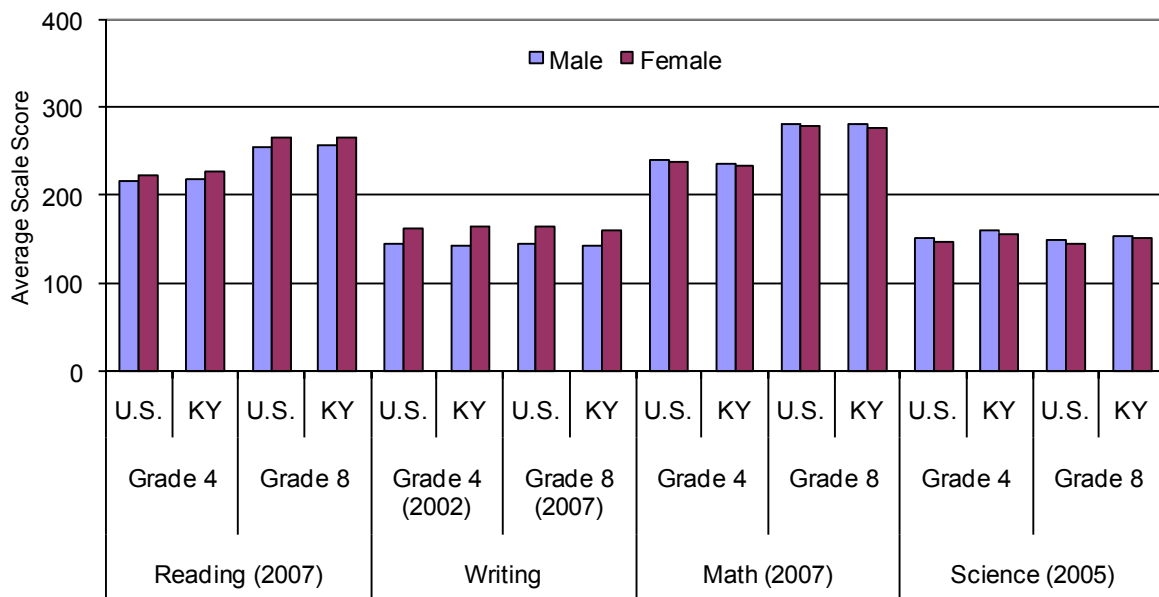
Source: U.S. Dept. of Ed. Inst. Natl. *NAEP Data*.

NAEP Achievement Gaps. This section discusses subgroup differences that are statistically significant at the 95 percent level for the latest NAEP assessment in each content area and grade. The subgroups compared were males versus females, whites versus African Americans, and free or reduced price-lunch-eligible versus noneligible.

Females score higher than males on reading and writing, while males score higher on math and science. In grade 4 writing and math, Kentucky's gender gaps are wider than the nation's.

As Figure 2.J shows, females score higher than males in reading and writing, while males have small but statistically significant leads in math and science. The only gender gap that is not statistically significant is in grade 8 math in Kentucky. In grade 4 writing and math, gender gaps are significantly wider in Kentucky than the U.S.. In both Kentucky and the nation, gender gaps have not changed significantly since state-level testing began in 1990.

Figure 2.J
NAEP Achievement Gaps by Gender, Most Recent Assessments



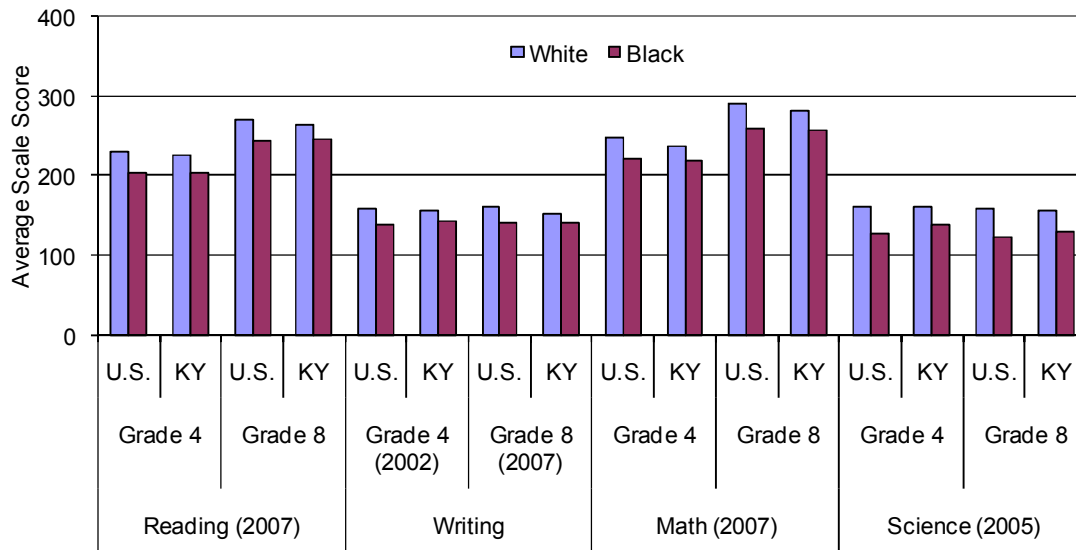
Notes: All gender differences are statistically significant except grade 8 math in Kentucky. Scores are on a 0-to-500 scale.

Source: U.S. Dept. of Ed. Inst. Natl. *NAEP Data*.

Whites score higher than African Americans in all content areas. However, gaps have been narrowing steadily. Kentucky's racial gaps are smaller than the nation's.

Figure 2.K also shows that, for the nation as a whole, whites score significantly higher than African Americans in all content areas. However, gaps have been narrowing steadily in grade 4 reading and were narrower in the most recent assessments of grades 4 and 8 writing, grade 8 math, and grade 4 science. Racial gaps in Kentucky are smaller than national gaps and have not changed significantly over time.

Figure 2.K
NAEP Achievement Gaps by Race, Most Recent Assessments

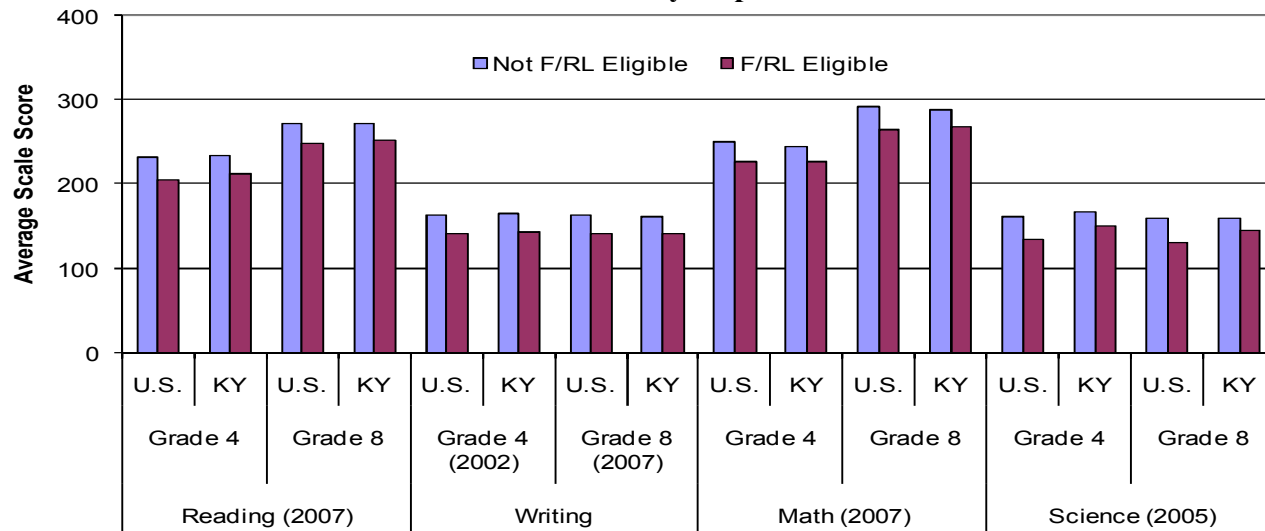


Notes: All race differences are statistically significant. Scores are on a 0-to-500 scale.
Source: U.S. Dept. of Ed. Inst. Natl. *NAEP Data*.

Students eligible for free or reduced-price lunch score lower than other students in all content areas. Kentucky's gaps are smaller than the nation's.

As Figure 2.L shows, students eligible for free or reduced-price lunch—a proxy for poverty—score lower than ineligible students in all content areas. Kentucky's gaps are smaller than the nation's. Over time, poverty gaps for science have narrowed for Kentucky and for the nation as a whole. In the other content areas, gaps have fluctuated but have not changed significantly.

Figure 2.L
NAEP Poverty Gaps



Notes: F/RL=Free or reduced-price lunch. All differences between eligible and ineligible students are statistically significant. Scores are on a 0-to-500 scale.

Source: U.S. Dept. of Ed. Inst. Natl. *NAEP Data*.

Due to sampling error, differences in NAEP scores must be tested for statistical significance. The definitions for proficiency and other achievement levels have not yet been officially approved. Exclusions and accommodations raise questions about comparability over time and across states.

Although NAEP is widely respected, it shares the limitations of all assessments. In addition to those already discussed, other limitations include sampling error, achievement levels still being used on a trial basis, and uncertainty about the impact of exclusions and accommodations.

Sampling Error. NAEP assessments are administered at about 100 randomly selected public schools in each state for each subject at each grade for the sample. Consequently, test results are subject to sampling error, and differences should be tested for statistical significance.

Achievement Levels Still Used on Trial Basis. The basic, proficient, and advanced achievement levels have never been formally approved (U.S. Dept. of Ed. Inst. Natl. “The Status”). By law, they are still being used on a trial basis, awaiting a determination that they are “reasonable, valid, and informative to the public” (PL 107-110).

For the first two decades of NAEP’s existence, results were reported only as numeric scores. Concerned that these scores were difficult to interpret, Congress voted in 1988 to require the development of “appropriate achievement goals” (PL 100-297). Controversy has surrounded the creation of achievement levels from the outset. Many approaches to defining and setting achievement standards are available to policy makers, but

consensus as to what constitutes the best approach has not been achieved (Vinovskis 41, 84; U.S. Government. *Educational*). Congressionally mandated evaluations of NAEP by such organizations as the National Academy of Education, the GAO, and the National Academy of Sciences have found a number of technical flaws that they believe have not been fully addressed (Shepard; U.S. Government. *Educational*; Pellegrino, Jones, and Mitchell).

One concern is that the cut scores (minimum scores) that define proficiency are set unreasonably high, a charge that resonates with many testing critics (Pellegrino “Should”; Rothstein; U.S. Government. *Educational*). Two studies suggest that countries that rank at the top on international assessments would show relatively low proficiency levels on NAEP (Phillips 9; Rothstein 32).

Exclusions and Accommodations. NAEP, like many assessments, permits students with disabilities or limited English proficiency to use certain accommodations, such as Braille or bilingual test forms, in order to fairly and accurately demonstrate their abilities. If it appears that a student cannot meaningfully participate even with permitted accommodations, the student is excluded from the assessment altogether. Decisions regarding accommodations and exclusions are made by personnel working at the individual schools participating in NAEP. In an effort to guide these decisions, NAEP stipulates that a questionnaire be filled out for each student by the person most knowledgeable about that student. However, studies have found that the person filling out the questionnaire is often the school’s test coordinator, who may not have detailed knowledge about students affected by decisions (U.S. Dept. of Ed. Inst. Natl. *NAEP Inclusion Policy*; Stancavage 22).

NAEP exclusions can be affected by state policies. For example, if a state test permits a certain accommodation that is not allowed by NAEP, students who use that accommodation on state assessments can be excluded from NAEP. For Kentucky, the most notable difference is that Kentucky permits reading test items to be signed or read aloud, while NAEP does not³ (U.S. Dept. of Ed. Inst. Natl. *NAEP Inclusion Policy and Students with Disabilities 7*; Commonwealth. Dept. of Ed. *Inclusion*).

Inconsistent practices with respect to exclusions and accommodations among states and over time have raised concerns about comparability.

In recent years, policy makers have become increasingly concerned about variations in NAEP exclusion and

³The justification for allowing readers for reading tests, stated in documentation incorporated by reference to 703 KAR 5:070, is that the intent of the KCCT reading test is to assess comprehension.

accommodation rates from state to state and from year to year within a state. Several studies, many commissioned by NAGB, have investigated these concerns, with no clear conclusions. A new federal ad hoc committee convened recently to investigate these issues further (Cavanagh).

Concerns have been raised that Kentucky excludes and accommodates more students than the national average and that these practices inflate NAEP scores to such an extent that they cannot be trusted (Innes. “CATS-SCAN”). To date, there is conflicting evidence with respect to these claims, as will be discussed below. This issue warrants continued monitoring due to its potential for skewing results.

For years, the percentages of students excluded from NAEP due to disabilities or language barriers in Kentucky's have mirrored the nation as a whole. However, exclusion rates have risen slightly in recent years, especially for reading. Exclusions based on disabilities alone show similar patterns.

As Table 2.18 shows, Kentucky's exclusion rates are not consistently above the national average. In fact, before 2002, Kentucky's exclusion rates were below national rates. Since 2002, exclusion rates for reading have been between 1 and 3 percentage points higher than the nation, while math exclusion rates have fluctuated between 1 percentage point below the nation and 3 points above. An analysis focusing on students with disabilities shows a similar pattern.

Table 2.18
Percentages of Students in NAEP Sample Excluded From Assessment,
Kentucky and U.S., 1990-2007

		1990	1992	1994	1996	1996*	1998	1998*	2000	2000*	2002*	2003*	2005*	2007*
Reading Grade 4	KY		4	4			9	7			9	9	8	8
	U.S.		6	6			10	7		6	7	6	7	6
	KY – U.S.		-2	-2			-1	0			2	3	1	
Reading Grade 8	KY						5	3			7	7	7	8
	U.S.		7	7			6	4			6	5	5	5
	KY – U.S.						-1	-1			1	2	2	3
Math Grade 4	KY		3		6				8	3		3	3	3
	U.S.		7		6	4			7	4		4	3	3
	KY – U.S.		-4		0				1	-1		-1	0	0
Math Grade 8	KY	5	5		5				9	4		4	3	7
	U.S.		6		5				7	4		4	4	4
	KY – U.S.		-1		0				2	0		0	-1	3

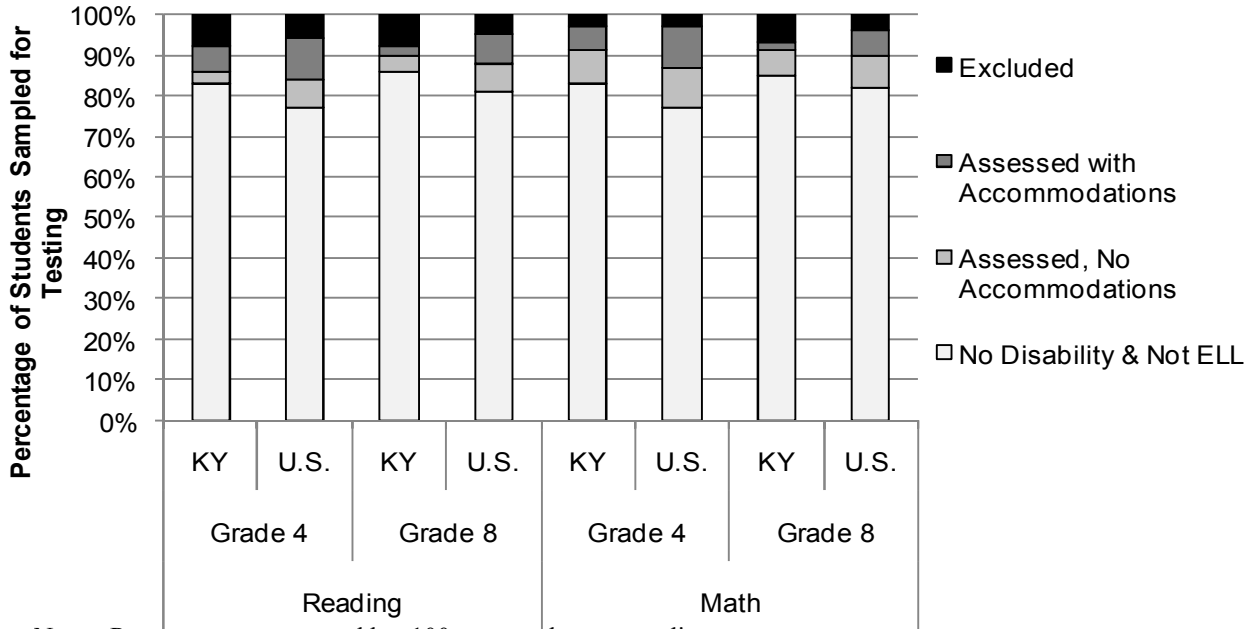
Note: *Accommodations Permitted. “KY - U.S.”=Kentucky exclusion rate minus U.S. rate; this number is positive when Kentucky excludes a relatively higher percentage of students and negative when Kentucky excludes a smaller percentage of students.

Source: U.S. Dept. of Ed. Inst. Natl. *State Exclusion*.

In 2007, Kentucky's exclusion rates tended to be slightly above national rates, while accommodation rates were slightly below. Kentucky's rates would mirror the nation if some students currently being excluded were tested with accommodations.

NAEP allows accommodations in order to include as many students as possible. Figure 2.M shows accommodations and exclusions for students with disabilities and English Language Learners in the U.S and Kentucky. Because Kentucky has relatively few English Language Learners, Figure 2.N shows exclusions and accommodations on the basis of disability only. As both figures show, Kentucky has below-average accommodation rates and above-average exclusion rates. This suggests that Kentucky could mirror the nation if some of the students who are being excluded were, instead, offered appropriate accommodations.

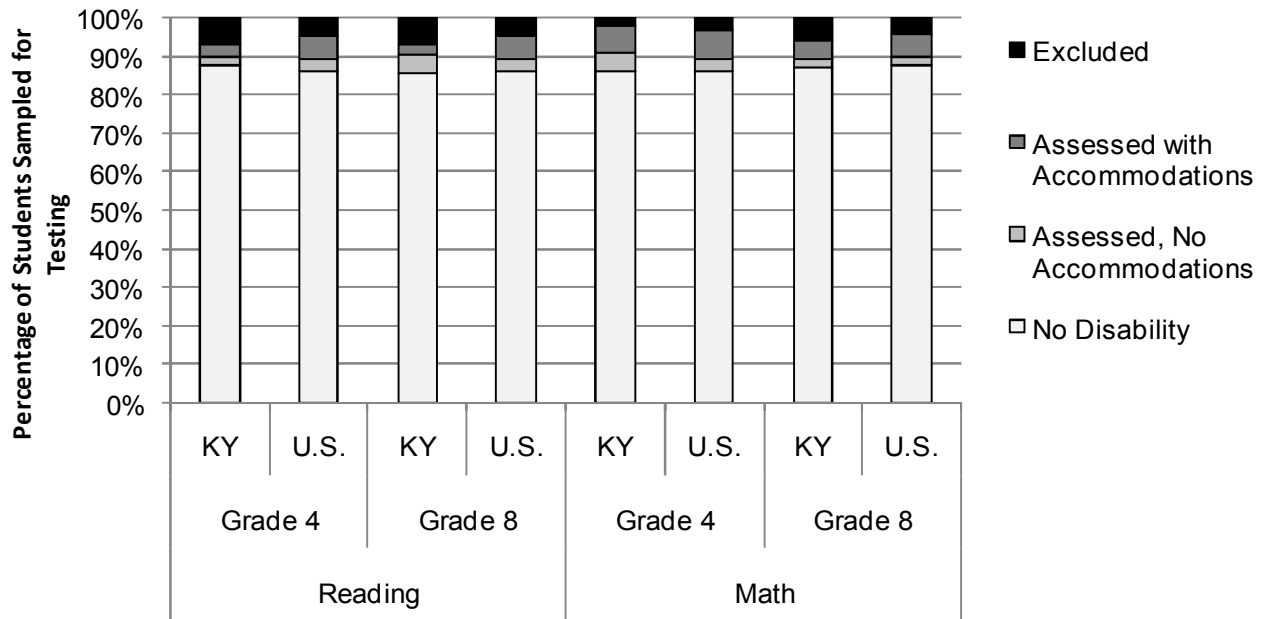
Figure 2.M
Percentages of Students in NAEP Sample Identified and Excluded or Assessed With or Without Accommodations on the Basis of Disability or English Language Learner Kentucky and U.S., 2007



Notes: Percentages may not add to 100 percent due to rounding.

Source: U.S. Dept. of Ed. Inst. Natl. *Mathematics Report Card* and *Reading Report Card*.

Figure 2.N
Percentages of Students in NAEP Sample Identified and Excluded or Assessed With or Without Accommodations on the Basis of Disability, Kentucky and U.S., 2007



Notes: Percentages may not add to 100 percent due to rounding.

Source: U.S. Dept. of Ed. Inst. Natl. *Mathematics Report Card* and *Reading Report Card*.

Extensive studies found the impact of accommodations on scores to be within acceptable limits, but the impact of exclusions is still being studied.

After 6 years of study, the USDOE found the impact of accommodations on scores to be within acceptable limits. It is for this reason that NAEP now permits accommodations for the entire sample (U.S. Dept. of Ed. Inst. Natl. *A Closer*).

Exclusions are still being studied closely because of their potential impact and their variation from state to state and from year to year. Since students with disabilities or limited English proficiency tend to score lower on NAEP, it is logical to assume that excluding more of these students will lead to higher test scores. However, to date, numerous studies exploring this topic have not found consistent or dramatic evidence to warrant this conclusion (U.S. Dept. of Ed. Inst. Natl. *Investigating* and *A Closer*). As Table 2.19 shows, special analyses suggest that exclusions had small and inconsistent effects on changes in Kentucky’s scores between 2003 and 2005. Exclusions may have made reading scores look better but made math scores look worse.

Table 2.19
Increases and Decreases in Average NAEP Scores From 2003 to 2005 With and Without Exclusions

	Official Results (With Exclusions)	Estimated Results For Full Population (Without Exclusions)
Reading, Grade 4	0.9	0.7↓
Reading, Grade 8	-2.3	-2.8↓
Math, Grade 4	2.8	2.9↑
Math, Grade 8	-0.3	0.2↑

Notes: Scores are based on 0-to-500 scales. Official results are the number of points on the scale that were gained or lost (if negative number) between the 2003 and 2005 assessments. Estimated results are the number of points on the scale that would have been gained or lost if exclusions were not permitted; these are based on a statistical model. ↓=Scores would have improved less if there had been no exclusions. ↑=Scores would have improved more if there had been no exclusions.

Source: U.S. Dept. of Ed. Inst. Natl. *Investigating*.

NAEP consistently reports fewer proficient students than do the assessments that states design, administer, and report for NCLB purposes.

Comparing NAEP to State Assessments. Proficiency rates on NAEP assessments are usually lower than rates on tests that states design, administer, score, and report for No Child Left Behind purposes. The discrepancies vary greatly by state and appear to be growing over time (Cary; Peterson; Fuller and Wright; Fuller et al. *Is the*; Olson. “Gaps”).

Given the complexities of public policy and the education testing systems, many factors may be responsible for these discrepancies.

Several factors could be operating simultaneously, and the mix of factors could be different in each state. Some possible explanations for the discrepancies are discussed below.

For the purposes of this discussion, it is important to note the distinction between “content standards” and “performance standards.” A state’s content standards—detailed documents describing what students should know and apply—are meant to guide the design of curriculum, instruction, and assessment within a particular state. In contrast, performance standards pertain specifically to assessment and are typically in the form of descriptions and cut scores (minimum scores) for each achievement level, such as NAEP’s basic, proficient, and advanced or Kentucky’s novice, apprentice, proficient, and distinguished. Performance standards are not necessarily tied to a state’s curriculum.

Students Can Perform Better on State Tests Than on NAEP.

Differences in proficiency on NAEP and states’ own tests reflect, in part, true differences in student performance. Given differences in test content and higher stakes for test takers and administrators, students can perform better on state tests than on NAEP, as discussed below.

Higher proficiency levels on state tests compared to NAEP are partly due to better alignment of state tests with what students have an opportunity to learn in each state. However, it is unknown how much these differences in alignment contribute to differences in scores.

State Tests Align With Students’ Opportunities To Learn. This issue is central for many who oppose comparing NAEP and state test results. The No Child Left Behind Act requires state assessments to be aligned with the subject areas, depth of knowledge, and skills specified in the state’s content standards, which also guide the curriculum and teaching in that state (PL 101-110 Sec. 1111(b)(3)(C)(ii)). Thus, a student should perform better on a state test that is tailored to the student’s everyday learning experiences than on a “one size fits all” standardized test.

A 2003 study identified several differences between the Kentucky Core Content Test (KCCT) and NAEP, including the standards each test is designed to measure, the content and format of test items, the language used within the items, test administration guidelines, and psychometric processing of the raw test scores (Koger). Yet despite these differences, another study found correlations of student performance on KCCT and NAEP to be moderate to strong, ranging from .55 for elementary level reading

to .74 for high school math (Hoffman 6).⁴ The study authors concluded that

Student ability tends to be highly correlated irrespective of the measurement instrument used or the content measured. Students who score well on one reading test tend to score well on all reading tests, and in fact tend to score well on tests of mathematics and other subjects, as well (Hoffman 1).

Studies have found a number of differences between NAEP and other state assessments. However, none of these findings provides an unambiguous indication as to whether NAEP is aligned enough with state assessments to permit accurate comparisons and rankings. A recent analysis of test scores suggested that three-fourths of state tests have “at least a moderate degree of alignment” with NAEP, with correlations ranging from .62 to .86 (U.S. Dept. of Ed. Inst. Natl. *Mapping* 59). However, USDOE recommended that this analysis be supplemented by examining alignment of test frameworks between NAEP and state tests. One research team found that state content standards do not agree with each other, much less with NAEP, yet the team is not pessimistic:

On the question of whether state content standards represent a de facto national curriculum, the answer is ‘no’, but that is not to say that each state’s content standards have content messages completely non-overlapping with each other state’s content standards. Some might say that it’s a question of seeing the glass two thirds empty or one third full (Porter, Polikoff, and Smithson 29).

Most testing experts stress the crucial importance of alignment but rarely venture to say how much alignment is enough. Answering that question is as difficult as deciding how much statistical confidence is enough. There is no absolute criterion (Porter. *Curriculum* 14).

Higher proficiency rates on state tests compared to NAEP may be due, in part, to the higher stakes of state tests. Whereas NAEP has been called a “no stakes” test, the sanctions and rewards that accompany state tests might motivate districts, schools, teachers, and students to try harder.

High Stakes on State Tests Can Boost Performance. NAEP has been called a “no stakes” test (Standard & Poor’s). In contrast, the sanctions and rewards associated with some states’ tests can motivate districts, schools, teachers, and students to try harder and to target more resources where needed (Stecher 90-91, 96-97). In addition, the incentives surrounding high stakes testing can promote practices that are undesirable but that boost scores, such as reassigning the best teachers to the assessed grades, narrowing

⁴ The correlation coefficient, a statistical measure of the strength of a relationship, can range between a perfect negative correlation of -1 and a perfect positive correlation of 1.

instruction to subjects and topics that are tested, making classroom instruction more like a test, and spending an excessive amount of time familiarizing students with the format of test questions and how to record answers (Stecher 91-97).

Many believe that NAEP has higher performance standards than do state tests. There is some evidence that NAEP standards may be too high, but there is more evidence that state standards are too low.

Performance Standards for NAEP Appear To Be Higher Than for State Tests. Although differences between tests make comparisons difficult, many believe that performance standards for NAEP are higher than for state assessments. If this is true, it raises the question: Are state assessment standards too low or are NAEP standards too high?

Research Suggests NAEP Standards Too High. As mentioned earlier, some say NAEP's cut scores (minimum scores) for defining proficiency may be set too high. NAEP seems to have higher standards than two internationally accepted tests (Phillips 9; Rothstein 32).

Many Deem State Standards Too Low. Others attribute the discrepancies to lower state standards, sometimes even intentional inflation of performance in order to avoid embarrassment and sanctions (Cary; Innes "CATS-SCAN"; Olson. "Gaps"; Peterson; Ravitch).

A recent analysis attempted to quantify differences in standards by "mapping" state proficiency levels onto the NAEP scale (U.S. Dept. of Ed. Inst. Natl. *Mapping*). It is important to note that critics have pointed out several limitations to the analysis, especially the inability to account for nonalignment between NAEP and state tests (Ho *(Over)-Interpreting and Apples*). However, the USDOE insists that the analysis is a useful, albeit rough, indicator of state performance standards.

The analysis of grade 4 reading suggests that states' proficiency standards are all below NAEP's proficiency standard; in fact, most are even below NAEP's standard for basic. Kentucky is one of the states whose proficiency standard falls below basic; yet Kentucky's standard is the 10th highest among the 32 states examined.

States' grade 8 math standards for proficiency appear to be somewhat closer to NAEP's. Three states—Missouri, South Carolina, and Massachusetts—have a proficiency standard above NAEP's. Most others, including Kentucky, have proficiency standards above NAEP basic but below NAEP's proficiency cut

score. Kentucky's proficiency standard ranks 8th among the 36 states examined.

Comparing NAEP to State Tests: Conclusions. Although both NAEP and states such as Kentucky use the term “proficient,” the term refers to different definitions and measures. When NAEP and state tests appear to conflict, there are compelling reasons to favor NAEP, including its ample funding for hiring top experts; its nationwide scrutiny, which encourages continual improvement; and its lack of incentive to keep standards low (intentionally or unintentionally) in order to avoid embarrassment and sanctions. On the other hand, as discussed earlier, expert evaluators have strongly criticized the process whereby NAEP performance standards were set. There is no universally accepted definition for proficiency. Given the measurement challenges discussed above, comparisons between NAEP and state test results should be made with caution and backed up with multiple sources of evidence.

Some policy makers have called for replacing the 50 different sets of state standards with one national set of standards based on NAEP (Hoxby; Olson. “Standards”). However, these efforts have stalled thus far due to strong resistance to what is perceived as federal intrusion into state education policy. After voting to establish a National Education Standards and Improvement Council, Congress reversed its decision and abolished the council before ever naming any of its members (Olson. “An ‘A’”).

College-readiness Exams

College-readiness exams were originally designed for use by college admissions officers, in combination with high school grades and other information, to gauge a student's chances for success in college (College Board. “SAT Program”). An increasing number of states are incorporating these tests into their accountability systems, as an indicator of how well the K-12 education system is preparing students for postsecondary education. These tests may be norm referenced, criterion referenced, or both.

The Higher the Participation, the Lower the Scores

Caution should be used when comparing college entrance exam scores across states because the pool of test takers varies widely. Participation rates can be as low as 3 percent or as high as 100 percent, and the higher the participation rate, the lower the average

Caution should be used when comparing college entrance exam scores because higher participation is associated with lower average scores. Participation rates vary from 3 percent to 100 percent.

score. This is particularly true for the SAT, with about three-fourths of the differences among scores being accounted for by state participation rates.⁵

Test Design

Another important caveat to consider is that the ACT and SAT were designed primarily to predict the success of college-bound high school seniors. The tests are meant to be the most sensitive to differences among top students rather than among struggling students. In contrast, achievement tests are designed to measure a school's success at teaching a comprehensive range of content to students at all ability levels. The tests provide different insights into content delivery and mastery.

ACT

The ACT test consists of multiple-choice tests that cover English, mathematics, reading, and science. The test also includes a relatively new optional writing test.

The ACT consists of multiple-choice tests that cover English, mathematics, reading, and science.⁶ The test also includes an optional writing exam that entails planning and writing a short essay. The maximum score for each test is 36. The ACT composite score is the average of the scores on the four multiple-choice tests. Table 2.20 shows the distribution of items by content area.

Table 2.20
ACT Test Items by Content Area

ACT College Readiness Test Content Areas	Number of Multiple-choice Items
English	75
Math	60
Reading	40
Science	40
Total	215

Source: ACT. *ACT Newsroom*.

⁵ The correlation between ACT participation rates and average ACT composite scores is -0.45. The correlation between SAT participation rates and average scores is even stronger: -.9 for reading and -.87 for math. The correlation coefficient, a measure of the strength of a relationship, can range between a perfect negative correlation of -1 and a perfect positive correlation of 1. The square of these correlation coefficients serves as an estimate of the amount of variation in average scores that can be explained by different participation rates. Therefore, participation rates explain about one-fifth of state differences in average ACT scores and about three-fourths of differences in SAT scores.

⁶ Appendix B contains a brief profile of ACT, Inc., the organization that creates and scores the ACT test.

Average ACT scores are not comparable across all states because participation rates vary. Comparability is better among states that have similar participation rates.

It is evident from Table 2.21, which presents ACT participation rates and test scores, that participation rates vary widely across states. Because different levels of participation indicate different pools of test-takers, scores are not comparable across all states. Comparability is better among states with similar participation rates; for example, Kentucky's scores are relatively comparable to those of Louisiana and Arkansas because the percentages of public and private school students taking the ACT in those states were similar to the percentage in Kentucky. However, it should be noted that even when two states have identical participation rates, there is no guarantee that the characteristics of test takers are the same.

Table 2.21
ACT Participation Rates and Average Scores for High School Graduates Tested, 2007

Participation			Composite			English			Math			Reading			Science			
Rank	State	%	Rank	State	Score	Rank	State	Score	Rank	State	Score	Rank	State	Score	Rank	State	Score	
1	IL	100	15	IN	22.0	16	IN	21.5	14	IN	22.0	10	IN	22.5	16	IN	21.7	
3	MS	96	23	DE	21.7		MO		21	DE	21.6	24	MO	22.1	19	OH	21.6	
	TN		25	MO	21.6	23	DE	21.2	26	NC	21.4	28	OH	22.0	22	MO	21.5	
6	AL	81		OH	21.6	27	OH	21.0	28	OH	21.3	30	DE	21.9	25	DE	21.4	
7	LA	79	VA	21.4	VA		31		VA	21.2	34	VA	21.7	33	VA	21.1		
9	KY	77	--	U.S.	21.2	29	TN	20.8	35	MO	21.0	--	U.S.	21.5	--	U.S.	21.0	
13	AR	75	35	NC	21.0		WV		--	U.S.	21.0	35	NC	21.4	35	NC	20.7	
14	MO	74	36	KY	20.7	36	U.S.	20.7	36	TX	20.8	36	OK	21.3	36	KY	20.6	
15	OK	71		OK			20.5	37	IL	20.4	37	KY	21.2	37	OK	20.5		
20	OH	68	TN	39	WV	20.6	38	AL	20.0	38	GA	20.3	37	WV	20.4	IL	20.4	
21	WV	66	WV		20.5	40		FL		20.0	39	TN	21.1	39		TN		20.4
26	FL	54	AR	40	IL	20.5	38	KY	20.3	40	KY	20.9	40	AR	20.7	43	AR	20.2
27	SC	43	IL		20.2			42		AR	19.9	43	AL	20.7	44	GA	20.6	43
--	U.S.	42	TX	44	AL	20.3	41	IL	20.2	44	OK	19.8	44	TX	20.5	45	AL	20.1
28	GA	34	AL		19.9			44			GA			19.9		44	SC	19.8
30	TX	30	GA	47	LA	20.1	47	TX	19.5	47	AL	19.5	46	IL	20.5	47	LA	19.9
34	IN	21	LA		19.9	48		FL	19.1		48			LA		20.2	48	LA
37	VA	18	48	FL	19.9	49	MS	19.0	47	WV	19.5	49	SC	19.8	49	SC	19.5	
40	NC	16	49	SC	19.6		SC			51			MS	18.0	51	MS	19.1	50
50	DE	9	50	MS	18.9													

Note: Because participation rates are negatively correlated with average scores, use caution when comparing across states.

Source: ACT. 2007 Average.

SAT

The SAT measures critical reading, mathematical reasoning, and writing skills that students have developed over time and that they need to be successful in college. The College Board releases

annual reports on the average SAT scores and participation rates by state.⁷ That information is presented in Table 2.22.

As is true of average ACT scores, average SAT scores are not comparable across all states because participation rates vary widely. Comparability is better among states with similar participation rates.

Like the earlier table of ACT scores, this table lists SAT scores in order of participation rate. (It bears repeating that because participation varies widely across states, scores are not comparable across all states.) Comparability is better among states with similar participation rates; for example, Alabama would be the closest match to Kentucky.

Kentucky's average scores are high, as one would expect given our low participation rate. The percentage of Kentucky high school graduates who took the SAT was only 10 percent, in contrast to the 77 percent who took the ACT.

Table 2.22
Percentage of High School Graduates Participating in SAT and Average SAT Scores, 2007

Participation in SAT			Critical Reading			Math			Writing		
Rank	State	%	Rank	State	Score	Rank	State	Score	Rank	State	Score
9	VA	73%	3	IL	594	2	IL	611	1	IL	588
10	DE	72%		MO		7	MO	594	2	MO	587
11	NC	71%	10	AR	578	11	OK	571	7	TN	568
12	MD	70%		OK		13	TN	569	9	AR	565
13	GA	69%	12	TN	574	14	LA	567	10	LA	563
16	FL	65%	13	LA	569	15	AR	566	13	MS	560
17	IN	62%	14	MS	568	16	KY	565	14	OK	559
	SC		16	KY	567	18	AL	556	15	AL	554
22	TX	52%	18	AL	563	20	MS	549	16	KY	553
--	U.S.	48%	24	OH	536	23	OH	542	22	OH	522
28	OH	27%	30	WV	516	--	U.S.	515	30	WV	505
30	WV	20%	33	VA	511	34	VA	511	33	VA	498
32	TN	13%	--	U.S.	502	36	NC	509	35	MD	496
34	KY	10%	35	MD	500	37	IN	507	--	U.S.	494
35	AL	9%	38	DE	497		TX		39	DE	486
38	IL	8%		FL		40	GA	483			
41	LA	7%		IN		43	MD	502			
42	MO	6%	42	NC	495	46	DE	496	42	NC	482
	OK		44	GA	494		TX				
47	AR	5%	46	TX	492	SC	47	FL	479		
48	MS	4%	48	SC	488	49	GA	495	48	SC	475

Note: Average scores are negatively correlated with participation rates. The College Board strongly discourages the comparison or ranking of states on the basis of SAT scores alone. The denominators for participation rates are Western Interstate Commission for Higher Education estimates of high school graduates.

Source: College Board. *College-Bound Seniors 2007* Table 3. Copyright (c) 2007-2008 The College Board, www.collegeboard.com. Reproduced with permission.

⁷ Appendix B contains a brief profile of the College Board, the organization that creates and scores the SAT and Advanced Placement tests.

Advanced Placement

Advanced Placement courses and exams provide high school students with early access to college-level learning in 37 subject areas.

Advanced Placement (AP) courses and exams provide high school students with early access to college-level learning in 37 subject areas. Most colleges and universities in the United States and many other countries use AP exam results in the admissions process to gauge student's ability and also award college credit or placement into higher-level college courses (College Board. *Advanced*).

The composite score for each AP exam reflects the grade that a student could be expected to earn in a college course. The score is reported on a scale of 1 to 5, corresponding to the letter grades F, D, C, B, and A, respectively. Statistical reports often focus on scores of 3 or higher because these correspond to passing grades eligible for college credit.

In 2007, 15.2 percent of the nation's high school students earned a passing score on an AP exam. This compares to 9.7 percent in Kentucky.

As Table 2.23 shows, in 2007, 15.2 percent of the nation's high school students took an AP exam and scored 3 or higher (a score that demonstrates college-level competency). In Kentucky, the percentage was 9.7 percent, placing Kentucky 33rd among all states.

Table 2.23
Advanced Placement Exam, 2000 and 2007

High School Class of 2000						High School Class of 2007					
Took At Least One AP Exam in High School			Demonstrated College-level Mastery (Scored 3-5)			Took At Least One AP Exam in High School			Demonstrated College-level Mastery (Scored 3-5)		
Rank	State	%	Rank	State	%	Rank	State	%	Rank	State	%
2	VA	25.0	3	VA	15.9	2	FL	38.0	2	MD	22.4
4	FL	22.7	6	MD	14.1	4	MD	35.3	3	VA	21.5
6	MD	20.2	8	FL	13.5	5	VA	34.4	4	FL	20.3
7	NC	19.7	12	NC	11.3	6	AR	32.2	11	NC	18.5
12	SC	17.7	--	U.S.	10.2	7	NC	31.9	15	GA	15.3
14	GA	17.2	16	SC	10.0	13	GA	28.6	--	U.S.	15.2
15	TX	16.6	17	IL	9.9	16	DE	27.4	17	IL	14.9
--	U.S.	15.9		17		TX	27.3	19	DE	14.5	
22	IL	13.4	19	GA	9.7	--	U.S.	24.9	19		TX
24	DE	13.3	25	DE	7.6	22	SC	22.7	22	SC	13.3
27	IN	11.9	28	OH	7.1	23	IL	22.0	28	OH	11.0
29	OH	11.3	34	TN	6.2	27	OK	19.8	31	TN	10.0
33	KY	10.6	36	IN	6.0	29	KY	19.6	33	IN	9.7
36	TN	10.4	39	KY	5.5	32	IN	19.0		KY	
40	OK	9.5	40	OK	5.4	33	TN	18.3	36	AR	9.6
41	WV	8.4	42	WV	4.6	34	OH	18.0	37	OK	9.3
42	AR	8.1	45	AR	4.3	42	WV	15.2	46	WV	7.0
43	AL	7.2	46	AL	3.9	46	MS	11.5	47	MO	6.7
48	MS	5.6	48	MO	3.7	47	AL	11.4	48	AL	6.4
49	MO	5.5	50	MS	2.3	48	MO	10.6	50	MS	3.7
51	LA	3.2	51	LA	1.9	51	LA	5.7	51	LA	2.7

Sources: College Board. *Advanced Placement Report to the Nation 2005* 48. Copyright (c) 2005 The College Board, www.collegeboard.com. Reproduced with permission. College Board. *The 4th Annual AP Report to the Nation* 52. Copyright (c) 2008 The College Board, www.collegeboard.com. Reproduced with permission.

Several states, including Kentucky, are considering policies to increase the number of students taking AP courses and exams. If these policies are implemented and successful at increasing participation, policy makers should expect a decline in average scores. This phenomenon has been observed for the ACT and the SAT, so it will likely happen with the AP.

Education Week’s Quality Counts Achievement Index

The Achievement Index is composed of 15 measures. Kentucky ranks 33rd, which is below average but not in the bottom tier of states.

Education Week’s Quality Counts, published by Editorial Projects in Education, reports an Achievement Index, shown in Table 2.24. This index is a composite of several types of scores, summarized in Table 2.25.

Among all states, Kentucky ranks 33rd on the Achievement Index. Kentucky’s total score of 66.5 is below a majority of the peer states. Both Kentucky and the U.S. were awarded the same letter grade, a D+.

Table 2.24
Education Week’s Quality Counts Achievement Index, 2008

Rank	State	Total Score	Grade
1	Maryland	82.5	B
6	Virginia	76.2	C
7	Florida	75.2	C
13	Texas	72.6	C
14	Ohio	72.4	C-
16	Delaware	72.2	C-
25	Indiana	70.0	C-
--	United States	69.4	D+
27	Illinois	69.1	D+
28	Georgia	68.1	D+
29	Tennessee	67.0	D+
31	North Carolina	66.7	D+
33	Kentucky	66.5	D+
34	Arkansas	66.3	D
36	Oklahoma	66.0	D
38	Missouri	64.7	D
40	South Carolina	64.5	D
46	Louisiana	60.3	D-
48	Alabama	59.1	F
49	West Virginia	58.1	F
51	Mississippi	55.9	F

Note: Components of this index are summarized in Table 2.20.
Source: Editorial Projects in Education. *Education Week’s Quality Counts* 2008.

Table 2.25 summarizes the components of the Achievement Index. Kentucky’s greatest weaknesses are relatively lower math proficiency levels and smaller gains in grade 8 reading.

Table 2.25
Education Week's Quality Counts Achievement Index Components, Summary, 2008

Indicator	U.S. %	KY %	KY Rank
Achievement Levels, NAEP			
Grade 4 Math Proficiency 2007 ^a	38.6	30.8	42
Grade 8 Math Proficiency 2007 ^a	31.0	27.3	37
Grade 4 Reading Proficiency 2007 ^a	31.7	33.5	27
Grade 8 Reading Proficiency 2007 ^a	29.2	27.7	33
Achievement Gains, NAEP			
Grade 4 Math Scale Score Percent Change 2003-2007 ^a	+5.1	+6.4	16
Grade 8 Math Scale Score Percent Change 2003-2007 ^a	+4.1	+4.4	17
Grade 4 Reading Scale Score Percent Change 2003-2007 ^a	+3.2	+3.4	20
Grade 8 Reading Scale Score Percent Change 2003-2007 ^a	-0.3	-4.2	49
Achieving Excellence, NAEP			
Grade 8 Math Percent Advanced ^a	6.6	5.0	36
Grade 8 Math Percent Advanced - Percent Change 2003-2007 ^a	+1.6	+1.3	30
High School Graduation, Public Schools			
Graduation Rates, School Year 2004 ^a	69.9	70.0	33
Graduation Rate Change School Years 2000-2004 ^a	+3.1	+6.3	5
Advanced Placement (Per 100 Grade 11 and 12 Students)			
Advanced Placement Scores of 3+ 2006 ^b	16.9	10.8	29
Advanced Placement Scores of 3+ Change 2000-2006 ^b	+6.0	+5.6	20
NAEP Achievement Poverty Gap based on National School Lunch Program			
Grade 4 Reading Poverty Gap 2007 ^a	26.8	22.0	34
Grade 8 Math Poverty Gap 2007 ^a	26.0	21.1	36
Grade 4 Reading Poverty Gap Change 2003-2007 ^a	-1.1	+2.2	13
Grade 8 Math Poverty Gap Change 2003-2007 ^a	-2.4	-1.4	28
Achievement Index Total Score	69.4	66.5	33

Notes: Origins of data that appear in *Quality Counts*: ^aU.S. Dept. of Ed.; ^bCollege Board.

Source: Editorial Projects in Education. *Education Week's Quality Counts* 2008.

Chapter Summary and Conclusions

Policy makers' efforts to monitor high school completion are complicated by data quality issues and competing formulas. Nevertheless, across multiple measures, Kentucky's graduation rate recently rose slightly above the national rate, after hovering slightly below for several years. As in the nation as a whole, Kentucky's graduation rates are higher for females than for males and higher for whites than for African Americans and Hispanics. Compared to the total U.S., Kentucky's gender gaps are larger but racial/ethnic gaps are smaller.

In the most recent NAEP exams, Kentucky students performed above the national average in grades 4 and 8 science and grade 4 reading, equal to the national average in grade 4 writing, and below the national average in grades 4 and 8 math and grade 8 writing. Compared to previous years, the latest NAEP exams show improvements for the Commonwealth in all these areas except for one: grade 8 reading declined, indicating a need for more focus on reading skills in middle schools. As in the nation as a whole, Kentucky's female students scored higher than males in reading and writing, males scored higher in math and science, whites scored higher than African Americans in all subjects, and impoverished students scored lower than others in all subjects. Compared to the nation, Kentucky's gender gaps are larger but racial and poverty gaps are smaller.

This chapter presented a variety of outcome measures, highlighting some strengths and weaknesses to keep in mind when interpreting the data. Different measures may not always agree but most lead to the same conclusion: that Kentucky has made significant strides in recent years but must intensify efforts to improve student learning, especially in middle and high school.

Chapter 3

Characteristics of Students and Their Families and Communities

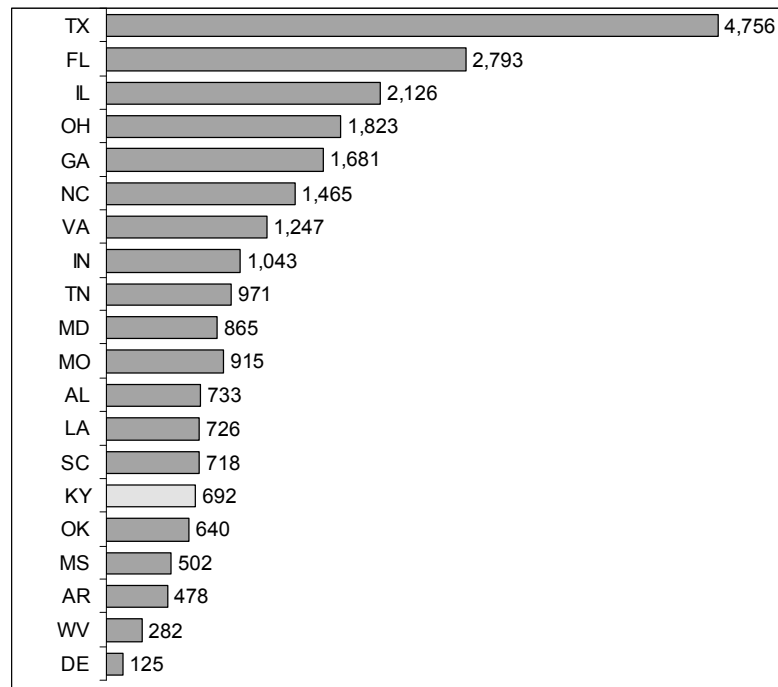
The impact of demographics and other external factors on academic performance is well known. Although data are not available to rank states on such personal factors as student motivation, data are available for family and community characteristics that influence achievement. This chapter focuses on those characteristics, as well as on enrollment and participation in selected programs.

Enrollment

The four largest states account for one-third of the nation's enrollment. Kentucky has the 26th largest enrollment in the nation.

The four largest states—California, Texas, Florida, and New York—account for one-third of the nation's elementary and secondary student enrollment. Kentucky has the 26th largest enrollment in the nation. Figure 3.A presents enrollment for Kentucky and the peer states.

Figure 3.A
Total P-12 Student Enrollment (in thousands), FY 2008



Source: U.S. Dept. of Ed. Inst. Natl. *Projections*, 2007 45.

K-12 Enrollment Trends

Birth rates have the most impact on enrollment trends. Birth rate fluctuations, such as the drop during the Great Depression and the upswing following World War II, have impacts on enrollment for generations.

Public school enrollment trends reflect a variety of factors, especially birth rates and migration. Fluctuations in birth rates affect enrollment for generations. For example, after falling during the Great Depression, U.S. birth rates rose dramatically during the two decades of prosperity that followed World War II and then dropped again. This post-war baby boom, which strained the capacity of the education system, has had ongoing impact as baby boomers' children and grandchildren have reached school age (Bloom).

Kentucky's enrollment growth rate of approximately one-half percent per year since 2000 is expected to continue through 2016.

Between 2000 and 2008, Kentucky's enrollment growth averaged about a half percent per year, as shown in Table 3.1. This rate was the 19th fastest in the nation. The same growth rate is projected for 2008-2016, but Kentucky's rank is projected to drop to 32nd as other states experience faster growth.

Table 3.1
Projected Percent Changes in Public P-12 Enrollment, Fall 2000-Fall 2016

2000-2008			2008-2016		
Rank	State	%	Rank	State	%
4	TX	17.1	2	TX	18.6
5	GA	16.3	6	FL	16.1
6	FL	14.7	7	GA	15.3
7	NC	13.2	9	NC	11.9
10	VA	8.9	12	VA	9.1
11	DE	8.7	13	TN	8.9
13	TN	6.8	14	DE	8.8
14	AR	6.2	18	AR	7.3
15	SC	6.1	--	U.S.	7.0
--	U.S.	5.5	21	OK	6.4
16	IN	5.5	22	MD	6.1
19	KY	3.9	26	MO	5.1
20	IL	3.8	29	SC	4.7
21	OK	2.7	31	LA	4.1
25	MD	1.4	32	KY	3.9
26	MO	0.2	38	MS	1.8
28	MS	0.8	39	IN	1.5
34	OH	-0.7	40	WV	0.7
35	AL	-0.9		IL	
38	WV	-1.4	42	AL	0.5
41	LA	-2.3	44	OH	0.3

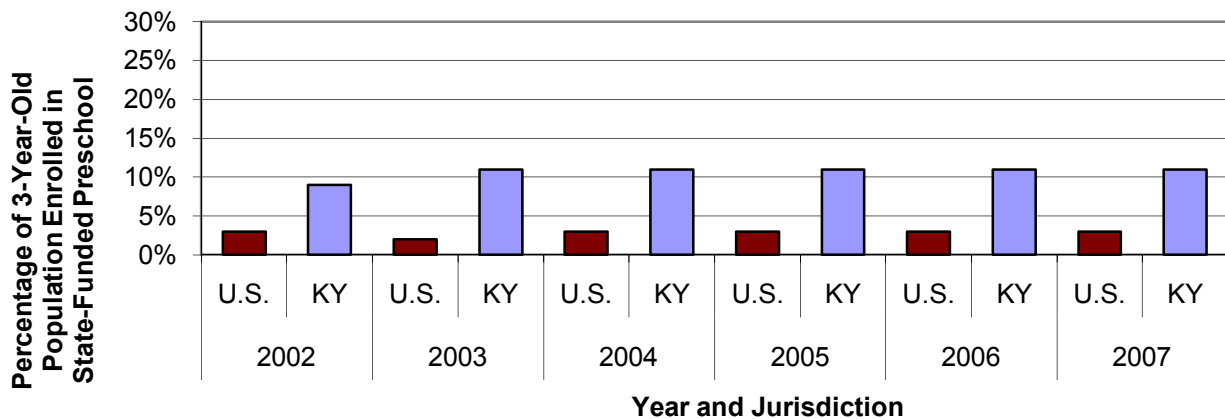
Source: U.S. Dept. of Ed. Inst. Natl. *Projections*, 2007 44-45.

Preschool Enrollment

In recent years, Kentucky has been, and continues to be, a national leader in preschool access. In FY 2007, the Commonwealth had the 5th highest enrollment of 3-year-olds and the 11th highest enrollment of 4-year-olds.

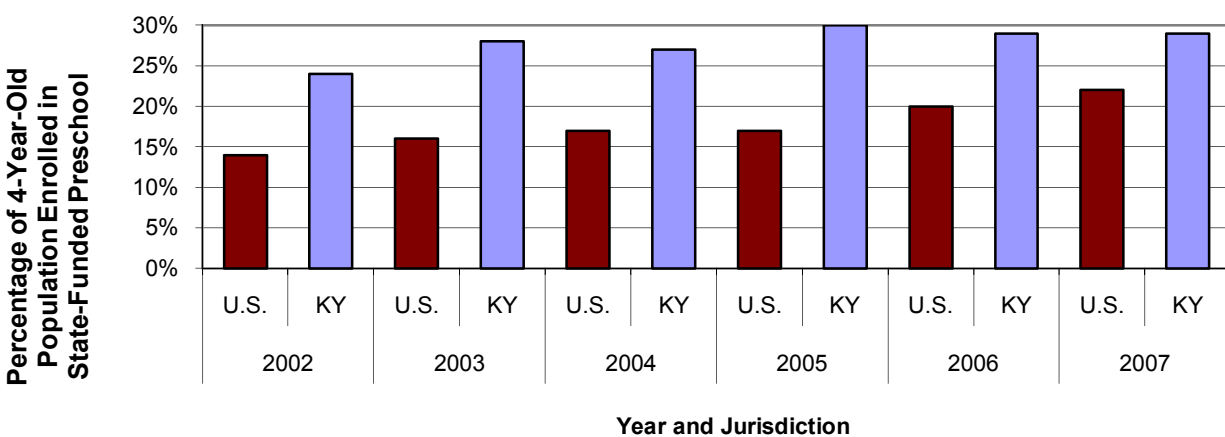
Nationwide attention is increasingly focusing on preschool as an opportunity to help at-risk students early in their educational development. Yet Kentucky is one of only 38 states with preschool programs and one of only 5 requiring preschool in all districts. Kentucky became a national leader in comprehensive preschool reform following the Kentucky Education Reform Act of 1990 (Natl. Institute. *The State* 64). As Figure 3.C and Table 3.2 show, the Commonwealth has been a national leader in preschool access in recent years and continued to be in FY 2007, with the 5th highest enrollment of 3-year-olds and the 11th highest enrollment of 4-year-olds.

Figure 3.B
Enrollment of 3-Year-Olds in State-funded Preschool, 2002 to 2007



Source: Natl. Institute. *The State* 4, 64.

Figure 3.C
Enrollment of 4-Year-Olds in State-funded Preschool, 2002 to 2007



Source: Natl. Institute. *The State* 4, 64.

Table 3.2
Enrollment of 3- and 4-Year-Olds in State-funded Preschool, 2007

3-Year-Olds			4-Year-Olds		
Rank	State	%	Rank	State	%
1	IL	18.5	1	OK	68.4
4	AR	10.8	2	FL	56.7
5	KY	10.7	3	GA	53.3
7	WV	5.1	4	WV	45.8
10	TX	4.4	5	TX	45.2
--	U.S.	3.2	7	SC	37.8
13	MO	2.2	10	MD	34.0
18	OH	1.3	11	KY	29.3
20	MD	1.2	12	IL	26.7
21	TN	1.0	14	LA	24.4
24	SC	0.6	--	U.S.	21.8
27	OK	0.0	15	AR	21.4
	FL		18	TN	15.6
	GA		21	NC	14.8
	LA		23	VA	12.5
	NC		27	DE	7.6
	VA		32	MO	4.3
	DE		35	OH	3.4
	AL		38	AL	1.8
n.a.	IN	No program	n.a.	IN	No program
	MS			MS	

Note: Rankings are out of 38 states that have state-funded preschool programs.

Source: Natl. Inst. *The State* 15.

Racial and Ethnic Composition of Students

Kentucky's minority student population is smaller and is growing more slowly than the nation's.

As Table 3.3 shows, Kentucky's elementary and secondary students are less racially diverse than the rest of the nation. The minority population has grown more slowly than in the nation as a whole. Unlike some states, Kentucky has not experienced rapid Hispanic population growth over the past decade.

Table 3.3
Racial and Ethnic Composition of Students, FY 2006

American Indian/ Alaska Native			Asian/Pacific Islander			Hispanic			Black Non-Hispanic			White Non-Hispanic		
Rank	State	%	Rank	State	%	Rank	State	%	Rank	State	%	Rank	State	%
2	OK	18.9	9	MD	5.2	3	TX	45.3	2	MS	51.2	3	WV	93.6
18	NC	1.4		VA		7	FL	23.9	3	LA	44.4	7	KY	86.3
--	U.S.	1.2	--	U.S.	4.6	--	U.S.	19.8	4	SC	40.3	13	IN	80.3
21	AL	0.8	13	IL	3.8	9	IL	19.0	5	GA	39.2	14	OH	76.6
	LA		17	TX	3.1	21	DE	9.2	6	MD	38.1	18	MO	69.5
24	AR	0.7	20	DE	2.8	23	OK	8.9	7	AL	36.0	26	TN	69.5
30	MD	0.4		GA		24	GA	8.7	8	DE	32.5	27	AR	68.2
	MO		26	FL	2.2	25	NC	8.4	9	NC	31.5	30	VA	59.8
34	DE	0.3	27	NC	2.1	26	VA	7.7	10	VA	27.0	31	OK	59.6
	FL		31	OK	1.7	27	MD	7.6	11	TN	25.1	32	AL	59.4
	IN		32	MO	1.6	28	AR	6.8	12	FL	23.9	--	U.S.	57.1
	SC		35	AR	1.4	32	IN	5.7	13	AR	23.0	34	NC	56.6
	TX			37		SC	4.0	14	IL	20.6	36	IL	56.4	
	VA			38		TN	3.8	17	MO	18.2	37	DE	55.1	
42	IL	0.2	40	LA	1.3	39	MO	3.2	--	U.S.	17.2	38	SC	54.0
	KY			40		AL	2.8	19	OH	17.1	40	LA	51.5	
	MS		43	IN	1.2	42	OH	2.4	21	TX	14.7	41	FL	49.6
	TN		46	AL	1.0	44	KY	2.1	23	IN	12.5	42	GA	49.2
GA	48	KY	0.9	25	OK		10.9		43	MD	48.6			
47	OH	0.1	50	MS	0.8	48	MS	1.4	26	KY	10.6	45	MS	46.5
	WV		51	WV	0.6	51	WV	0.7	38	WV	5.0	47	TX	36.5

Source: U.S. Dept. of Ed. Inst. Natl. *Common.*

Incomes**Family Income**

Kentucky's median family income is among the lowest in the nation.

As Table 3.4 shows, Kentucky's median family income is among the lowest in the nation. In 2005, incomes were significantly lower in only three peer states.

Table 3.4
Median Family Income in Nominal Dollars, 1989, 1999, and 2006

1989			1999			2006			Sig.
Rank	State	\$	Rank	State	\$	Rank	State	\$	
4	MD	45,034	3	MD	61,876	3	MD	77,839	>
9	DE	40,252	10	IL	55,545	8	VA	66,886	
12	IL	38,664	11	DE	55,257	14	IL	63,121	
13	VA	38,213	12	VA	54,169	15	DE	62,623	
--	U.S.	35,225	21	IN	50,261	--	U.S.	58,526	
23	OH	34,351	--	U.S.	50,046	27	OH	56,148	
24	IN	34,082	22	OH	50,037	28	GA	56,112	
25	GA	33,529	24	GA	49,280	30	IN	55,781	
31	FL	32,212	31	NC	46,335	34	FL	54,445	
33	MO	31,838	33	MO	46,044	36	MO	53,026	
36	TX	31,553	34	TX	45,861	38	TX	52,355	
37	NC	31,548	36	FL	45,625	39	NC	52,336	
38	SC	30,797	38	SC	44,227	42	SC	50,334	
39	TN	29,546	40	TN	43,517	43	TN	49,804	
42	AL	28,688	43	AL	41,657	44	AL	49,207	=
43	OK	28,554	44	KY	40,939	45	KY	48,726	
47	KY	27,028	45	OK	40,709	46	LA	48,261	
48	LA	26,313	47	LA	39,774	48	OK	47,955	<
49	WV	25,602	49	AR	38,663	49	AR	45,093	
50	AR	25,395	50	MS	37,406	50	WV	44,012	
51	MS	24,448	51	WV	36,484	51	MS	42,805	

Notes: Incomes for 1989 and 1999 are from decennial censuses, and are therefore not subject to sampling error. Incomes for 2006 are from the 2006 American Community Survey, which is subject to sampling error. Each difference between Kentucky and another state was tested for statistical significance with a 95 percent confidence level; > indicates states with significantly higher incomes than Kentucky, = indicates states not significantly different, and < indicates states with significantly lower incomes than Kentucky. Statistical tests used unrounded percentages and took into account each state's sample size and variance; therefore, states with the same percentages can have different levels of significance.

Sources: U.S. Dept. of Commerce. Census. "American Community Survey" and "Decennial Census."

Child Poverty Rates

More than one in five Kentucky children live in poverty.

More than one in five Kentucky children live in families whose incomes are below the federal poverty line. As Table 3.5 shows, in 2005, Kentucky had the 10th highest child poverty rate in the nation. This compares to a rank of 6th in 1989 and 7th in 1999, based on the last two decennial censuses.

Table 3.5
Children Living Below the Federal Poverty Line, 1989, 1999, and 2006

1989			1999			2006			Sig.
Rank	State	%	Rank	State	%	Rank	State	%	
1	MS	25.2	2	MS	19.9	2	MS	29.5	>
2	LA	23.6	3	LA	19.6	3	LA	27.8	
4	WV	19.7	5	WV	17.9	5	WV	25.2	
5	AR	19.1	6	AL	16.1	6	AR	24.3	=
6	KY	19.0	7	AR	15.8		OK		
7	AL	18.3		KY		8	TX	23.9	
8	TX	18.1	9	TX	15.4	9	AL	23.0	
10	OK	16.7	10	OK	14.7	10	KY	22.8	
13	TN	15.7	14	SC	14.1	11	TN	22.7	
15	SC	15.4	16	TN	13.5	12	SC	22.1	
16	GA	14.7	18	GA	13.0	13	GA	20.2	
18	MO	13.3	19	FL	12.5		NC		
--	U.S.	13.1	--	U.S.	12.4	17	OH	18.7	
21	NC	13.0	20	NC	12.3	18	MO	18.6	
23	FL	12.7	24	MO	11.7	--	U.S.	18.3	
24	OH	12.5	29	IL	10.7	21	IN	17.9	
27	IL	11.9	31	OH	10.6	23	FL	17.5	
37	IN	10.7	37	VA	9.6	25	IL	17.1	
39	VA	10.2	38	IN	9.5	29	DE	15.8	
46	DE	8.7	44	DE	9.2	43	VA	12.2	
47	MD	8.3	47	MD	8.5	50	MD	9.7	

Notes: Poverty rates for 1989 and 1999 are from decennial censuses. Poverty rates for 2006 are from the American Community Survey, which is subject to sampling error. Each difference between Kentucky and another state in 2006 was tested for statistical significance with a 95 percent confidence level; > indicates states with significantly higher poverty rates than Kentucky, = indicates states not significantly different, and < indicates states with significantly lower poverty rates than Kentucky. Statistical tests used unrounded percentages and took into account each state's sample size and variance; therefore, states with the same percentages can have different levels of significance. Source: U.S. Dept. of Commerce. Census. "American Community Survey" and "Decennial Census."

Caveats and Limitations. Although poverty rates are widely used, they do not take into account geographic differences in the cost of living nor do they include noncash benefits such as food stamps, subsidized housing, Medicaid, and subsidized school lunches (U.S. Dept. of Commerce. Census. "Characteristics" 7). Because one national set of income thresholds is used for the entire country, poverty will be overstated in areas like Kentucky where the cost of

living is lower. In addition, poverty statistics provide little information about the distribution of income. For example, two states could have the same percentage below the poverty level, but one could have income extremes far above and below the poverty level, while the other could have incomes concentrated just above and below the poverty level.

NCES Comparable Wage Index

NCES developed the Comparable Wage Index to allow researchers to adjust comparisons of financial data for geographic differences in costs.

NCES developed the Comparable Wage Index (CWI) to allow researchers to adjust comparisons of financial data for geographic differences in costs. The CWI compares the average income earned by a college-educated worker in a given labor market to the national average in 1999.⁸ This measure, which has several advantages over cost-of-living indices, is appropriate because salaries make up the majority of education costs. In order to avoid the potential for education systems to manipulate the CWI by raising salaries, NCES excludes wages of education professionals when calculating the CWI (U.S. Dept. of Ed. Inst. Natl. “NCES Comparable”). As Table 3.6 shows, Kentucky’s CWI is 34th in the nation.

⁸ A CWI of 1 was assigned to the national average salary of college-educated workers in 1999; a CWI greater than 1 indicates an average salary above the 1999 national average, and a CWI less than 1 indicates an average salary below the 1999 national average. The 1.265 CWI for the U.S. in 2005 indicates that the national average income for college-educated workers increased by 26.5 percent between 1999 and 2005.

Table 3.6
NCES Comparable Wage Index, 2005

Rank	State	Average CWI for All Labor Markets in State	Range of CWI Across All Labor Markets in State				
			Rank by Range	State	Lowest Market	Highest Market	Range, Highest Minus Lowest
7	VA	1.369	--	U.S.	0.833	1.669	0.835
8	MD	1.368	2	WV	0.980	1.554	0.574
10	IL	1.306	4	TX	0.855	1.389	0.534
11	DE	1.286	5	MD	1.063	1.554	0.491
--	U.S.	1.265	6	VA	1.066	1.554	0.488
14	TX	1.251	9	FL	0.833	1.265	0.432
15	GA	1.242	11	IL	0.964	1.387	0.424
19	OH	1.211	13	TN	0.894	1.290	0.395
24	NC	1.194	14	AR	0.910	1.290	0.380
26	FL	1.171	15	KY	0.913	1.293	0.379
27	TN	1.163	16	NC	0.942	1.308	0.365
31	MO	1.144	17	MS	0.930	1.290	0.360
32	SC	1.140	18	MO	0.349	0.897	1.246
33	IN	1.123	23	GA	0.991	1.305	0.314
34	KY	1.117	24	IN	0.979	1.293	0.313
36	AL	1.108	25	DE	1.031	1.338	0.308
37	LA	1.097	29	OH	0.992	1.293	0.300
38	WV	1.071	30	LA	0.913	1.203	0.290
42	OK	1.064	35	SC	1.079	1.308	0.229
45	MS	1.051	36	OK	0.905	1.128	0.223
46	AR	1.041	40	AL	0.970	1.174	0.205

Source: U.S. Dept. of Ed. Inst. Natl. "NCES Comparable."

Student Participation in Selected Programs

Programs for Disadvantaged Students and Their Schools

Title I funds can be used for targeted assistance to specific students or for schoolwide programs. Kentucky has the 15th highest percentage of students enrolled in Title I-eligible schools and the 5th highest percentage of children in schoolwide programs.

Because income data for specific students is difficult to obtain, researchers and policy makers often use proxies, such as participation in programs that help low-income students and the schools they attend. Title I, the first section of the Elementary and Secondary Education Act, refers to federally funded programs aimed at America's most disadvantaged students. Title I, Part A funds can be used for targeted assistance to specific students. However, schools with at least 40 percent of students living below the poverty level are encouraged to combine Title I, Part A funds with other federal, state, and local funds to operate a comprehensive schoolwide program that upgrades the entire educational program in the school (U.S. Dept. of Ed. Office of Elementary). Through the National School Lunch Program, children from families with incomes at or below 130 percent of the poverty level are eligible for free meals, and those with incomes between 130 percent and 185 percent of the poverty level are

eligible for reduced-price meals (U.S. Dept. of Ed. Inst. Natl. *Numbers and Types of Public Elementary and Secondary Schools 4-5*).

Above-average percentages of Kentucky students attend Title I schools and are eligible for subsidized lunches.

Table 3.7 presents the percentages in 2006 of students who are enrolled in Title I schools as well as those eligible for free or reduced-price lunch. All of these rankings reflect Kentucky's high rates of child poverty. With more than 60 percent of students enrolled in Title I-eligible schools and more than 50 percent in schools with schoolwide programs, Kentucky ranks 15th and 5th, respectively, in the nation. With 52.4 percent of students eligible for free or reduced-price lunches, Kentucky is well above the national average and ranks 7th.

Table 3.7
Students in Title I Schools or Eligible for National School Lunch Program, FY 2006

All Title I Schools			Title I Schools with Schoolwide Programs			Eligible for Free Lunch			Eligible for Reduced-price Lunch			Eligible for Free or Reduced-price Lunch		
Rank	State	%	Rank	State	%	Rank	State	%	Rank	State	%	Rank	State	%
2	IN	96.1	2	MS	61.6	1	MS	62.3	--	TN	n.a.	1	MS	69.5
6	AR	67.1	3	TX	60.4	2	LA	53.9	2	OK	10.4	2	LA	61.2
8	OK	65.8	5	KY	52.8	5	OK	44.1	6	WV	9.8	4	OK	54.5
9	MS	65.6	6	LA	51.0	6	AR	44.0	11	AR	8.8	6	AR	52.9
10	TX	64.7	8	OK	46.1	7	KY	43.8	12	FL	8.7	7	KY	52.4
11	OH	63.8	9	AR	45.8	8	SC	43.7	13	KY	8.6	8	AL	51.7
15	KY	60.6	10	AL	45.1	9	AL	43.0		AL		9	SC	51.5
19	LA	57.7	11	TN	38.6	10	GA	41.5	17	GA	8.2	10	GA	49.8
21	AL	55.5	13	GA	37.5	11	TX	40.0	17	TX	8.2	11	WV	49.1
23	IL	54.4	14	SC	34.4	12	WV	39.3	22	IN	7.9	13	TX	48.2
--	U.S.	52.3	15	FL	34.1	14	FL	37.1		SC		14	TN	47.1
29	GA	45.9	--	U.S.	31.3	17	NC	35.2	25	MO	7.4	15	FL	45.8
30	TN	45.3	18	DE	29.8	--	U.S.	32.4		NC		19	NC	42.6
32	DE	44.6	19	NC	29.7	19	IL	31.5	--	U.S.	7.4	--	U.S.	41.6
33	MO	42.7	20	VA	27.4		MO		30	LA	7.3	22	MO	39.1
40	NC	37.3	23	WV	26.2	21	DE	30.7		MS		25	IL	37.2
41	SC	36.9	24	IL	24.8	27	IN	28.2	33	MD	7.2	27	DE	36.1
42	WV	36.7	26	OH	21.6	30	OH	26.4	35	VA	6.8		IN	
43	FL	34.9	38	MD	16.8	36	MD	24.4	40	OH	6.2	35	OH	32.5
46	VA	27.4	40	MO	15.8	38	VA	24.3	42	IL	5.7	39	MD	31.6
48	MD	20.1	48	IN	6.8	n.a.	TN	n.a.	45	DE	5.4	43	VA	31.1

Notes: Ranks for all Title I schools and Title I schools with schoolwide programs are out of 50; data were not available for NJ. Ranks for eligibility for free lunch and eligibility for reduced-price lunch are out of 48; data not available for NV, TN, or WI.

Source: U.S. Dept. of Ed. Inst. Natl. *Common*.

English Language Learners

Kentucky has relatively few students who lack English proficiency, ranking 44th out of 46 states reporting.

An English language learner (ELL) is a student who comes from an environment in which a language other than English has had a significant impact on his or her level of English language proficiency (U.S. Dept. of Ed. Inst. Natl. *Overview* 38). Table 3.8 ranks peer states with respect to the percentage of students receiving ELL services. The percentages are high in southwestern and western states. Although some Kentucky districts have concentrations of ELL students, the overall percentage for the state is low, giving Kentucky a rank of 44th out of the 46 states that reported data on this variable.

Table 3.8
Students Receiving English Language Learner Services
FY 2006

Rank	State	%
4	Texas	15.7
--	United States	8.6
11	Florida	8.3
12	Oklahoma	7.5
19	Virginia	6.0
20	Indiana	5.5
21	Georgia	5.4
24	North Carolina	5.2
26	Delaware	4.9
29	Arkansas	4.4
32	Maryland	3.7
37	Alabama	2.2
38	South Carolina	2.1
39	Missouri	2.0
41	Louisiana	1.8
43	Ohio	1.6
44	Kentucky	1.5
45	West Virginia	0.7
46	Mississippi	0.6
n.a.	Illinois	n.a.
	Tennessee	

Notes: Ranks are out of 46; data are not available for IL, ND, NH, PA, and TN.

Source: U.S. Dept. of Ed. Inst. Natl. *Common*.

The percentage of students receiving ELL services has been growing over time. This growth has been slower for Kentucky than for the nation as a whole.

Disabilities

A frequently used proxy for the percentage of students with disabilities is the percentage of students with Individualized Education Programs (IEPs). An IEP is a written instructional plan for a student with a disability (U.S. Dept. of Ed. Inst. Natl. *Overview* 39). This is not a very precise proxy for the disability rate because IEPs are provided for a wide range of disability types and severity levels, including speech difficulties, attention deficit/hyperactivity disorder, and severe cognitive disabilities.

Kentucky is above the national average with respect to the percentage of students with Individualized Education Programs due to disabilities.

As Table 3.9 shows, Kentucky is above the national average with respect to the percentage of students with IEPs, and ranks 12th overall.

Table 3.9
Students With Individualized Education Programs, FY 2006

Rank	State	%
6	WV	17.6
8	IN	17.1
10	AL	16.8
12	KY	16.0
13	SC	15.6
15	IL	15.3
16	OK	15.2
18	FL	14.9
22	DE	14.7
25	OH	14.5
26	VA	14.4
31	MS	13.7
--	U.S.	13.6
32	NC	13.6
35	TN	13.3
39	LA	13.0
40	MD	12.8
41	GA	12.4
42	AR	12.3
46	TX	11.3
51	MO	0.0

Source: U.S. Dept. of Ed. Inst. Natl. *Common*.

The percentage of students with IEPs has been growing over time. Growth has been faster in Kentucky than in the nation as a whole.

Annie E. Casey Child Well-being Index and Measures

Since 1990, the Annie E. Casey Foundation has released an annual *KIDS COUNT Data Book* on the well-being of American children. Although the data and rankings from this publication do not report directly on education, they are included in this compendium because child well-being is related to educational success. Even though the education system has little or no control over these factors, they have an important impact on a child’s ability to benefit from education.

Kentucky has a low ranking on several child well-being measures, indicating more obstacles to student achievement in Kentucky than in most other states.

KIDS COUNTS ranks states with respect to a child well-being index. The 10 key indicators that make up this index are summarized in Table 3.10. Kentucky has a low ranking on several components, reflecting a number of obstacles to achievement.

Table 3.10
Summary of Components of 2007 *KIDS COUNT* Child Well-being Index, 2007

Key Indicator	KY	U.S.	KY Rank
Percentage of live births with low birth weight (under 5.5 pounds), 2004 ^a	8.8	8.1	38
Infant mortality rate (deaths per 1,000 live births), 2004 ^a	6.8	6.8	27
Child death rate (deaths per 100,000 children ages 1-14), 2004 ^b	24	20	32
Teen death rate (deaths per 100,000 teens ages 15-19), 2004 ^b	95	66	44
Teen birth rate (births to 15-19-year-olds per 1,000 females), 2004 ^b	49	41	37
Percentage of teens ages 16-19 who are high school dropouts, 2005 ^a	9	7	36
Percentage of teens ages 16-19 not attending school and not working, 2005 ^a	11	8	45
Percentage of children with no parent working full time, year-round, 2005 ^a	38	34	44
Percentage of children in poverty, 2005 ^a	22	19	41
Percentage of children in single-parent families, 2005 ^a	31	32	26

Notes: Poverty rates do not take into account noncash benefits or geographic cost differences. Origins of data that appear in *KIDS COUNT*: ^a U.S. Centers for Disease Control and Prevention, Natl. Ctr. for Health Statistics; ^b Death rates from U.S. Centers for Disease Control and Prevention, and population data from U.S. Census Bureau.

Source: Annie E. Casey 28, 33.

As shown in Table 3.11, Kentucky's Overall Child Well-being Index rank's 40th in the nation. This illustrates the overall impact of challenges facing Kentucky.

Table 3.11
Overall Child Well-being, 2007 *KIDS COUNT* Data Book

Overall Rank	State
14	Virginia
24	Maryland
26	Illinois
28	Ohio
31	Indiana
32	Florida
34	Missouri
35	Delaware
37	Texas
39	North Carolina
40	Kentucky
41	Georgia
42	Oklahoma
43	Tennessee
44	West Virginia
45	Arkansas
46	South Carolina
48	Alabama
49	Louisiana
50	Mississippi

Source: Annie E. Casey.

Education Week’s Quality Counts Chance-for-Success Index

Kentucky students are fortunate to have few language barriers, but other measures of their chances for success are low.

Education Week’s Chance-for-Success Index is based on 13 indicators of students’ socioeconomic status, participation in education, and employment opportunities; these are summarized in Table 3.12. The index includes more education measures and fewer health measures than the *KIDS COUNT* study. Kentucky has strong linguistic integration but struggles with other factors, especially parental employment, kindergarten enrollment, and adult educational attainment.

Table 3.12
Education Week’s Quality Counts Chance-for-Success Index Components, Summary, 2008

Indicator	KY %	U.S. %	Percentage Point Change from previous year		KY Rank
			KY	U.S.	
Early Foundations	24.8	25.0	--	--	36
Family Income 2005 (at or above 200% of poverty level) ^a	56.4	60.1	+2.7	+0.3	38
Parent Education 2006 (at least one parent has a 2- or 4-year postsecondary degree) ^a	39.0	43.3	+1.8	+0.8	37
Parental Employment 2006 (at least one parent employed full time, year-round) ^a	68.6	71.8	+2.1	+1.2	44
Linguistic Integration 2006 (parents speak fluent English) ^a	97.5	84.3	+0.5	0.0	6
The Schooling Years	32.9	34.5	--	--	33
Preschool Enrollment 2006 (3- and 4-year-olds enrolled) ^a	40.9	46.1	-1.3	+1.3	34
Kindergarten Enrollment 2006 (5- and 6-year-olds enrolled) ^a	73.0	75.7	-2.2	+0.4	44
Elementary Reading Achievement 2007 (grade 4 public school students who scored at or above proficient) ^b	33.5	31.7	+2.7	+1.9	27
Middle School Math Achievement 2007 (grade 8 public school students who scored at or above proficient) ^b	27.3	31.0	+4.8	+2.5	37
High School Graduation FY 2004 (public high school students graduating on time with standard diploma) ^c	70.0	69.9	+0.3	+0.3	33
Postsecondary Participation 2006 (adults ages 18-24 who have a postsecondary credential or are enrolled in college/university) ^a	47.4	51.8	+3.9	+4.0	35
Adult Outcomes (ages 25-64)	17.0	18.8	--	--	43
Adult Educational Attainment 2006 (associate degree or higher) ^a	29.3	37.2	+0.6	-0.2	46
Annual Income 2005 (personal income at/above national median) ^a	44.1	50.1	+0.4	+0.1	37
Steady Employment 2006 (working full time year-round) ^a	68.4	68.2	+1.0	+1.0	26
Chance-for-Success Index Total Score	74.7 (C)	78.4 (C+)	--	--	38

Notes: Income differences do not take into account geographic cost differences. Origins of *Quality Counts* 2008 data: ^aEditorial Projects in Education analysis of data from the U.S. Census Bureau’s 2006 American Community Survey; ^bNatl. Assessment of Educational Progress, Natl. Ctr. for Education Statistics, U.S. Dept. of Ed., 2005; ^cCalculated using Editorial Projects in Education Research Center’s Cumulative Promotion Index formula and data from the U.S. Dept. of Ed.’s *Common Core of Data*.
Source: Editorial Projects in Education. *Education Week’s Quality Counts* 2008.

Table 3.13 presents state rankings on the Chance-for-Success-Index. Kentucky's rank is 38th, earning a C letter grade, compared to the national average of C+.

Table 3.13
Education Week's Quality Counts Chance-for-Success-Index

Rank	State	Score	Grade
6	Maryland	88.2	B+
8	Virginia	85.9	B
13	Delaware	82.6	B
19	Illinois	81.3	B-
24	Ohio	79.6	B-
--	U.S.	78.4	C+
28	Missouri	77.5	C+
29	Indiana	77.4	C+
31	North Carolina	77.1	C+
32	Florida	76.6	C+
36	Georgia	75.2	C
38	Kentucky	74.7	C
39	South Carolina	74.3	C
41	Texas	73.3	C
42	Alabama	72.1	C-
43	Tennessee, Oklahoma	71.9	C-
45	Arkansas	71.7	C-
47	West Virginia	70.8	C-
50	Louisiana	67.9	D+
51	Mississippi	67.7	D+

Notes: Components of this index are summarized in Table 3.14.

Source: Editorial Projects in Education. *Education Week's Quality Counts* 2008.

Caveats and Limitations

Education Week justifies examining noneducation indicators because of their impact on a child's ability to and benefit from educational opportunities. However, Education Trust criticizes this focus, asserting that personal circumstances do not preordain a child to failure or success.

More than half of the components of the Chance-for-Success-Index reported in Table 3.14 are outside the control of educators. However, in its 2007 edition of *Quality Counts*, *Education Week* justified including them because of their impact on a child's ability to benefit from educational opportunities:

A child who comes to school malnourished, from a poor household, having a mother with less than a high school education, or a parent whose primary language is not English is much more likely than a classmate without those factors to have academic and behavioral problems later on (Editorial. *Education Week's Quality Counts* 2007 20).

However, Education Trust charges that the index in *Quality Counts* encourages the defeatist notion that "demographics are destiny"

and diminishes the “critical role of educators and public schools in preparing young people to become contributing citizens despite the obstacles they face outside of school” (Education Trust. *Education*).

Chapter Summary and Conclusions

As this chapter has shown, Kentucky’s students face many obstacles to educational success before they even set foot in a classroom. Their parents typically have lower incomes, education, and employment rates. Disabilities, teen parenthood, and teen death rates are above the national average. On the other hand, Kentucky has fewer students with limited English proficiency. Despite these challenges, some of Kentucky’s high-poverty schools have demonstrated that it is possible to achieve high performance by focusing on the delivery of challenging content and creating a strong learning environment.

Chapter 4

Characteristics of Staff, Schools, and Districts

This chapter presents characteristics of schools and staff, including the student-teacher ratio, instructors as a percentage of all staff, salaries, Title I eligibility of schools, safety, and technology.

Student-Teacher Ratio

Kentucky has 16 enrolled students per full-time equivalent teacher, compared to a national student-teacher ratio of 15.7. This places Kentucky 36th among all states.

The student-teacher ratio is the number of students enrolled in the fall of the school year divided by the full-time equivalent count of teachers. A low student-teacher ratio is considered an indicator of quality, giving students more opportunities for personal attention. As shown in Table 4.1, Kentucky's 16.0 ratio overall is close to the national average of 15.7; Kentucky is ranked 36th. Kentucky's ratio is better (lower) than the national average in elementary schools, but worse (higher) than the national average in middle and high schools.

Table 4.1
Student-Teacher Ratio, Total and by Grade Level, FY 2006

Total			Elementary			Middle School			High School		
Rank	State	Ratio	Rank*	State	Ratio	Rank*	State	Ratio	Rank*	State	Ratio
6	VA	12.6	6	VA	13.1	9	VA	13.2	6	AR	12.9
8	AL	12.8	13	MO	13.7	17	AR	14.1	17	VA	14.5
14	MO	13.7	18	GA	14.3	20	WV	14.3	18	OK	14.6
19	WV	14.1	20	AL	14.4	21	MO	14.7	19	TX	15.0
20	AR	14.4	22	SC	14.6	23	TX	14.8	22	LA	15.6
22	SC	14.6		24		NC	14.9	23	MO	15.7	
24	GA	14.7	24	NC	14.7	24		SC	14.9		23
	LA		25	LA	14.9	27	GA	15.0	25	SC	15.8
26	NC	14.8	26	KY	15.1	28	LA	15.2	26	NC	15.9
28	TX	15.0		MD		15.4	29	MD	15.4	29	IL
30	DE	15.1	28	TN	15.3	30	MS	15.5	30	AL	16.5
31	MD	15.2	29	DE	15.4		OK		15.5	30	
	OK			32		IL	15.8	32	GA	16.7	
33	OH	15.6	31	FL	15.5	32	OH	15.8	33	MS	16.8
--	U.S.	15.7	32	AR	15.6	--	U.S.	16.0	--	U.S.	17.0
34	MS	15.7	--	U.S.	15.9	35	KY	16.3	35	KY	17.2
35	IL	15.8	35	OK	16.2	38	DE	16.7		MD	
36	KY	16.0	39	IL	17.0	39	TN	17.0		OH	
	TN		40	MS	17.1	41	AL	17.4	41	IN	18.8
40	FL	16.8	42	OH	17.5	42	IN	17.6	43	TN	19.1
43	IN	17.1	44	IN	17.6	43	FL	17.7	44	FL	19.8

Note: *Ranks by grade level are out of 50; data not available for AZ.

Sources: U.S. Dept. of Ed. Inst. Natl. *Common and Numbers and Types of Public Elem. and Sec. Schools* 8-9.

The steady decline in the ratio of students to teachers for the past several decades is attributed to the need for more teachers to provide schools' increasing complex and diverse offerings.

Student-teacher ratios decline when the number of teachers employed grows at a faster rate than enrollment. The student-teacher ratio has declined steadily in Kentucky and the nation since 1987, the first year for which comparable data are available for all states. This trend is attributed to increasingly complex and diverse school offerings, such as special education and enrichment programs, requiring increasing numbers of specialized teachers (U.S. Dept. of Ed. Inst. Natl. *120 Years* 28-29).

Teachers as a Percentage of Staff

Kentucky has the nation's lowest percentage of teachers as a percentage of all staff.

Nationally, the number of nonteaching staff has been increasing slightly faster than the number of teachers. As Table 4.2 shows, teachers as a percentage of staff declined from 53 percent in 1985 to 51.2 percent in 2005. Kentucky fell from a rank of 38th among 48 states in 1985 to a rank of 51st in 1995. In 2005, the most recent year data are available, Kentucky still ranked last, with teachers making up 43.3 percent of staff, compared to 51.2 percent of staff for the U.S.

Table 4.2
Teachers as a Percentage of All Staff
Fall 1985, 1995, and 2005

1985			1995			2005		
Rank	State	%	Rank	State	%	Rank	State	%
14	SC	56.7	9	OH	55.2	1	SC	71.5
15	IL	56.6	10	WV	54.5	7	AL	55.7
18	DE	55.4		DE		13	NC	52.5
19	WV	55.0	13	MD	54.4	14	VA	52.3
20	VA	54.3	14	VA	54.3		WV	
21	OH	54.0		IL		16	TN	52.2
23	MD	53.9	18	TN	54.0	17	MO	52.1
25	OK	53.5	19	AR	53.8	20	DE	51.7
26	AR	53.4	22	SC	53.3	--	U.S.	51.2
27	MO	53.3	27	AL	52.9	23	OK	51.1
--	U.S.	53.0	31	NC	52.2	24	MD	51.0
31	GA	52.8	--	U.S.	52.0	27	FL	50.6
32	AL	52.4	33	TX	52.0		IL	
	NC		39	LA	50.5	30	GA	49.6
36	FL	51.6	43	FL	48.3	31	OH	49.4
38	KY	51.1	45	GA	48.2	34	TX	48.7
	TN		46	IN	48.0	37	LA	48.2
41	IN	43		AR		46.7		
43	TX	50.7	48	MS	47.6	44	MS	46.5
46	LA	48.2	49	OK	47.0	48	IN	45.5
47	MS	47.0	51	KY	46.3	51	KY	43.3

Notes: For 1985, ranks are out of 48 states; CT, MT, and NV are not shown because they underreported support staff. The U.S. value includes estimates for these three states.

Source: Staff compilation of data from U.S. Dept. of Ed. Inst. Natl. *Digest*.

During the 1980s, the percentage of staff who were teachers in Kentucky was close to the national average, at a little over 50 percent. However, since 1990, Kentucky's percentage has fallen more quickly than the U.S. percentage.

Types of Staff

Table 4.3 presents full time equivalent staff in each major category per 1,000 students in membership. Student support and other support staff include library support, student support services, and all other nonadministrative support staff. Administrative support includes district- and school-level administrative support staff.

Kentucky's higher numbers of support staff and instructional aides may be due to higher preschool enrollments and student disability rates.

While the number of teachers per 1,000 students in Kentucky is below the national average, resulting in a rank of 37th, Kentucky is above the national average for several other types of staff. The Commonwealth ranks 5th for student support and other support

staff, 5th for administrative support staff, 8th for the number of instructional aides, and 14th for librarians.

Staffing reflects many factors, especially policies written into statutes and regulations. For example, Kentucky's high rate of instructional aides could be related to the following four factors:

- Preschools use more instructional aides than do K-12 classes, and the percentage of children enrolled in preschool is higher in Kentucky than in most other states.
- Until recently, Kentucky allowed instructional aides to teach in preschools. The statutes and regulations now require certification, but those already in the position were allowed to stay. In contrast, some other states have only certified teachers in their preschools.
- KRS 157.360 requires one instructional aide for every 24 full-time equivalent kindergarten students.
- Kentucky has an above-average proportion of students who receive special education services, which are more labor-intensive than regular education services; instructional aides provide many extra services.

Table 4.3
Staffing Rates
Full-time Equivalent Staff Members Per 1,000 Students, FY 2006

All Staff			Teachers			Instructional Aides			Instructional Coord./ Supervisors			Guidance Counselors		
Rank	State	Rate	Rank	State	Rate	Rank	State	Rate	Rank	State	Rate	Rank	State	Rate
10	VA	151.4	7	VA	79.2	8	KY	20.7	4	LA	2.7	3	LA	4.5
11	AR	149.0	8	AL	77.9	9	NC	20.3	5	DE	2.4	8	AR	3.0
14	KY	144.1	14	MO	73.1	11	IN	19.2	12	IN	1.6	10	MO	2.9
18	LA	141.5	19	WV	71.0	17	MS	17.5		MD		12	MD	2.7
19	MO	140.3	20	AR	69.6	20	IL	16.6	15	MS	1.5	14	NC	2.6
21	AL	139.9	22	SC	68.7	24	GA	16.0	16	AR	1.4	16	OK	2.5
22	TX	137.1	24	LA	68.2	25	LA	15.8		VA			SC	
23	GA	137.0	25	GA	67.9	26	AR	15.6	20	AL	1.3	19	AL	
24	MS	136.7	26	NC	67.5	27	VA	15.5		KY		DE	2.3	
25	WV	135.8	29	TX	66.8	30	TN	14.3	28	WV	1.0	27		TX
30	OH	129.9	30	DE	66.1	--	U.S.	14.2		MO		1.0	30	GA
31	MD	129.3	31	MD	65.9	32	DE	14.1	SC	1.0	VA			
32	OK	129.0		OK		33	TX	13.5	--		U.S.		U.S.	2.1
33	IN	128.6	33	OH	64.1	36	MO	13.4	35	OK	0.8	34	FL	2.1
	NC		--	U.S.	63.9	39	OK	12.4	38	NC	0.7			
35	DE	127.9	34	MS	63.5	40	MD	12.2	41	IL	0.6		KY	
36	IL	125.3	35	IL	63.4	43	WV	11.7	42	TN	0.5		MS	
--	U.S.	124.7	36	TN	62.5	44	FL	10.9	44	TX	0.4		OH	
39	TN	119.7	37	KY	62.4	48	OH	9.7	46	FL	0.3		TN	
42	FL	117.5	40	FL	59.4	50	AL	9.1		GA		43	IN	1.7
47	SC	96.1	43	IN	58.5	51	SC	5.2		OH		46	IL	1.5

Continued on next page.

Table 4.3 continued

Librarians			Student Support/Other Support Staff			School Admin.			School District Admin.			Admin. Support Staff		
Rank	State	Rate	Rank	State	Rate	Rank	State	Rate	Rank	State	Rate	Rank	State	Rate
3	AR	2.1	2	AR	45.5	2	TX	7.0	2	OH	4.3	2	OH	16.3
5	MS	2.0	5	KY	39.3	6	SC	4.8	7	DE	2.7	5	KY	11.9
8	AL	1.9	8	TX	37.2	9	AL	4.0	12	MS	2.0	6	FL	11.5
10	LA	1.8	9	GA	36.9		GA		3.9	17	IL	1.8	7	AL
	MO		12	MS	36.2	LA	3.7	TX			8		VA	11.1
12	NC	1.7	13	LA	35.9	15		MD	3.5	21	WV	1.6	14	OK
	VA		14	VA	35.7		TN	3.6		22	MO	1.5	15	MO
14	KY	1.6	15	WV	35.1	18	WV		3.4	24	AR	1.4	--	U.S.
	OK		16	IN	35.0		MS	3.5			GA		20	IL
	SC		18	MD	34.4	AR	3.4		--	U.S.	1.3	23		MS
	TN		20	MO	33.7	NC		3.4	KY	1.3	28	VA	25	LA
21	GA	1.4	25	AL	31.6	--	U.S.		3.4		30	NC	1.2	30
	MD		26	OK	30.9	MO	3.4	32		MD	1.1			
	WV		28	DE	29.8	OK		3.3		37	IN	1.0	33	NC
--	U.S.	1.1	29	OH	29.7	VA	29		KY		3.3		36	TX
32	DE	1.1	--	U.S.	29.0	31	DE	3.2	43	FL	0.7	37	GA	6.9
	TX		35	IL	28.9	33	IL	3.1	45	LA	0.5	38	AR	6.8
36	FL	1.0	36	FL	28.8	36	IN	2.9	47	SC	0.4	41	DE	6.3
	IL		37	TN	28.3	40	FL	2.7	50	AL	0.3		TN	
41	IN	0.9	42	NC	23.7	44	OH	2.6	43	MD		6.1		
44	OH	0.8	51	SC	3.4									

Source: U.S. Dept. of Ed. Inst. Natl. *Public* 5-6 and 15-16.

Due to Kentucky's recertification requirements, Kentucky has the 3rd highest rate of teachers holding advanced degrees.

Table 4.4 shows the percentage of teachers who have a master's, doctorate, or other degree beyond the bachelor's. Kentucky has the 3rd highest rate of advanced degree-holding teachers. Unlike many other states, Kentucky requires that teachers complete an advanced degree within their first 10 years of teaching.

Table 4.4
Teachers With Advanced Degrees, FY 2004

Rank	State	%
--	United States	48.1
3	Kentucky	70.6
4	Indiana	61.9
5	West Virginia	61.1
6	Alabama	60.6
9	Maryland	56.3
15	Illinois	53.5
16	Delaware	53.4
17	Georgia	52.7
	Ohio	
19	Tennessee	52.3
22	South Carolina	51.0
23	Missouri	50.8
36	Virginia	39.4
37	Arkansas	38.4
39	Florida	36.6
40	Mississippi	35.5
43	Louisiana	33.9
45	Oklahoma	33.4
47	North Carolina	31.7
49	Texas	27.2

Source: U.S. Dept. of Ed. Inst. Natl. *Digest* 2007, Table 64.

Education Week's Quality Counts Teaching Profession Index

Education Week's Quality Counts gave Kentucky a rank of 9th and a grade of B- on its overall teaching profession index.

The 2008 edition of *Education Week's Quality Counts* included an index of teaching profession measures in three categories: accountability for quality, incentives and teacher allocation, and building and supporting capacity. As Table 4.5 shows, Kentucky received an overall rank of 9th and a grade of B-. It is interesting to note that most of the top-ranked states are members of Southern Regional Education Board.

Kentucky's grade reflects the implementation of 28 of the 50 policies recommended in *Quality Counts*. These are discussed briefly in the following pages.

Table 4.5
Quality Counts Teaching Profession Index, 2008

Rank	State	Score	Grade
1	SC	91.9	A-
2	AR	88.9	B+
3	NC	84.8	B
4	FL	83.2	
5	GA	83.0	
	LA		
7	VA	82.0	
8	AL	81.1	
9	KY	80.9	
10	OK	80.1	
13	WV	78.9	C+
14	OH	78.1	
19	DE	76.8	
21	TN	75.1	C
22	MO	75.0	
23	TX	73.1	
--	U.S.	73.0	C
26	MD	72.0	C-
28	IN	71.9	
35	IL	68.1	D+
44	MS	65.1	D

Source: Editorial Projects in Education. *Education Week's Quality Counts 2008*.

Accountability for Quality

Quality Counts gives Kentucky credit for having implemented many of the recommended teacher accountability measures.

Table 4.6 summarizes the 16 teacher-related accountability policies that were included in the *Quality Counts* index. Kentucky has implemented nine of these policies, including limitations on out-of-field teaching, a policy present in only three other states. Of the seven policies Kentucky does not have in place, only one is in a majority of other states: written testing of prospective teachers' basic skills.

Table 4.6
***Quality Counts* Teacher Accountability Measures, 2008**

Policies Relating to Accountability for Quality	Implemented	
	# of States	KY
Initial Licensure Requirements for All Prospective Teachers (FY 2008)		
State requires substantial formal coursework in subject area(s) taught	27	✓
Prospective teachers must pass written tests		
Basic skills	39	
Subject-specific knowledge	42	✓
Subject-specific pedagogy	6	
State requires clinical experiences during teacher training		
Student teaching ^a	39	✓
Other clinical experiences ^b	13	
Discouraging Out-of-Field Teaching for All Schools (FY 2008)		
Parental notification of out-of-field teachers	5	
State has ban or cap on the number of out-of-field teachers	4	✓
Evaluation of Teacher Performance (FY 2008)		
State requires all teachers' performance to be formally evaluated	43	✓
Teacher evaluation is tied to student achievement	12	
Teacher evaluation occurs on an annual basis	12	
State requires evaluators to receive formal training	26	✓
Accountability for Effectiveness of Teacher Education Programs (FY 2008)		
State publishes pass rates/rankings of teacher-preparation institutions	30	✓
Programs accountable for graduates' performance in classroom setting	18	✓
Data Systems to Monitor Quality (2007)		
State assigns a unique identification number to each teacher	46	✓
Teacher and student records can be matched by course/subject and state assessment	12	

Notes: ^a Kentucky requires 12 weeks, which is the same as the median for the 39 states with student teacher training.

^b The median for the 13 states requiring other clinical experience is 100 hours.

Source: Editorial Projects in Education. *Education Week's Quality Counts* 2008.

Incentives and Teacher Allocation

Kentucky has implemented 8 of the 17 recommended policies with respect to incentives and teacher allocation.

Table 4.7 summarizes the 17 policies relating to teacher incentives and allocation of talent. Kentucky has implemented eight of these policies. Of the nine policies not in place, two are in a majority of other states: teacher license reciprocity agreements with other states and monitoring of highly qualified teachers by school poverty level.

Table 4.7
Quality Counts Teacher Incentives and Allocation Measures, 2008

Policies Relating to Incentives and Teacher Allocation	Implemented	
	# of States	KY
Reducing Entry and Transfer Barriers (FY 2008)		
State finances/regulates an alternative-route teacher-preparation program to recruit candidates with at least a bachelor's degree	47	✓
State has teacher-license reciprocity or portability agreement with other state(s)	38	
State policy allows portability of teacher pension across state lines	20	
Teacher Salaries		
Pay Parity (2006): average teacher salary is 100% of average in comparable occupations ^a	10	
State requires all districts to report average teacher salaries at the school level (FY 2008)	12	
Incentives for Teacher Leadership and Performance (FY 2008)		
State has pay-for-performance program or pilot rewarding teachers for raising student achievement	7	
State formally recognizes differentiated roles for teacher leaders	20	✓
State provides incentives or rewards to teachers taking on leadership roles	17	✓
State provides incentives for teachers to earn national board certification	38	✓
Monitoring the Distribution of Teaching Talent by School Poverty Level (FY 2008)		
Fully licensed teachers	42	✓
Highly qualified teachers	31	
First-year teachers	35	✓
National-board-certified teachers	25	✓
Managing the Allocation of Talent (FY 2008)		
State provides incentives to teachers who work in targeted assignments		
Targeted schools	20	
Targeted teaching assignment areas	16	✓
State provides incentives for national-board-certified teachers to work in targeted schools	10	
State provides incentives to principals who work in targeted schools	10	

Note: ^aWith Kentucky teachers paid 94.3% of what comparable workers earn, Kentucky ranks 18th.
Source: Editorial Projects in Education. *Education Week's Quality Counts 2008*.

Building and Supporting Teacher Capacity

Kentucky has 11 of the 17 policies recommended for building and supporting teacher capacity.

Table 4.8 summarizes the 17 policies related to building and supporting teacher capacity. Kentucky has implemented 11 of these policies. Of the six policies not implemented, two are present in a majority of other states: penalties for incidents of school violence and state-financed program to reduce school violence.

Table 4.8
Quality Counts Building and Supporting Teacher Capacity, 2008

Policies Relating to Building and Supporting Teacher Capacity	Implemented	
	# of States	KY
Supports for Beginning Teachers (FY 2008)		
All new teachers are required to participate in a state-funded induction program	22	✓
Mentoring programs for all beginning teachers		
All new teachers are required to participate in a state-funded mentoring program	25	✓
State has standards for selecting, training, and/or matching mentors	20	✓
State has a reduced-workload policy for first-year teachers	2	
Professional Development (FY 2008)		
State has formal professional-development standards	41	✓
State finances professional development for all districts	24	✓
State requires districts/schools to set aside time for professional development	16	✓
State requires districts to align professional development with local priorities and goals	30	✓
School Leadership (2006)		
State has standards for licensure of school administrators	48	✓
State requirements for initial administrator licensure		
Supervised internship	28	✓
Participation in induction or mentoring program	14	✓
School Working Conditions		
State has a class-size-reduction program or regulations to limit class size (FY 2008)	18	
Median student-teacher ratio in primary-level schools is 15.0 or lower (2005) ^a	26	✓
State tracks condition of all school facilities (FY 2008)	22	
State collects and publicly reports school-level information on school climate and working conditions (FY 2008)	3	
State policy imposes penalties for incidents of school violence (FY 2008)	36	
State finances program to reduce school violence (FY 2008)	28	

Note: ^aThe median student-teacher ratio in Kentucky's primary-level schools is 15.0.

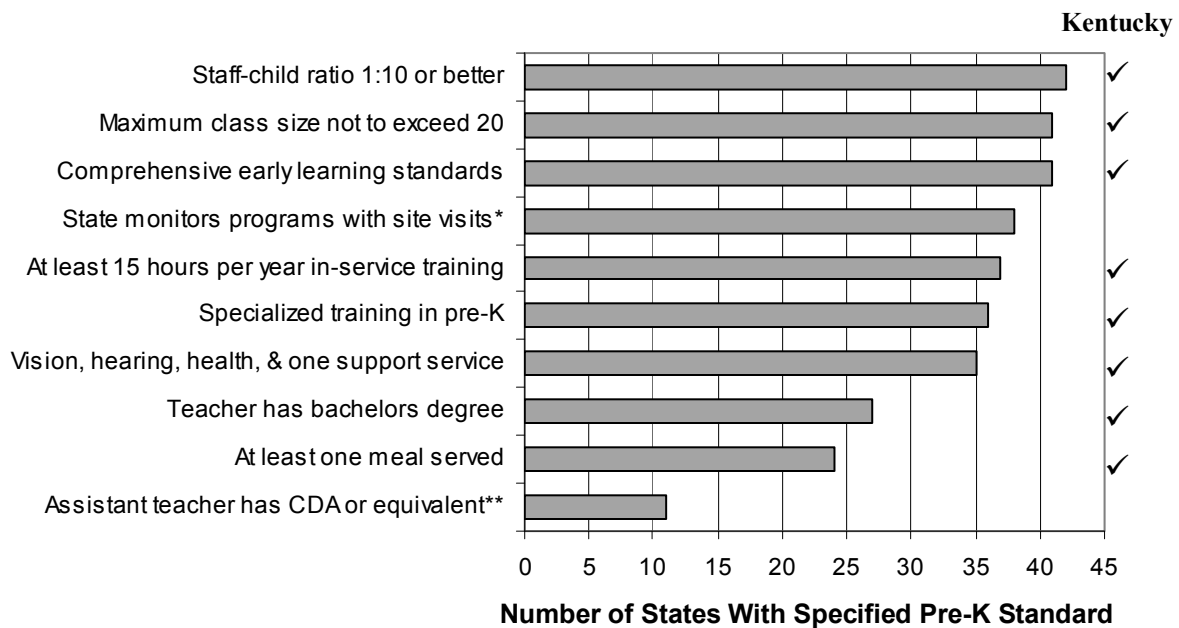
Source: Editorial Projects in Education. *Education Week's Quality Counts 2008*.

Preschools

Kentucky meets 8 out of the 10 preschool quality standards recommended by the National Institute for Early Education Research.

The National Institute for Early Education Research reports that Kentucky meets 8 out of 10 recommended quality standards, the same as last year. As Figure 4.A shows, the two standards Kentucky does not meet are requiring teachers to have a Child Development Associate credential and having the Kentucky Department of Education visit preschool sites.

Figure 4.A
Pre-Kindergarten Quality Standards, FY 2007



Notes: *Monitoring refers to department of education personnel making periodic site visits to preschools.

**CDA means Child Development Associate credential.

Source: Staff compilation based on data from Natl. Institute. *The State* 19.

Title I Schools

The high percentage of students enrolled in Title I schools and schoolwide programs was discussed in Chapter 3. This table shows Kentucky's high percentage of schools that are eligible for Title I.

Chapter 3 discussed the high percentages of students enrolled in Title I schools and schoolwide programs. Table 4.9 ranks states by the percentages of schools eligible for Title I and schoolwide programs. Kentucky ranks 17th with over 60 percent of schools eligible for Title I and ranks 5th with over half of schools operating schoolwide programs.

Table 4.9
Title I-Eligible Schools and Schoolwide Programs as a Percentage of All Schools, FY 2006

Title I-Eligible Schools As a Percentage of All Schools			Title I Schoolwide Programs As a Percentage of All Schools		
Rank	State	%	Rank	State	%
2	IN	90.1	2	MS	59.9
5	AR	73.6	3	TX	58.4
	OK		5	KY	55.9
10	OH	68.8		OK	
16	MS	63.5	7	LA	55.5
17	KY	62.9	8	AR	53.3
	LA		10	AL	46.4
19	TX	62.7	11	TN	45.1
--	U.S.	55.3	12	SC	42.4
25	AL	54.8	13	GA	39.9
28	TN	53.4	14	NC	39.2
29	IL	52.5	15	VA	37.1
30	MO	49.3	16	FL	36.4
32	GA	48.4	18	WV	34.8
34	NC	47.8	--	U.S.	31.4
37	WV	45.7	19	DE	30.6
38	DE	45.0	25	OH	24.6
39	SC	44.9	27	MD	22.9
43	FL	37.6	32	IL	21.4
45	VA	37.1	40	MO	18.0
47	MD	27.0	48	IN	8.7

Note: Ranks are out of 50; data were not available for NJ. Title I-eligible schools are encouraged to create schoolwide programs if 40 percent or more of their students are eligible for free or reduced-price lunch. Otherwise, assistance is targeted to individual students who are eligible for free or reduced-price lunch.

Source: Staff compilation of data from U.S. Dept. of Ed. Inst. Natl. *Numbers and Types of Public Elem. and Secondary Schools* 4-5.

Technology

About Education Week's Technology Counts

Kentucky is considered a national leader in school technology, ranking 4th overall.

Technology Counts ranks states on 14 indicators covering three major areas of state technology policy and practice: access, use, and capacity. The overall rankings for these areas are presented in Table 4.10. Subsequent tables show state scores on the indicators that are used to calculate scores. As Table 4.10 shows, Kentucky is a national leader in school technology, ranking 4th overall, 13th for access to technology, 5th for use of technology, and 3rd for capacity to use technology.

Table 4.10
Education Technology Overall Grade, Access, Use, and Capacity, 2008

Overall			Access			Use			Capacity								
Rank	State	Grade (Score)	Rank	State	Grade (Score)	Rank	State	Grade (Score)	Rank	State	Grade (Score)						
1	WV	A (95.3)	3	WV	A (96.3)	1	GA	A (100.0)	1	GA	A (100.0)						
3	GA	A- (91.2)	7	VA	A- (90.0)		WV										
4	KY	B+ (88.5)	13	IN	B (82.5)	5	AR	A- (89.8)	3	KY	A (93.2)						
5	VA	B+ (88.7)		KY			16		FL	B- (80.0)	AR	4	MD	B- (79.5)			
6	FL	B (85.4)	FL	LA													
8	LA	B- (82.0)	SC	MD													
10	NC	B- (81.5)	NC	MO													
11	OK	B- (80.9)	OH	OK													
13	AR	B- (80.1)	26	GA	C (73.5)				VA		16		FL		B (86.3)		
15	SC	B- (79.7)		OK					WV								
17	MO	C+ (77.0)	29	IL	C (72.5)				AL				25			IL	C (72.7)
19	MD	C+ (77.9)		TX					TX								
20	IN	C+ (78.2)	32	AR	C- (71.0)	IL	36	VA	D (65.8)								
24	IL	C+ (79.4)	33	LA	C- (70.0)	IN											
	TX			TN													
34	OH	C (74.6)	35	MO	D+ (68.5)	MS											
36	TN	C (74.1)	39	AL	D (65.5)	SC											
39	AL	C (72.6)	41	MD	D (64.5)	TN											
44	MS	C- (70.4)	46	DE	D- (60.5)	TX											
47	DE	D+ (67.5)	47	MS	F (59.0)	DE	D+ (69.3)	TN									
						OH		NC									

Source: Editorial Projects in Education. *Education Week's Technology Counts 2008*.

Access to Technology

Kentucky is above the national average for all technology access measures, ranking 13th overall.

The access index is made up of the percentage of students who say they have access to a computer in the classroom, the number of students per instructional computer, and the number of students per high-speed Internet-connected computer. State rankings on these measures are reported in Table 4.11. Kentucky is above the national average on all access measures, with a rank of 3rd for access to computers in grade 4 classrooms, 7th for access to computers in grade 8 classrooms, 20th for the student-computer ratio, and 19th for the number of students per high-speed Internet-connected computer.

Table 4.11
Access to Technology, 2006 and 2007

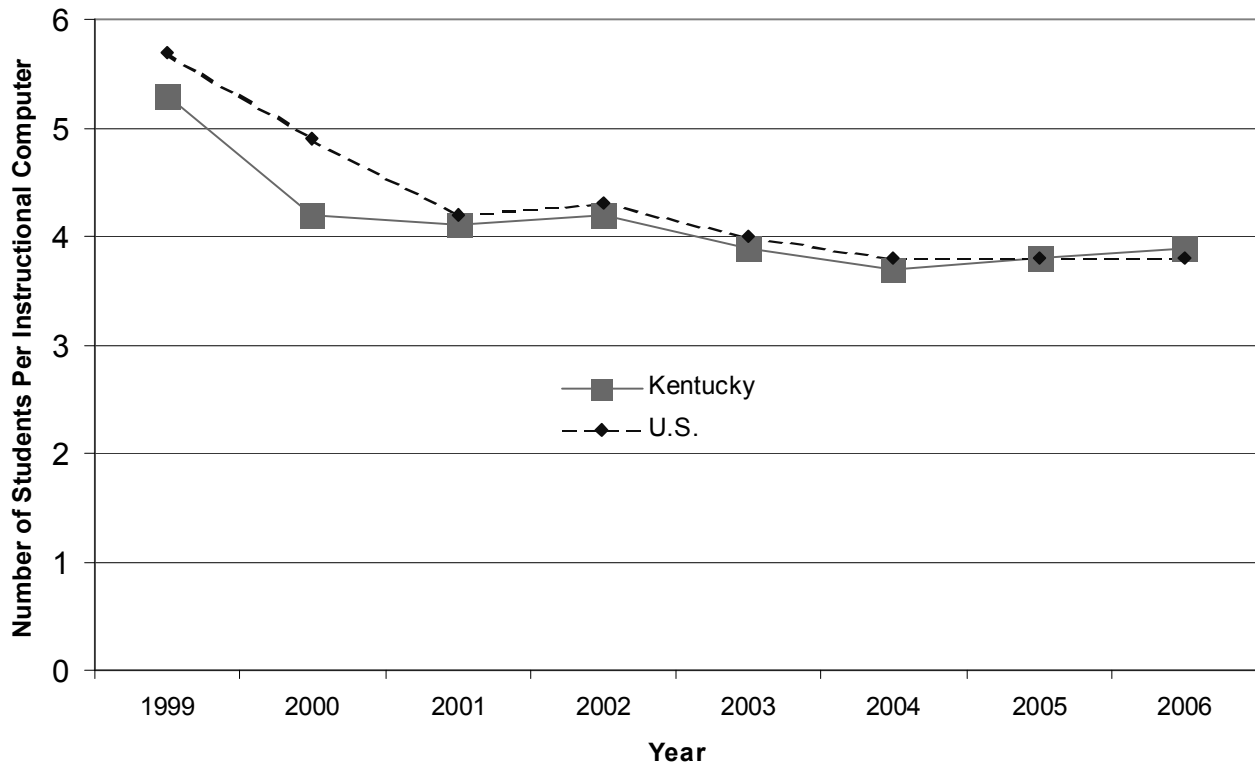
Access to Technology Grade and Score			Percentage of 4 th Grade Students With Access to Computers 2007			Percentage of 8 th Grade Students With Access to Computers 2007			Students Per Instructional Computer 2006			Students Per High-speed Internet-connected Computer 2006				
Rank	State	Grade (Score)	Rank	State	%	Rank	State	%	Rank	State	Ratio	Rank	State	Ratio		
3	WV	A (96.3)	1	WV	100	2	WV	97	2	DE	5.2	2	MS	5.0		
7	VA	A- (90.0)	3	KY	98	3	VA	95	4	MS	5.0	4	DE	4.9		
13	IN	B (82.5)		7		NC	97	7	KY	92	6	AL	4.8	5	AL	4.8
	KY		7	AL	11	GA		90	10	MD	4.5	9	MD	4.4		
16	FL	B- (80.0)	7	FL	97	11	IN		90	15	LA	4.1	11	LA	4.3	
	SC			SC			15	TN			14		TN	4.1		
20	NC	C+ (78.8)	12	IN	96	17	IL	88	19	IL	4.0	18	IL	3.9		
23	OH	C (75.0)		19		LA	87	20	KY	3.9	19	AR	3.8			
26	GA	C (73.5)		24		MD	86	23	AR			3.8		23	GA	3.7
	OK			TN		28		OH	83	25	SC		3.6			
29	IL	C (72.5)		22		VA	95	31	TN	82	29	MO	3.5	28	OH	3.5
32	AR			C- (71.0)		31		AR	94			34		TX	81	30
	LA	IL				38	MO	79		30	OK					
35	MO	D+ (68.5)	31	MD	94	38	MO	79	29	TX	3.5	28	OH	3.5		
39	TN	C- (70.0)		31			OH			94		41	MS	78	35	FL
	AL		GA	41	MS	78	35	FL	3.3		34	IN	3.3			
41	MD	D (64.5)	37	MO	93	43	AL	76	38	WV	3.2	38	FL	3.2		
46	DE	D- (60.5)		43			MS			93		43	OK	76	38	WV
47	MS	F (59.0)	45	DE	91	46	AR	75	41	VA	3.1	44	WV	3.0		

Source: Editorial Projects in Education. *Education Week's Technology Counts 2008*.

Figure 4.B shows trends in the number of students per instructional computer for Kentucky and the U.S. A lower number of students indicates better access. Kentucky provided better access than the

nation in 1999 and 2000 but lost this advantage in 2001 and has stayed on par with the nation since then.

Figure 4.B
Number of Students Per Instructional Computer, Kentucky and U.S., 1999-2006



Source: Staff compilation of data from Editorial Projects in Education. *EdCounts Database*.

Use of Technology

Kentucky has implemented all of the recommended policies regarding use of technology except the assessment of students' technology skills.

Use of technology is based on four policies: state includes technology in academic standards for students, state tests students on technology, state has established a virtual school, and state offers computer-based assessments. In Table 4.12, checkmarks indicate the states in which the policies are in place. The only policy that Kentucky lacks is assessment of students' technology skills, a policy in place in only five states.

Table 4.12
Use of Technology, FY 2008

Use of Technology Grade and Score			Total Implemented	State Standards For Students Include Technology	State Tests Students On Technology	State Has Established a Virtual School	State Offers Computer-based Assessments
Rank	State	Grade (Score)					
1	GA	A (100.0)	4	✓	✓	✓	✓
	NC			✓	✓	✓	✓
5	AR	A- (89.8)	3	✓		✓	✓
	FL			✓		✓	✓
	KY			✓		✓	✓
	LA			✓		✓	✓
	MD			✓		✓	✓
	MO			✓		✓	✓
	OK			✓		✓	✓
	VA			✓		✓	✓
	WV			✓		✓	✓
17	AL	B- (79.5)	2	✓		✓	
	IL			✓		✓	
	IN			✓			✓
	MS					✓	✓
	SC			✓		✓	
	TN			✓			✓
	TX			✓			✓
36	DE	D+ (69.3)	1	✓			
	OH			✓			
Number of States/DC				48	5	25	27

Source: Editorial Projects in Education. *Education Week's Technology Counts 2008*.

Capacity To Use Technology

Kentucky ranks 3rd with respect to the capacity to use technology, lacking only a policy that would require administrators to demonstrate technology skills or take technology-related training.

This indicator is based on six policy indicators, shown in Table 4.13, designed to measure the extent to which states include technology in their personnel requirements. Improving students' ability to benefit from using computers is closely tied to improving professional development for teachers in the area of technology use (U.S. Dept. of Ed. Inst. Natl. *Monitoring* 28). Kentucky ranks 3rd, lacking only a policy that would require administrators to demonstrate technology skills or take technology-related training or professional development.

Table 4.13
Capacity To Use Technology, FY 2008

Capacity To Use Technology Grade and Score			Total # of Policies Implemented	State Standards Include Technology		Requirements for an Initial License Include Technology Coursework or a Test		State Requires Technology-related PD or Training or Testing for Recertification	
Rank	State	Grade (Score)		Teachers	Admin.	Teachers	Admin.	Teachers	Admin.
1	GA	A (100.0)	6	✓	✓	✓	✓	✓	✓
	WV			✓	✓	✓	✓	✓	✓
3	KY	A (93.2)	5	✓	✓	✓	✓	✓	
4	FL	B (86.3)	4	✓	✓	✓	✓		
	IL			✓	✓	✓	✓		
	LA			✓	✓	✓			✓
	TX			✓	✓	✓	✓		
	VA			✓	✓	✓	✓		
13	AR	B- (79.5)	3	✓				✓	✓
	MD			✓	✓	✓			
	OH			✓	✓	✓			
	OK			✓	✓	✓			
	SC			✓	✓				✓
25	AL	C (72.7)	2	✓	✓				
	DE			✓	✓				
	IN			✓	✓				
	MO			✓	✓				
	MS			✓	✓				
	TN			✓	✓				
38	NC	D (65.8)	1	✓					
Total States With Indicated Policies				51	49	43	39	37	36

Note: PD = professional development.

Source: Editorial Projects in Education. *Education Week's Technology Counts 2008*.

Caveats and Limitations

The data source for student-computer ratios undercounts computers. This may be partially offset by the fact that many computers included in the count may be old and of limited use. It is also important to remember that overall national and state averages obscure the uneven distribution of computers.

A recent NCES report found that the data sources for student-computer ratios tend to undercount computers. However, this undercount is partially offset by the fact that many computers that are counted should not have been included because they are old and have limited utility.

Overall student-to-computer ratios for the nation and for states obscure the fact that computers are not evenly distributed; some

districts have many computers, while others have few. This is not evident in an overall average student-to-computer ratio. Finally, some states that score high on technology indicators are not ranked high in educational performance. The link between technology and student outcomes remains unknown (U.S. Dept. of Ed. Inst. Natl. *Monitoring 28*).

There is widespread agreement that computers are needed for gaining computer skills, but there is less consensus about the nature and degree of other learning benefits.

Uncertain Benefits To Student Learning. There is widespread agreement that classrooms need computers so that students can gain computer skills to succeed in today's workplace. However, there is less consensus regarding the nature and degree of other benefits that may be gained, such as critical thinking skills and knowledge of other content areas (U.S. Dept. of Ed. Inst. Natl. *Monitoring 28*).

Data Comparability. Table 4.12 includes a measure of whether the state offered computer-based assessments in FY 2008 and indicates that Kentucky has this policy in place. However, the availability of computer-based assessments is neither statewide nor to the majority of students. Kentucky has been conducting pilot programs to test computer-based assessment. The state also offers it for some special needs students. The comparability of computer-based assessment across states is unknown because *Technology Counts* does not discuss specific implementation differences.

Urban, Suburban, and Rural Locations

Kentucky has the 8th most rural student population. Rural schools have unique advantages and disadvantages over other schools.

As Table 4.14 shows, Kentucky has the 8th highest percentage of students in rural districts. Rural schools have special challenges as well as some advantages. Costs per student are higher due to underenrolled schools and long bus routes to carry geographically dispersed students. Compared to other locales, rural schools offer fewer Advanced Placement and International Baccalaureate courses. However, achievement levels are typically higher, and school climates are better in rural schools than in urban schools (U.S. Dept. of Ed. Inst. Natl. *Status of Education*).

Table 4.14
Students in Rural Areas, FY 2006

Rank	State	%
3	MS	51.3
4	WV	48.6
5	NC	47.0
8	KY	40.1
9	AR	38.4
13	AL	31.5
14	OK	31.1
15	VA	29.6
16	SC	29.2
17	LA	28.1
20	IN	27.2
22	TN	26.7
23	OH	25.3
25	MO	24.2
27	GA	23.0
31	DE	17.7
--	U.S.	17.4
33	TX	12.4
38	IL	11.2
40	MD	9.1
43	FL	7.4

Source: U.S. Dept. of Ed. Inst. Natl. *Numbers and Types of Public Elem. and Secondary Agencies* 12.

School Crime and Safety

NCES collaborates with the U.S. Bureau of Justice Statistics to produce a report on crime and safety that brings together the perspectives of students, teachers, principals, and the public. The sources include several federally funded collections such as the National Crime Victimization Survey, Youth Risk Behavior Survey, School Survey on Crime and Safety, and School and Staffing Survey. In these surveys, students and teachers report incidents occurring at school and on the way to and from school (U.S. Dept. of Ed. Inst. Natl. *Indicators*).

Teacher-reported Incidents

Incidents of students threatening teachers with injury are less common in rural and suburban areas than in cities. In 2004, 7.9 percent of Kentucky teachers reported threats, compared to 7.5 percent for the U.S.

Table 4.15 shows the percentages of teachers reporting that students threatened them with bodily injury. This is a more common occurrence in cities than in rural and suburban areas; consequently, percentages are high in only a handful of states that have large cities. In 2004, 7.9 percent of teachers in Kentucky

reported threats, compared to 7.5 percent for the U.S. Although Kentucky had the 15th highest rate in 2004, this rate differed by only a few percentage points from rates in most other states. The incidence of threats has been decreasing dramatically; between 1994 and 2004, the percentage of teachers reporting threats dropped 43.6 percent in Kentucky, compared to a drop of 41.4 percent for the U.S.

Table 4.15
Public School Teachers Threatened With Injury by a Student at School,
FY 1994 and FY 2004

FY 1994			FY 2004			Percent Change		
Rank	State	%	Rank	State	%	Rank	State	%
2	FL	20.1	2	MD	13.5	5	AR	-65.3
3	MD	19.9	3	FL	11.2	7	OH	-59.3
4	DE	18.7	5	LA	9.9	8	MS	-58.9
5	NC	17.1	10	NC	8.7	9	DE	-58.8
6	LA	17.0	11	SC	8.6	10	WY	-57.8
8	SC	15.3	12	MO	8.3	11	VA	-56.3
9	OH	15.2	14	IL	8.0	12	AL	-54.3
10	VA	14.9	15	KY	7.9	13	GA	-54.2
11	GA	14.0	17	DE	7.7	16	NC	-49.2
	KY			19		IN	-47.8	
13	AR	13.8	--	U.S.	7.5	20	TN	-47.2
	IN		21	IN	7.2	24	OK	-44.7
17	MS	13.4		WV		27	FL	-44.4
19	AL	13.3	26	TN	6.6	28	KY	-43.6
--	U.S.	12.8	27	VA	6.5	29	SC	-43.6
25	TX	12.7	28	GA	6.4	32	LA	-41.7
26	MO	12.6	30	OH	6.2	--	U.S.	-41.4
27	TN	12.5	31	AL	6.1	34	TX	-39.4
31	WV	11.4		OK		39	MO	-33.9
34	OK	11.0	37	MS	5.5	40	MD	-32.0
36	IL	10.8	45	AR	4.8	43	IL	-26.2

Note: Staff calculated the percent change using unrounded percentages for FY 1994 and FY 2004.

Source: Staff compilation of data from U.S. Dept. of Ed. Inst. *Indicators 79*.

Student-reported Incidents

Student involvement in violence and substance abuse in Kentucky is below the national average.

Table 4.16 shows several types of undesirable incidents reported by students, including fighting, being threatened with weapons, having access to drugs, and using alcohol. Kentucky's rates are lower than the national rates for all measures.

Table 4.16
Public School Students Involved in Violence or Substance Abuse
Average of 2003 and 2005

On School Property												Anywhere		
Were in a Physical Fight			Were Threatened or Injured With Weapon			Had Drugs Available			Used Alcohol			Used Alcohol		
Rank	State	%	Rank	State	%	Rank	State	%	Rank	State	%	Rank	State	%
3	MD	14.9	2	MD	11.7	7	GA	32.0	8	SC	6.0	7	TX	47.3
4	TX	14.5	4	SC	10.1	9	OH	31.0	10	TX	5.7	13	MO	45.0
5	AR	13.9	6	AR	9.6	11	TX	30.7	11	WV	5.3	15	DE	44.2
6	AL	13.7	7	TX	9.3	13	NC	29.6	12	AR	5.2	15	OK	44.2
--	U.S.	13.2	11	AL	8.9	14	AR	29.2	12	DE	5.2	--	U.S.	44.1
9	SC	12.7	--	U.S.	8.6	15	SC	29.1	16	MS	4.9	21	IN	43.2
11	FL	12.4	16	MO	8.3	16	MD	28.9	19	FL	4.8		SC	
17	OK	11.7		WV		17	IN	28.6	--	U.S.	4.7	23	AR	43.1
18	GA	11.6	18	GA	8.2	20	DE	27.0	25	NC	4.5	24	WV	43.0
19	TN	11.5	19	FL	8.1	--	U.S.	27.0	27	AL	4.3	28	OH	42.3
20	KY	11.4	22	OH	8.0	22	AL	26.1	28	KY	4.1	30	MS	41.8
24	WV	11.2	24	TN	7.9	24	WV	25.6	32	GA	4.0	31	TN	41.4
26	IN	11.1	25	IN	7.8	25	TN	25.5	34	TN	3.9	32	KY	41.3
	NC		29	NC	7.5	27	KY	25.1	37	IN	3.6	33	FL	41.2
29	OH	10.8	35	DE	6.9	29	FL	24.4		OH		35	NC	40.9
30	DE	10.6	38	OK	6.7	34	MS	22.3	39	OK	3.5	36	AL	39.8
33	MS	10.3	39	KY	6.6	40	OK	20.3	40	MD	3.2		MD	
37	MO	10.0		MS		41	MO	19.9	41	MO	2.9	38	GA	38.8
n.a.	IL	n.a.	n.a.	IL	n.a.	n.a.	IL	n.a.	n.a.	IL	n.a.	n.a.	IL	n.a.
	LA			LA			LA			LA				
	VA			VA			VA			VA				

Note: Because some states reported only in 2003 and some reported only in 2005, staff averaged the 2003 and 2005 data; states that failed to report in both 2003 and 2005 are indicated by n.a. Ranks are out of 42 for use of alcohol on school property and out of 43 for all other measures.

Source: Staff compilation using data from U.S. Dept. of Ed. Inst. Natl. *Indicators* 76, 91, 101, and 105.

Chapter Summary and Conclusions

This chapter presented data on school characteristics, student-teacher ratios, and participation in such programs as subsidized lunches, English language learner services, and IEPs. Compared to the nation, a higher percentage of Kentucky students attend rural schools, which have special challenges as well as some advantages. The Commonwealth continues to perform well with regard to technology access, use, and capacity. School climates are generally better than average in Kentucky, with students less likely to report being in fights, being threatened with weapons, having drugs available, or using alcohol.

For many years, in Kentucky and the nation as a whole, the number of teachers employed in schools has increased faster than enrollment, a trend attributed to schools' increasingly complex and diverse offerings. Kentucky's student-teacher ratio is better (lower) than the national average in elementary schools but slightly worse (higher) in middle and high schools. In terms of teachers as a percentage of all staff, Kentucky is again ranked last in the nation because of high percentages of instructional aides and support staff. Additional research is needed to better understand the relatively high percentage of nonteacher staff employed in Kentucky schools.

Kentucky receives high marks for policies relating to the teaching profession. Among all states, Kentucky has the 3rd highest percentage of teachers with advanced degrees.

Chapter 5

Finance

While policy makers acknowledge the critical role of education in the global economy, education competes with other issues for resources. This chapter presents data on revenues, expenses, funding equity, and teacher salaries. FY 2006 is the most recent year for which data are available. Given this lag time in collecting and reporting data, these tables do not reflect the recent downturn in the economy.

Revenues

Revenues Per Pupil

Kentucky ranks 43rd in terms of revenues per pupil. When revenues are adjusted for geographic differences in the cost of living, Kentucky rises to 38th.

Table 5.1 reports combined federal, state, and local revenues per pupil before and after adjusting for geographic differences in the cost of living. Kentucky ranks 43rd with respect to unadjusted revenues per pupil. When revenues are adjusted, Kentucky rises to 38th.

Table 5.1
Revenues Per Pupil, FY 2006

Rank	State	Unadjusted \$	Rank	State	Cost-adjusted \$
10	DE	13,143	12	DE	12,924
12	MD	12,430	17	IN	12,418
16	OH	11,606	19	OH	12,120
18	IN	11,028	20	LA	12,060
--	U.S.	10,771	21	WV	11,850
21	VA	10,672	26	MD	11,496
23	IL	10,506	29	AR	10,886
24	LA	10,456	--	U.S.	10,771
26	GA	10,113	31	SC	10,700
27	WV	10,032	32	MO	10,597
32	SC	9,643	34	MS	10,408
33	MO	9,585	35	FL	10,307
34	FL	9,542	36	GA	10,301
39	TX	9,210	37	IL	10,179
40	AR	8,960	38	KY	9,995
43	KY	8,828	39	VA	9,860
44	MS	8,644	40	AL	9,771
45	AL	8,560	42	OK	9,597
46	NC	8,434	44	TX	9,311
47	OK	8,069	48	NC	8,937
49	TN	7,512	50	TN	8,174

Source: U.S. Dept. of Commerce. Census. *Public* 2006 11.

Revenue Sources

Compared to other states, Kentucky draws a smaller share of revenues from local sources than from state and federal sources. Kentucky ranks 40th in terms of the percentage of revenues from local sources but 16th for the percentage from federal sources and 13th for the percentage from state sources.

Table 5.2 shows the percentages of revenues that come from federal, state, and local sources. Compared to other states, Kentucky draws a smaller share of revenues from local sources than from state and federal sources. Kentucky ranks 40th in terms of the percentage of revenues from local sources, compared to 16th with respect to federal sources and 13th with respect to state sources.

Table 5.2
Revenues by Source, FY 2006

Federal			State			Local		
Rank	State	%	Rank	State	%	Rank	State	%
1	MS	20.1	3	AR	73.4	2	IL	59.1
2	LA	18.8	6	DE	64.5	6	TX	55.5
8	OK	12.8	9	WV	58.8	8	MD	54.6
9	WV	12.3	10	NC	58.5	10	VA	53.7
12	TX	11.6	13	KY	57.3	14	OH	50.4
14	AL	11.5	17	AL	55.6	15	FL	50.1
15	AR	11.4	21	OK	50.2	20	MO	47.9
16	KY	11.3	22	MS	49.4	21	GA	46.8
17	TN	11.1	23	IN	47.5	22	IN	45.9
20	NC	10.1	--	U.S.	46.6	24	TN	45.7
23	SC	9.9	27	SC	44.8	26	SC	45.3
24	FL	9.7	28	GA	44.2	--	U.S.	44.4
26	GA	9.0	31	MO	43.6	30	LA	39.6
--	U.S.	9.0	32	TN	43.2	32	OK	37.0
28	IL	8.5	35	OH	42.3	37	AL	32.9
29	MO	8.4	36	LA	41.5	39	NC	31.4
37	DE	7.3	39	FL	40.2	40	KY	31.3
39	OH	7.2	41	VA	39.6	42	MS	30.5
43	VA	6.7	42	MD	39.2	44	WV	28.9
44	IN	6.5	47	TX	32.9	45	DE	28.2
45	MD	6.2	49	IL	32.3	48	AR	15.2

Source: U.S. Dept. of Commerce. Census. *Public*, 2006 5.

Historical trends reveal that the state share seen today is a recent phenomenon. In the late 19th century and early 20th century, U.S. education funds came from states; not federal funds. Since the 1930s, states have increased their contributions rapidly, and the federal government started providing some funds. It was not until the late 1970s that state and local funds made up roughly equal shares of U.S. education revenues.

The Kentucky Education Reform Act changed Kentucky's funding landscape abruptly in 1990; state funds were increased to almost 70 percent of Kentucky's revenues, while local and federal funds constituted 20 percent and 10 percent, respectively. However, the state share of funds has declined gradually and steadily, so that the 2006 shares were 57 percent from state sources, 31 percent from local sources, and 11 percent from federal sources.

Expenditures

Current Spending Per Pupil

Current spending pertains to operations; it excludes capital outlay and interest on debt. Kentucky's current spending per pupil is below the national average, even after adjusting for geographic cost differences.

Current spending includes expenditures for day-to-day operations, payments made by the state government on behalf of districts, and employer contributions made by the few school systems that administer their own retirement funds. It excludes capital outlay and interest on debt. (U.S. Dept. of Commerce. Census. *Public* 2006 vi).

Table 5.3 displays current spending per pupil before and after adjusting for geographic cost differences. Kentucky's current expenditures per pupil in FY 2006 were far below the national average. When these expenditures are adjusted for geographic differences in costs, Kentucky moves up only one rank, from 40th to 39th. However, it should be noted that, unlike other states, Kentucky does not report spending from school fees and activity funds, which are substantial. It is not known what Kentucky's rank would be if spending from these funds were reported.

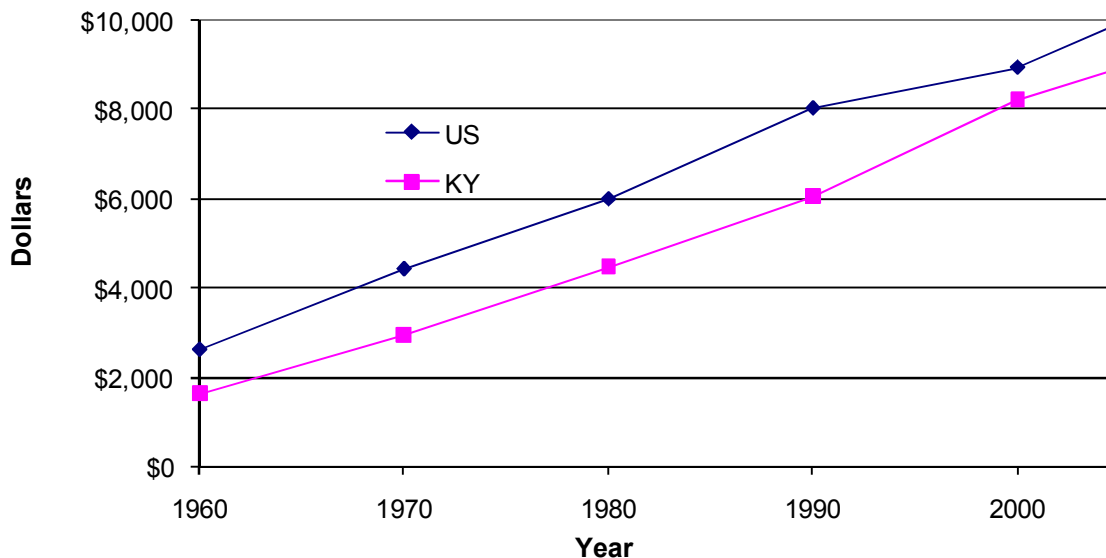
Table 5.3
Current Spending Per Pupil in P-12 Fall Enrollment, FY 2006

Rank	State	Unadjusted \$	Rank	State	Cost-adjusted \$
8	DE	11,633	10	DE	11,439
12	MD	10,670	12	WV	11,047
17	OH	9,598	21	OH	10,023
19	VA	9,447		IN	9,901
20	WV	9,352	25	MD	9,869
21	IL	9,149	27	LA	9,691
--	U.S.	9,138	28	AR	9,632
23	IN	8,793	--	U.S.	9,138
27	GA	8,565	32	SC	8,977
30	LA	8,402	33	MO	8,964
33	MO	8,107	34	IL	8,864
34	SC	8,091	35	VA	8,728
37	AR	7,927		AL	
39	FL	7,759	37	GA	8,724
40	KY	7,662	38	MS	8,695
42	AL	7,646	39	KY	8,675
43	TX	7,561	41	FL	8,381
44	NC	7,388	42	OK	8,280
46	MS	7,221	44	NC	7,828
47	OK	6,961	46	TX	7,643
48	TN	6,883	48	TN	7,489

Sources: Unadjusted numbers are from U.S. Dept. of Commerce. Census. *Public* 8; Staff calculated adjusted numbers using the Comparable Wage Index from U.S. Dept. of Ed. Inst. Natl. "NCES Comparable Wage."

As Figure 5.A shows, current spending per pupil has been increasing rapidly over the past 45 years. This is true in both Kentucky and the nation as a whole.

Figure 5.A
Current Spending Per Pupil in P-12 Average Daily Attendance
In Constant 2007 Dollars, 1960-2005



Notes: There are discrepancies in average daily attendance reporting practices from state to state.
Source: U.S. Dept. of Ed. Inst. Natl. *Digest*, 2007 258-259.

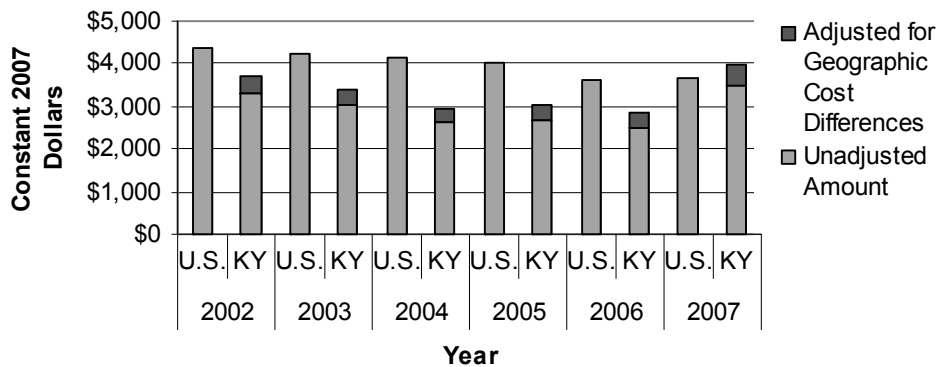
Preschool Spending

In recent years, preschool spending declined in Kentucky as well as in the nation as a whole. Kentucky's per-child spending was below the national average, even after adjusting for Kentucky's lower costs. However, a budget increase in 2007 pushed Kentucky's per-child spending above the national average.

Eligibility for state-funded preschool is extended to Kentucky's 4-year-olds from low-income families and all 3- and 4-year olds who have disabilities.⁹ Children not meeting the criteria for state funds may participate if districts use their own funds or parents pay tuition (Natl. Institute. *The State* 64). Figure 5.B shows inflation-adjusted state spending per child enrolled in preschool from FY 2002 to FY 2007 for Kentucky compared to all state programs in the nation. Before 2007, spending had been declining in Kentucky as well as in the nation, and Kentucky's per-child spending was below the national average, even after adjusting for Kentucky's lower costs. In FY 2007, a budget increase of \$25 million pushed Kentucky's per-child spending above the national average.

⁹ Kentucky recently raised the income criterion for low-income families from 130 percent to 150 percent of the federal poverty level, making more children eligible.

Figure 5.B
State Spending Per Child Enrolled
In Constant 2007 Dollars, FY 2002-FY 2007



Source: Natl. Institute *The State* 4, 64.

Current Spending Per \$1,000 in Personal Income

Adjusting spending for each state's personal income takes into account what taxpayers are able to afford. Relative to personal income, Kentucky's spending is 16th in terms of teacher salaries and 21st with respect to teacher benefits. Spending on administration is close to the national average.

Table 5.4 presents current spending per \$1,000 in personal income of Kentucky residents. This is another way to adjust for geographic cost differences because it takes into account what taxpayers are able to afford. Relative to the personal income, Kentucky is 16th in terms of spending on teacher salaries and 21st with respect to spending on benefits. Spending on administration is close to the national average.

Table 5.4
Current Spending Per \$1,000 in Personal Income, FY 2006

Total Current Spending			Instruction						Benefits Only			General Administration			School Administration		
Rank	State	\$	Total Instruction			Salaries Only			Rank	State	\$	Administration			Rank	State	\$
			Rank	State	\$	Rank	State	\$				Rank	State	\$			
4	WV	54.56	4	ME	33.87	4	ME	21.94	1	WV	10.34	5	AR	1.45	4	GA	3.00
6	ME	52.03	5	WV	32.73	5	GA	21.51	4	IN	8.90	6	IL	1.41	6	WV	2.93
8	AR	50.10	7	AR	30.28	7	AR	20.74	8	ME	7.95	7	WV	1.39	8	ME	2.80
11	LA	48.77	8	GA	30.23	8	TX	20.15	10	DE	7.18	8	MS	1.38	9	MD	2.75
13	GA	48.21	13	LA	28.36	10	WV	20.01	14	LA	6.94	12	OH	1.29	11	SC	2.70
14	MS	48.18	14	MS	28.31	11	MS	19.87	19	GA	6.19	16	MO	1.23	12	AR	2.68
15	OH	47.72	16	IN	27.64	13	SC	19.52	21	KY	5.99	16	OK		15	IN	2.65
17	SC	47.07	18	OH	27.51	15	LA	18.99	22	OH	5.92	21	AL	1.16	16	AL	2.64
18	IN	46.63	19	SC	27.42	16	KY	18.65	23	AL	5.90	21	LA		17	MS	2.63
21	TX	44.26	24	TX	26.70	19	OH	18.43	25	MD	5.81	24	ME	1.09	19	OH	2.60
22	KY	44.02	--	US	26.43	--	US	17.93	--	US	5.68	25	KY	1.06	22	LA	2.52
--	US	43.34	27	DE	26.20	25	MO	17.89	28	MS	5.63	30	IN	0.86	24	NC	2.49
26	DE	42.83	28	KY	26.05	26	IN	17.87	31	AR	5.35	--	US	0.82	26	DE	2.42
27	AL	42.75	33	AL	25.00	31	NC	17.65	32	SC	5.33	32	TN	0.75	26	TX	
33	OK	41.47	35	MO	24.64	33	IL	17.57	34	VA	5.21	33	TX	0.67	28	KY	2.40
34	IL	41.45	36	VA	24.45	34	VA	17.49	38	IL	4.62	34	NC	0.64	--	US	2.38
36	MO	40.81	37	IL	24.40	36	DE	16.65	40	OK	4.35	35	GA	0.63	35	MO	2.33
38	VA	39.93	41	MD	23.81	37	MD	16.55	41	MO	4.33	37	VA	0.60	37	VA	2.32
40	MD	39.48	42	NC	23.76	38	AL	16.33	42	TN	4.30	39	SC	0.57	39	OK	2.24
43	NC	38.42	43	TN	23.01	41	TN	15.91	45	NC	4.08	45	DE	0.47	41	IL	2.11
48	TN	35.55	44	OK	22.89	42	OK	15.85	48	FL	3.56	48	MD	0.42	43	TN	1.97
50	FL	33.51	50	FL	19.80	49	FL	12.87	50	TX	3.22	50	FL	0.34	45	FL	1.90

Source: U.S. Dept. of Commerce, Census, Public2006.

Spending on Instruction and Other Functions

The next few pages describe how NCES and the Census Bureau break out current expenditures by function.

Support services include a variety of activities that occur outside the classroom, such as administration, training, library services, counseling, operations, and transportation.

Support Services. This category includes a wide variety of activities that occur outside the classroom. The services include payments from all funds for salaries, employee benefits (paid by the school or the state), supplies, materials, and contractual services associated with the following activities:

- General Administration includes the board of education and executive administration (office of the superintendent) services.
- Instructional Staff Support includes supervision of instruction service improvements; curriculum development; instructional staff training; and media, library, audiovisual, television, and computer-assisted instruction services.
- Operation and Maintenance of Plant includes building services (heating, electricity, air conditioning, property insurance), care and upkeep of grounds and equipment, nonstudent transportation vehicle operation and maintenance, and security.
- Pupil Support Services include attendance record keeping, social work, student accounting, counseling, student appraisal, record maintenance, and placement services. This category also includes medical, dental, nursing, psychological, and speech services.
- Pupil Transportation Services include transportation of public school students including vehicle operation, rider monitoring, and vehicle servicing and maintenance.
- School Administration includes office of principal services.
- Other Support Services include business and central support and other support services. Business support services include payments for fiscal services, purchasing, warehousing, supply distribution, printing, publishing, and duplicating. Central support services include planning, research, development, and evaluation services. They also include information services, staff services (recruitment, staff accounting, noninstructional in-service training, and staff health), and data processing services.
- Nonspecified Support Services include expenditures that pertain to more than one of the above categories. In some cases, reporting units could not provide distinct expenditure amounts for each support services category. This expenditure is included in “nonspecified” instead of “other support services” (U.S. Dept. of Commerce. Census. *Public A-5*).

The spending category called all other functions or noninstruction includes food services, enterprise operations, community services, and adult education.

Instruction expenditures include teacher compensation, purchased services, tuition, and supply costs for the interaction between teachers and students.

Salaries and benefits make up 90 percent of instructional expenditures.

All Other Functions. This category, which is also sometimes called noninstruction, includes all expenditures not related to instruction or support services, such as food services, enterprise operations, community services, and adult education (U.S. Dept. of Commerce. Census. *Public* 2006 A-3).

Instruction. Instruction expenditures include teacher salaries and benefits, purchased services, tuition payments, and supply costs incurred for year-round activities dealing directly with the interaction between teachers and students (U.S. Dept. of Ed. Inst. Natl. *Natl. Public* 2006 50-51).

Instructional activities may occur in a classroom, in another location such as a home or hospital, in other learning situations such as cocurricular activities, or through an approved medium such as television or correspondence between teachers and students. Teachers' coaching and supervising of cocurricular and extracurricular activities is considered instructional (U.S. Dept. of Ed. Inst. Natl. *Natl. Public* 2006 51, 54).

Salaries and benefits make up 90 percent of instructional expenditures for the U.S. as a whole and 94 percent in Kentucky (U.S. Dept. of Commerce. Census. *Public* 6). Instruction personnel include not only full-time classroom teachers but also part-time, substitute, and home- or hospital-based teachers; teachers on sabbatical leave; classroom assistants; clerks; and graders.

The distinction between instruction and noninstruction is sometimes blurred, with the same activities classified in different ways depending on who performs them and whether they generate self-sustaining revenues. For example, nonteachers are excluded even when engaged in duties that teachers also could perform, such as librarians who teach students about conducting research or guidance counselors who help students with job-readiness skills.

Controversy has arisen over the NCES definition of instruction as a result of a national movement dubbed the "65 Percent Solution." This plan calls for 65 percent of expenditures to be devoted to instruction. Proponents of the 65 Percent Solution were accused of "putting sports before education" because the NCES definition of instruction includes coaches and extracurricular activities but not librarians, library expenses, guidance counselors, or professional development (Elliott). In response, Texas changed its definition to include librarians (State of Texas).

In July 2006, NCES introduced a new “instruction and instruction-related” category that includes librarians. NCES said that this and the other new categories “provide a clearer picture of how education dollars are spent” (U.S. Dept. of Ed. Inst. Natl. *Current Expenditures*).

Under the new instruction and instruction-related definition, 30 states spent 65 percent or more on instruction in FY 2004, compared to just two states under the old definition in FY 2003. Although subsequent NCES publications have used the new categories, the Census Bureau continues to break out spending using the old definition (U.S. Dept. of Ed. Inst. Natl. *Overview and Revenues*; U.S. Dept. of Commerce. Census. *Public* 2006). This compendium breaks out current spending by the old categories in Table 5.5 and the new categories in Table 5.6.

Under the older definition still used by the Census Bureau, Kentucky spent 58.5 percent on instruction in FY 2006, which is below the national average and gives Kentucky a rank of 37th.

Table 5.5 shows the distribution of current spending by the older categories of instruction, support services, and all other functions. By these definitions, only New York spent 65 percent or more on instruction in FY 2006. Kentucky spent 58.5 percent on instruction, which was below the national average of 60.2 percent and which gives Kentucky a rank of 37th.

Table 5.5
Spending on Instruction, Support Services, and Other Functions
As Percentages of Current Spending, FY 2006

Instruction			Support Services			All Other		
Rank	State	%	Rank	State	%	Rank	State	%
3	TN	64.0	5	OH	38.4	1	OK	10.7
8	GA	62.5	8	IL	37.4	4	AL	8.4
11	NC	61.5	11	IN	36.5	7	WV	7.0
14	VA	60.9	13	OK	36.4	8	FL	6.8
16	DE	60.6	14	SC	36.0		MS	
--	U.S.	60.2	15	LA	35.9		KY	
20	MD	60.2	19	FL	35.4	11	SC	6.4
22	AR	60.0	23	MD	35.0	12	LA	6.2
23	TX	59.8	26	KY	34.7		MO	
28	MO	59.2		MS		28	34.6	NC
	WV		DE					
33	IN	58.9	MO	18	TX			5.8
35	MS	58.5	--	U.S.	34.6	20	AR	5.6
	KY		31	VA	34.4	--	U.S.	5.2
38	IL	58.4		TX		23	GA	5.2
39	LA	57.9		AR		28	MD	4.9
40	FL	57.8	35	AL	34.2	31	OH	4.8
42	SC	57.6	36	WV	33.9		DE	
43	AL	57.4	42	NC	32.5	34	IN	4.7
46	OH	56.8	43	GA	32.3		VA	
50	OK	52.9	47	TN	30.1	39	IL	4.2

Source: U.S. Dept. of Commerce. Census. *Public* 2006.

Under the newer definition used by NCES, Kentucky spent 65.1 percent on instruction and instruction-related expenditures in FY 2006, which was close to the national average and ranked Kentucky 22nd.

Table 5.6 shows the distribution of current spending by the newer categories of instruction and instruction-related (including librarians), student support services, administration, and operations. The number of states spending 65 percent or more on instruction is 24 by this definition, in contrast to just one by the older definition shown in Table 5.5. Kentucky spent 65.1 percent on instruction and instruction-related activities, which was close to the national average and ranked Kentucky 22nd.

Table 5.6
Spending on Instruction and Instruction-related, Student Support Services, Administration, and Operations Functions as Percentages of Current Spending, FY 2006

Instruction & Instruction-related			Student Support Services			Administration			Operations		
Rank	State	%	Rank	State	%	Rank	State	%	Rank	State	%
2	TN	69.9	8	SC	6.9	4	DE	13.2	1	WV	23.1
6	GA	68.0	10	OK	6.5	5	OH	13.1	2	LA	22.4
8	VA	67.7	12	IL	6.3	11	IL	11.9	4	OK	21.6
13	AR	66.6	15	OH	6.0	13	IN	11.7	5	MS	21.2
	MD		24	NC	5.4	19	OK	11.2	6	KY	20.9
--	U.S.	65.9	--	U.S.	5.2	20	NC	11.1	8	IN	20.7
17	FL	65.9	26	AL	5.1	25	AL	10.9	9	AL	20.6
	NC		27	TX	4.9	--	U.S.	10.8	10	DE	20.4
20	MO	65.2	29	DE	4.8	26	AR	10.8	14	MO	19.6
22	KY	65.1		28		TX	10.6	11	FL	20.1	
23	TX	65.0		30		VA	10.5	15	TX	19.5	
25	SC	64.9	32		FL	21		MD	18.7		
31	MS	63.9	32	MO	4.7	30	MO	10.5	21	VA	18.7
34	WV	63.8	34	AR	4.6		34		MS	10.4	
35	OH	63.7	37	MS	4.5	36	LA	10.2	27	SC	
37	IL	63.5	38	IN	4.4	37	KY	10.0	--	U.S.	18.1
38	AL	63.4	40	MD	4.2	38	SC	9.9	31	AR	18.1
39	LA	63.3	42	KY	4.1	43	WV	9.5	36	NC	17.6
41	IN	63.2		45		FL	9.3				
46	DE	61.7	48	WV	3.6	47	TN	9.1	39	OH	17.2
50	OK	60.7	49	TN	3.4	48	VA	8.9	41	GA	16.7

Source: U.S. Dept. of Ed. *Inst. Natl. Revenues* 13.

Teacher Salaries

In FY 2005, the average teacher salary in Kentucky was \$42,592, and Kentucky ranked 33rd in the nation. Adjusting salaries for state cost differences brings Kentucky up to a rank of 31st. Both the adjusted and unadjusted salaries are below the national average.

Comparing salaries across states can be misleading because states with higher costs usually offer higher salaries. In Table 5.7, states are ranked by unadjusted teacher salaries and then by salaries adjusted for cost differences, using the NCES Comparable Wage Index discussed in Chapter 3.¹⁰ When salaries are adjusted, some states' rankings change more than others. Going from unadjusted to adjusted salaries, Virginia's rank drops from 28th to 51st. However, Kentucky's rank changes only slightly, from 33rd to 31st. Both the adjusted and unadjusted salaries for Kentucky are below the national average. However, as discussed earlier, Kentucky ranked 16th in terms of spending on salaries per \$1,000 in personal income. Whereas the CWI adjustment takes into account only the

¹⁰ Cost-adjusted salaries were calculated by dividing each state's average teacher salary by its CWI and then multiplying by the national CWI.

wages of college-educated professionals, personal income is from the full range of workers.

Table 5.7
Average Public School Teacher Salaries, Unadjusted and Adjusted for Geographic Cost Differences, FY 2006

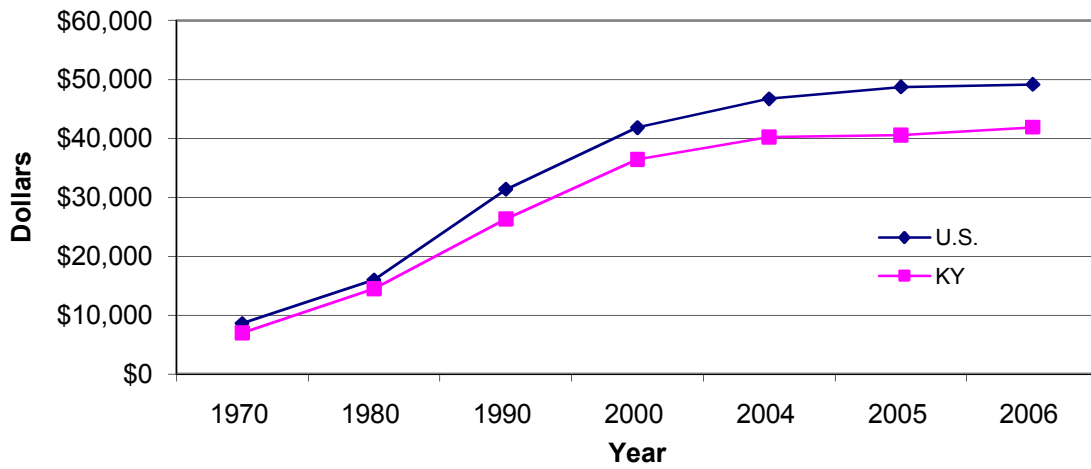
Unadjusted			Adjusted for Geographic Cost Differences		
Rank	State	Dollars	Rank	State	Dollars
4	Illinois	58,686	1	Illinois	56,861
10	Maryland	54,333	12	Delaware	53,361
11	Delaware	54,264	13	Indiana	53,211
14	Ohio	50,314	14	Ohio	52,540
--	United States	49,026	16	Arkansas	51,966
18	Georgia	48,300	21	Maryland	50,253
19	Indiana	47,255	23	Georgia	49,198
27	North Carolina	43,922	--	United States	49,026
28	Virginia	43,823	27	Mississippi	48,857
29	Florida	43,302	31	Kentucky	48,222
31	South Carolina	43,011	34	South Carolina	47,723
32	Arkansas	42,768	37	Florida	46,774
33	Kentucky	42,592	38	North Carolina	46,538
34	Tennessee	42,537	40	Tennessee	46,284
35	Texas	41,744	41	Louisiana	46,172
41	Mississippi	40,576	42	Oklahoma	46,118
42	Missouri	40,462	43	Alabama	46,056
44	Alabama	40,347	45	West Virginia	45,223
45	Louisiana	40,029	46	Missouri	44,738
48	Oklahoma	38,772	50	Texas	42,198
49	West Virginia	38,284	51	Virginia	40,488

Note: Staff calculated adjusted salaries using NCES Comparable Wage Index.

Source: Natl. Ed. Assoc. *Rankings & Estimates 2006-2007*, Rankings, Table C-11. Data used with permission of the National Education Association © 2007. All rights reserved.

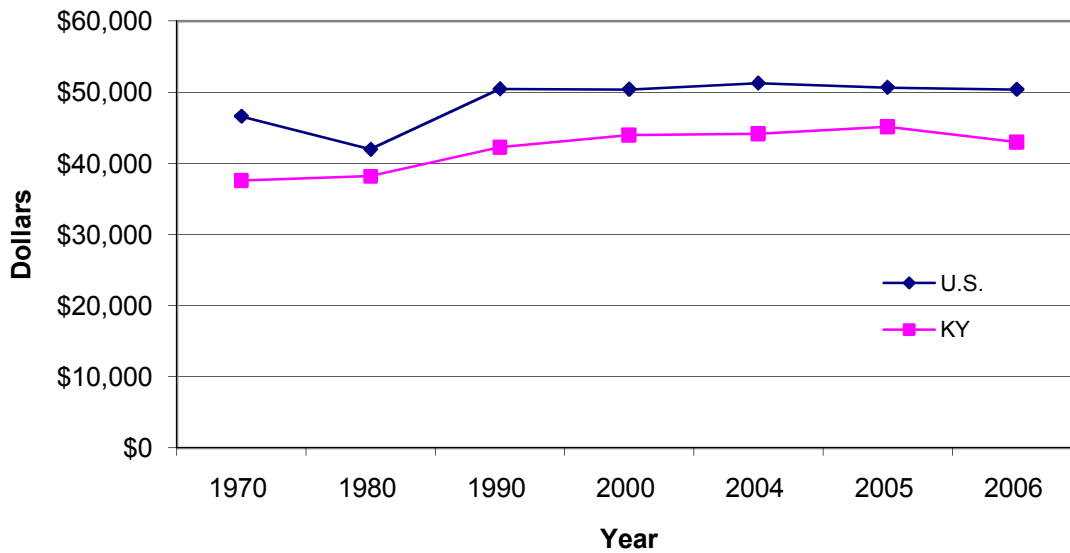
Figures 5.C and 5.D show year-to-year changes in teacher salaries for Kentucky and the nation as a whole, from 1970 to 2005. In nominal dollars, salary increases appear large, especially for the period between 1970 and 2000. However, adjusting for inflation reveals modest increases from 1970 to 2000, followed by increases that just keep up with inflation.

Figure 5.C
Teacher Salary Trends, U.S. and Kentucky, 1970-2005
Nominal Dollars



Source: U.S. Dept. of Ed. Inst. Natl. *Digest* 110.

Figure 5.D
Teacher Salary Trends, U.S. and Kentucky, 1970-2005
Constant 2006 Dollars (Inflation Adjusted)



Source: U.S. Dept. of Ed. Inst. Natl. *Digest* 110 and “NCES Comparable.”

Funding Equity

Funding equity between poorer and wealthier districts has occupied policy makers' attention for four decades, as court cases have challenged the constitutionality of education systems that rely on local property taxes. Since the passage of the Kentucky Education Reform Act of 1990, Kentucky's SEEK formula has provided state funds to reduce funding disparities among districts.

There is no consensus as to which equity indicator is best. Some are easier to understand than others. Few distinguish undesirable inequity (wealthier districts spending more) from that which is intentional and policy driven (poorer districts spending more, sometimes called "progressive inequity").

Education Week's Equity/Disparity Measures

Kentucky's ranks highly on several funding equity measures, which may indicate the success of Kentucky's Support Education Excellence in Kentucky funding mechanism.

Table 5.8 presents equity measures published by *Education Week's Quality Counts*. Kentucky is better than the national average on three of the four measures. On two of the four measures, Kentucky is among the top three states. These favorable ratings could be seen as indicators of the success of Kentucky's SEEK funding mechanism. Brief descriptions of the equity measures follow the table.

Table 5.8
Education Week's Equity/Disparity Measures, FY 2005

Wealth-neutrality Score			McLoone Index			Coefficient of Variation			Restricted Range		
Relationship Between District Funding and Local Property Wealth (Lower Value is Better)			Actual Spending as Percentage of Amount Needed To Bring All Districts to Median Level (Higher Value is Better)			Amount of Disparity in Spending Across Districts (Lower Value = Greater Equity)			Difference in Per-pupil Spending Levels at the 95 th and 5 th Percentiles (Lower Value is Better)		
Rank	State	Score	Rank	State	Index	Rank	State	CV	Rank	State	\$
12	OK	0.016	5	NC	95.6	1	WV	0.058	1	WV	1,626
13	IN	0.017	7	LA	95.3	2	FL	0.074	2	KY	1,920
14	AR	0.033	9	MD	95.2	3	KY	0.091	3	AL	1,980
16	LA	0.045	12	FL	94.4	4	DE	0.092	4	TN	2,092
19	KY	0.070	13	WV	94.3		AL		5	AR	2,355
20	WV	0.075	14	GA	94.1	6	LA	0.094	6	MS	2,396
21	MO	0.077	16	AL	94.0	7	TN	0.095	8	OH	2,644
--	U.S.	0.085	18	AR	93.9	9	NC	0.098	9	FL	2,837
28	TN	0.093		TX		11	GA	0.099	11	SC	3,060
29	OH	0.094	20	SC	93.7	12	AR	0.103	12	NC	3,090
31	GA	0.127	24	TN	93.3	13	MD	0.105	13	LA	3,335
	MS		26	VA	92.8	14	SC	0.112	15	DE	3,521
36	FL	0.148	--	U.S.	92.6		MS		16	GA	3,530
38	TX	0.156	29	MS	92.5	23	IL	0.135	18	MO	3,659
39	DE	0.159	33	DE	92.1	26	VA	0.137	19	MD	3,696
43	IL	0.170		OH		29	TX	0.143	20	IN	3,785
44	AL	0.171		KY		30	OH	0.144	23	OK	4,062
45	NC	0.201	39	OK	90.9	31	IN	0.145	26	VA	4,163
46	SC	0.212	40	IL	90.7	--	U.S.	0.147	--	U.S.	4,725
48	MD	0.283	42	MO	89.7	34	MO	0.162	31	IL	4,743
49	VA	0.288	44	IN	89.5	38	OK	0.180	32	TX	4,756

Note: Rankings are out of 49 because DC and HI have only one district.

Source: Editorial Projects in Education. *Education Week's Quality Counts*.

Wealth-neutrality Score. This equity measure examines the relationship between districts' property wealth and revenues per pupil. If these two measures have a high positive correlation, funding is inequitable. A negative value indicates that more funding is targeted at poorer districts. Of the four equity measures used by *Education Week*, this appears to be the only one that rewards, instead of penalizing, states for this progressive inequity. As Table 5.8 shows, this index ranks Kentucky 19th with respect to equity (Editorial. *Education Week's Quality*).

McLoone Index. This equity measure focuses on districts that spend less than the state median, calculating the amount that would be required were they to spend at the median (Costrell). By focusing on only those districts spending below the median, it is less likely than other measures to be distorted if some districts spend considerably more than what might be considered necessary to provide adequate educational services (Hussar 17). The maximum value for this measure is 100 percent, indicating the same level of spending for all districts. Kentucky's index of 92.1 percent means Kentucky would need to spend 7.9 percent more to bring all districts up to the median. In Table 5.8, Kentucky ranks 33rd on this index.

Coefficient of Variation. This is a measure of the amount of variation in spending among districts. Kentucky ranks 3rd with respect to this measure. This measure has the advantage of being simple to calculate and understand—it is the standard deviation divided by the mean—and was chosen by Congress as an equity factor for Title I legislation (Hussar 13). On the negative side, it has the potential to penalize states if they spend more in poorer districts. However, *Education Week* did not find Kentucky to be spending more for poorer districts (Editorial. *Education Week's Quality*). As will be discussed later in this chapter, Education Trust did find that Kentucky spends more for poorer districts, after making certain adjustments to improve comparability.

Restricted Range. This measures the difference in per-pupil spending between the 95th percentile and the 5th percentile. The smaller this range, the better (Editorial. *Education Week's Quality*). Kentucky ranks 2nd on this measure.

Education Trust's Poverty and Minority Gap Measures

Education Trust uses per-student revenues to calculate funding gaps between highest- and lowest-poverty districts and highest- and lowest-minority districts. Revenues are adjusted for geographic variations in costs and the number of special education students enrolled.

Education Trust examines differences in state and local revenues per pupil between districts with relatively high numbers of impoverished or minority students and districts with relatively few impoverished or minority students. To classify districts by poverty, Education Trust ranked them by the percentage of students living below the poverty level and then divided them into quartiles. The top 25 percent were the highest-poverty districts and the bottom 25 percent were the lowest-poverty districts. Highest- and lowest-minority districts were identified in a similar way.

The poverty gap is equal to revenues received by the highest-poverty districts minus revenues received by the lowest-poverty districts. Gaps are adjusted for geographic cost differences and the number of special education students enrolled because higher costs are associated with these students. For some tables, Education Trust also made adjustments that assumed 40 percent greater costs for low-income students. This is more than the 20 percent adjustment that *Education Week* uses.

As Education Trust interprets its analysis, positive numbers indicate greater funding of districts that need it most, while negative numbers indicate less funding for these neediest districts. The minority gap is calculated in a similar way; positive numbers indicate greater funding of districts with the highest percentages of minorities while negative numbers indicate less funding in high-minority districts.

Kentucky is reported to be relatively good at ensuring equity for students in poverty and for minority students. Instead of a funding gap, Kentucky's highest-poverty districts and highest-minority districts receive more money per student than wealthier and less diverse districts.

As Table 5.9 shows, Kentucky ranks 7th and 12th, respectively, for funding to highest-poverty and highest-minority districts relative to the lowest-poverty and lowest-minority districts. The positive numbers indicate that more funds go to Kentucky's needier districts.¹¹ In contrast, Illinois had large funding gaps, with the highest-poverty districts receiving an average of \$2,827 less per student than the lowest-poverty districts and the highest-minority districts receiving \$2,021 less than the lowest-minority districts.

¹¹ *Education Week's* equity measures did not indicate that Kentucky spends more for poorer districts than for wealthier districts. This discrepancy may be due to the fact that *Education Week* uses only a 20 percent adjustment for low-income students, while the Education Trust uses a 40 percent adjustment.

Table 5.9
Education Trust Poverty and Minority Funding Equity and Gaps, 2005

Gap, Low-poverty Minus High-poverty Districts			Gap, Low-minority Minus High-minority Districts		
Rank*	State	Gap (\$)	Rank*	State	Gap (\$)
7	KY	462	4	OH	1,032
9	AR	230	6	AR	547
11	TN	155	7	MO	535
12	OH	73	8	IN	428
13	SC	-19	10	WV	238
14	MD	-23	11	LA	229
16	OK	-72	12	KY	152
19	FL	-199	13	GA	134
22	IN	-238	14	SC	81
23	MS	-267	15	TN	-81
26	WV	-383	18	FL	-133
27	GA	-436	20	MS	-166
30	VA	-526	22	VA	-250
31	LA	-560	23	OK	-294
35	AL	-692	25	AL	-500
38	TX	-796	31	NC	-738
40	MO	-803	32	MD	-803
42	NC	-825	35	DE	-933
44	DE	-1,126	--	U.S.	-1,275
--	U.S.	-1,532	42	TX	-1,385
48	IL	-2,827	46	IL	-2,021

Notes: *Rank out of 49; DC and HI each has only one district. A negative dollar amount indicates that fewer dollars were provided to high-poverty or high-minority districts. A positive amount indicates more dollars for high-poverty or high-minority districts. Education Trust made a 40 percent adjustment for low-income students.

Source: Education Trust. *The Funding Gap* 9.

In both 1999 and 2005, Kentucky was a national leader in providing extra funding for high-poverty districts.

As Table 5.10 shows, Kentucky was a national leader in providing extra funding for high-poverty districts in both 1999 and 2005. Between 1999 and 2005, Kentucky's extra funding for the highest-poverty districts increased by \$77 per pupil, the 18th largest increase.

Table 5.10
Poverty Funding Gap Trends, 1999 to 2005

1999 Gap, Low-poverty Minus High-poverty Districts			2005 Gap, Low-poverty Minus High-poverty Districts			1999-2005 Poverty Gap, Change in Dollars		
Rank*	State	Gap (\$)	Rank*	State	Gap (\$)	Rank*	State	Change (\$)
4	KY	801	6	KY	878	3	MD	1,376
6	TN	729	7	OH	833	4	OH	910
12	MO	480	11	AR	541	6	AR	523
16	FL	350	13	TN	454	11	IN	197
17	NC	337	14	MD	395	12	LA	180
18	OK	312	15	IN	322	15	SC	136
19	TX	280	16	SC	302	17	DE	98
20	GA	245	17	OK	271	18	KY	77
22	VA	234	21	MS	151	25	AL	-19
24	MS	192	24	GA	82	28	WV	-40
26	SC	166	26	FL	-18	29	MS	-41
27	IN	126	27	WV	-19	30	OK	-42
29	WV	22	28	MO	-104	--	U.S.	-90
30	AR	18	29	VA	-122	33	GA	-162
36	OH	-77	32	TX	-165	34	TN	-275
40	AL	-309	35	LA	-241	37	VA	-356
41	LA	-421	38	AL	-328	38	FL	-368
--	U.S.	-848	42	NC	-603	40	TX	-445
45	MD	-981	--	U.S.	-938	43	MO	-584
46	DE	-1,052	45	DE	-954	46	IL	-668
48	IL	-1,568	48	IL	-2,235	48	NC	-939

Notes: *Rank out of 49; DC and HI each has only one district. A negative dollar amount indicates that fewer dollars were provided to high-poverty districts. A positive amount indicates more dollars for high-poverty districts.

Education Trust made no adjustment to these numbers for low-income students.

Source: Education Trust. *The Funding Gap* 6.

Between 1999 and 2005, Kentucky eliminated a minority funding gap. High-minority districts now receive more funding than low-minority districts.

As Table 5.11 shows, Kentucky eliminated a minority funding gap between 1999 and 2005. In 1999, Kentucky's highest-minority districts had \$162 per student less than the lowest-minority districts. By 2005, there was a "progressive gap," with the highest-minority districts receiving \$44 more per pupil.

Table 5.11
Minority Funding Gap Trends, 1999 to 2005

1999 Gap, Low-minority Minus High-minority Districts			2005 Gap, Low-minority Minus High-minority Districts			1999-2005 Minority Gap, Change in Dollars		
Rank*	State	Gap (\$)	Rank*	State	Gap (\$)	Rank*	State	Change (\$)
3	MO	1,446	4	OH	1,520	3	OH	800
5	GA	957	6	MO	788	4	LA	578
7	IN	766	7	IN	721	7	SC	445
8	OH	720	8	AR	707	9	AR	400
9	VA	521	9	GA	496	12	KY	206
12	AR	308	12	SC	297	15	WV	109
13	MS	215	13	LA	293	--	U.S.	73
14	WV	91	14	WV	200	17	AL	67
18	FL	31	15	MS	163	19	TN	51
19	OK	17	20	KY	44	23	IN	-45
22	TN	-41	21	TN	10	24	FL	-46
25	NC	-75	23	FL	-15	25	MS	-52
28	SC	-148	24	OK	-56	28	OK	-73
29	KY	-162	25	VA	-57	29	MD	-157
30	LA	-285	29	AL	-280	33	TX	-327
31	AL	-347	31	MD	-578	36	GA	-461
32	DE	-385	33	NC	-663	37	DE	-507
34	MD	-421	--	U.S.	-877	40	VA	-579
39	TX	-586	39	DE	-892	41	NC	-587
42	IL	-864	40	TX	-912	42	MO	-658
--	U.S.	-950	45	IL	-1,623	45	IL	-758

Notes: *Rank out of 49; DC and HI each has only one district. A negative dollar amount indicates that fewer dollars were provided to high-minority districts. A positive amount indicates more dollars for high-minority districts.

Education Trust made no adjustment to these numbers for low-income students.

Source: Education Trust. *The Funding Gap* 6.

Education Week's Overall School Finance Index

Education Week's 2008 issue of *Quality Counts* included an overall school finance index, based on the four equity measures discussed earlier in this chapter and four spending measures, shown in Table 5.12. One weakness of this index is that some of the equity measures fail to distinguish “progressive” inequity and therefore penalize states like Kentucky that provide poorer districts with more funding than wealthier districts.

Table 5.12
Components of *Education Week's* School Finance Index, 2008

Indicator	U.S.	KY	KY Rank
Equity			
Wealth-neutrality Score, 2005 (lower value is better; negative value indicates higher funding for poorer districts)*	0.085	0.070	19
McLoone Index, 2005 (actual spending as a percentage of amount needed to bring all students to median level)*	92.6	92.1	33
Coefficient of Variation, 2005 (amount of disparity in spending across districts, with lower value indicating greater equity)*	0.147	0.091	3
Restricted Range, 2005 (difference in per-pupil spending levels at the 95 th and 5 th percentiles)*	\$4,725	\$1,920	2
Spending			
Per-pupil Expenditures (PPE), adjusted for regional cost differences, 2005	\$8,973	\$7,978	37
Percentage of Students in Districts in Which PPE is At or Above U.S. Average, 2005*	46.1%	9.0%	41
Spending Index, 2005 (per-pupil spending levels weighted by the degree to which districts meet or approach the national average for expenditures, cost and student-need adjusted)*	92.7	91.0	35
Percentage of Total Taxable Resources Spent on Education, 2005	3.6%	3.4%	32
School Finance Index Total Score	77.6	74.0	29

Note: *Adjusted for regional cost differences and special-needs students.

Source: Editorial Projects in Education. *Education Week's Quality Counts* 2008.

Education Week's 2008 issue of *Quality Counts* gave Kentucky a ranking of 29th and a grade of C on the overall school finance index.

Table 5.13, which presents state rankings based on the overall school finance index, shows that Kentucky ranks 29th and has a grade of C. Even if the equity measures in this index did not penalize states for extra funding for high-poverty schools, Kentucky's rank and grade would not improve much because per-pupil funding is relatively low even after adjusting for geographic cost differences.

Table 5.13
***Education Week's* Overall School Finance Index, 2008**

Rank	State	Total Score	Overall Grade
1	WV	92.5	A
10	MD	84.9	B
11	IN	84.3	
12	DE	83.5	
13	OH	82.0	B-
16	AR	81.1	C+
21	GA	78.7	
24	VA	77.6	
--	U.S.	77.6	
25	LA	77.2	C
26	SC	76.1	
29	KY	74.0	
31	AL	73.8	
32	IL	73.2	
33	MO	72.9	C-
34	MS	72.3	
38	FL	70.6	
39	NC	70.3	
40	TX	69.9	
41	TN	69.7	
42	OK	69.5	D+

Source: Editorial Projects in Education. *Education Week's Quality Counts* 2008.

Chapter Summary and Conclusions

Kentucky spends less on education than other states, even after adjusting for cost differences. However, the below-average funding is allocated more equitably than in most other states.

Even after adjusting for Kentucky's lower cost of living, Kentucky's teacher salaries and per-pupil revenues and expenditures are below the national average. The exception is per-pupil preschool spending which, due to a \$25 million budget increase, spiked above the national average in FY 2007. Notwithstanding Kentucky's below-average education funding, the Commonwealth is a national leader in allocating those funds equitably among districts.

Chapter 6

Indices Composed of Multiple Topics

Indices composed of multiple topics are popular overall measures, but due to different measures and methodologies they lead to widely different conclusions about Kentucky's position in the nation.

This chapter discusses indices that combine several measures, including some topics discussed earlier in this compendium as well as noneducation topics. Many organizations grade and rank states based on broad indices that combine data across a spectrum of topics including education, economic conditions, crime, health, and other quality-of-life measures. Instead of focusing on education in a vacuum, these indices provide a multidisciplinary frame of reference.

However, multi-topic indices should be used with caution. They vary widely, depending on the measures chosen and the methodology used for combining them. The same state can be graded an A by one organization but an F by another (Olson. "An 'A'"). In addition, organizations that produce indices on a broad array of topics may not have the specialized expertise to choose the best indicators for each specific topic, such as education. Some measures may be redundant, giving certain factors too much weight, or important measures may be overlooked.

Quality Counts Overall Grade and Score

The 2008 edition of *Education Week's Quality Counts* assigned overall grades to states by averaging the scores for six categories of measures, with each category given equal weight in the overall grade. The categories were

- Chance-for-Success-Index, made up of 13 measures
- K-12 Achievement Index, calculated from 18 measures
- Standards, assessment, and accountability, based on 25 policies
- Transitions and alignment, based on 14 policies relating to early childhood education, college readiness, and the economy and the workforce
- Teaching profession, reflecting 50 policies related to accountability, incentives and allocation, and building and supporting capacity
- School finance, derived from 8 measures (Editorial. *Education Week's Quality*).

Education Week's Quality Counts 2008 gave Kentucky, overall, a C grade and a score that is just above the national score.

As Table 6.1 shows, Kentucky received a C grade overall and a total score that is just above the national score. Many peer states received higher grades than Kentucky, although differences among states are small. Kentucky's B+ grade for standards, assessment, and accountability reflects the implementation of 18 of the 25 policies recommended by *Education Week*. Kentucky's implementation of half of the 14 recommended transitions and alignment policies earned a grade of C. Having put in place 28 of the 50 recommended policies regarding the teaching profession, Kentucky received a grade of B-. The Chance-for-Success-Index, K-12 Achievement Index, and School Finance Index are discussed in detail in this compendium, in chapters 3, 2, and 5, respectively.

Table 6.1
Education Week's Quality Counts Overall Grade

Rank	State	Over-all Grade	Total Score	Chance for Success	K-12 Achievement	Standards, Assessment, and Accountability	Transitions and Alignment	Teaching Profession	School Finance
3	MD	B	83.5	B+	B	B	B+	C-	B
5	VA	B-	82.3	B	C	A	C+	B-	C+
6	WV	B-	80.8	C-	F	A	B+	C+	A
7	OH	B-	80.6	B-	C-	A	C+	C+	B-
8	AR	B-	80.5	C-	D	B+	B	B+	B-
9	SC	B-	80.4	C	D	A	B-	A-	C
11	GA	B-	80.2	C	D+	A-	B	B	C+
12	IN	B-	79.7	C+	C-	A	C+	C-	B
14	FL	C+	79.2	C+	C	A-	C+	B	C-
16	TN	C+	78.0	C-	D+	A-	A	C	C-
	DE	C+		B	C-	B+	D	C+	B
21	LA	C	76.5	D+	D-	A	C	B	C+
22	KY	C	76.4	C	D+	B+	C	B-	C
23	TX	C	75.9	C	C	B+	C+	C	C-
--	U.S.	C	75.9	C+	D+	B	C	C	C+
24	NC	C	75.8	C+	D+	B+	D+	B	C-
26	AL	C	75.7	C-	F	A-	C+	B-	C
28	OK	C	75.5	C-	D	A-	C	B-	D+
35	IL	C	73.4	B-	D+	C+	C-	D+	C
40	MO	C-	72.1	C+	D	C	D+	C	C
48	MS	D+	68.9	D+	F	B	D+	D	C-

Notes: The total score is the average of the scores across the six individual categories; each category receives equal weight in the overall grade. Because DC and HI are single-district jurisdictions, there is no measure of financial equity among districts; therefore, neither DC nor HI has a grade for school finance.

Source: Editorial Projects in Education. *Education Week's Quality Counts 2008*.

Kentucky Long-Term Policy Research Center Indices

The Kentucky Long-Term Policy Research Center (KLTPRC) tracks Kentucky’s progress relative to other states using several indices, some of which focus on education. The center’s indices of obstacles to cost-effective spending, NAEP proficiency purchasing power, and state of the Commonwealth are discussed below.

Obstacles to Cost-effective Educational Spending Index

According to the Kentucky Long-Term Policy Research Center, Kentucky children face the 4th highest level of obstacles.

KLTPRC created this index using eight measures, summarized in Table 6.2, that are correlated with academic achievement. As mentioned in Chapter 3, most Kentucky students are proficient in English, but they struggle with the other seven obstacles. In particular, Kentucky has the highest student obesity rate in the nation and the 9th highest rates of lunch subsidies and rural school settings. Consequently, Kentucky is ranked 4th with respect to the Obstacles to Cost-Effective Educational Spending Index (Commonwealth. Legislative. Kentucky Long-Term. *Reducing*).

Table 6.2
Components of the Obstacles to Cost-effective Educational Spending Index, 2008

Student Characteristic	KY	U.S.	KY Rank
No parent with postsecondary degree, 2006 ^a	61.0%	56.7%	13
Eligible for free or reduced-price lunch, FY 2006	49.5%	41.4%	9
Limited English proficiency, FY 2006	1.6%	8.6%	45
Attends rural school, FY 2005	42.3%	21.4%	9
Obese or overweight, 2003	38.0%	31.0%	1
Fair or poor health (as reported by parent), 2003	3.1%	3.2%	17
Disability, FY 2005	15.8%	13.8%	11
Missed 11 or more school days, 2003	6.1%	5.2%	17
Index Value	0.71686	0.50000	4

Note: ^aThis table presents the reciprocal of the published parent education measure in order to make all measures consistent (all negatively correlated with achievement).

Source: Staff compilation of data from Commonwealth. Legislative. Kentucky Long-Term. *Reducing*.

Index of NAEP Proficiency Purchasing Power Relative to Obstacles

After adjusting for obstacles, the Kentucky’s return on investment in education was deemed to be 18 percent above what would be expected.

KLTPRC assesses states’ returns on investments in education by dividing the average NAEP proficiency rate by per-pupil spending. On this measure, as Table 6.3 shows, Kentucky is just below the national average and is ranked 25th. However, when this measure is examined relative to levels of obstacles in each state, Kentucky rises to a rank of 8th. Using a statistical analysis, KLTPRC estimates that Kentucky’s return on investment in education is 18

percent above what would be expected, given the obstacles the Commonwealth faces.

Table 6.3
Index of NAEP Proficiency Purchasing Power Relative to Obstacles, 2008

Per-pupil Spending, Adjusted for Cost-of-Living Differences FY 2005			NAEP Proficiency in Grades 4 & 8 Reading & Math 2005 & 2007			NAEP Proficiency Purchasing Power (% proficient per \$1,000 spending)			Obstacles to Cost-Effective Educational Spending Index			NAEP Proficiency Purchasing Power Relative to Obstacles		
Rank	State	\$	Rank	State	%	Rank	State	%	Rank	State	Value	Rank	State	%
5	DE	10,661	11	OH	37.4	9	NC	4.33	1	WV	0.81392	4	TX	125.3
10	WV	10,073	14	VA	37.0	12	TX	4.19	3	MS	0.75334	5	NC	121.5
14	MD	9,829	22	MD	34.4	14	FL	4.10	4	KY	0.71686	8	KY	118.2
15	IN	9,542	24	IN	34.1	16	VA	4.04	5	AR	0.70718	10	FL	116.1
16	OH	9,441	25	DE	33.2	18	OH	3.96	6	AL	0.68972	11	OK	112.3
20	VA	9,169	--	U.S.	32.9	21	MO	3.80	7	OK	0.68328	12	SC	110.2
26	AR	8,790	28	NC	32.6	--	U.S.	3.78	8	LA	0.67382	17	TN	107.3
--	U.S.	8,701	29	TX	32.2	23	IL	3.62	9	TN	0.66423	19	IN	105.7
28	GA	8,658	31	MO	31.5	25	KY	3.59	10	SC	0.66394	21	AR	105.1
29	IL	8,621	32	IL	31.2	26	IN	3.57	12	TX	0.60727	--	U.S.	103.6
30	LA	8,582	33	FL	30.9	29	OK	3.52	14	IN	0.59493	23	OH	103.2
34	SC	8,339	35	SC	29.3	30	SC	3.51	17	FL	0.54216	24	MO	103.1
35	MO	8,276	37	KY	28.7	31	MD	3.50	19	NC	0.53064	25	IL	100.8
36	KY	7,978	38	AR	28.3	34	TN	3.42	20	IL	0.52025	26	VA	99.7
38	AL	7,924	39	GA	26.8	40	AR	3.22	21	GA	0.50806	36	AL	88.3
39	TX	7,687	40	OK	25.8	41	DE	3.12	--	U.S.	0.50000	38	WV	86.3
40	FL	7,539	41	TN	25.7	42	GA	3.09	24	MO	0.48487	40	GA	85.3
41	NC	7,525	43	WV	24.0	44	AL	2.75	27	DE	0.46491	42	DE	83.2
42	MS	7,513	47	AL	21.8	47	WV	2.39	29	OH	0.43336	45	MD	80.1
43	TN	7,506	48	LA	20.4	48	LA	2.38	39	VA	0.3575	46	MS	79.6
45	OK	7,331	50	MS	17.6	49	MS	2.34	49	MD	0.24172	48	LA	75.4

Notes: KLTPRC assigned a value of 0.50000 to the average Obstacles to Cost-Effective Educational Spending Index of all states. Staff used spending and proficiency data from NCES to calculate purchasing power for the U.S.

Source: Staff compilation using data from Commonwealth. Legislative. Kentucky Long-Term. *Reducing*; U.S. Dept. of Ed. Inst. Natl. *NAEP Data and Common*.

State of the Commonwealth Index

Kentucky is among the 20 best in terms of crime, homeownership, air and water quality, achievement gaps, and government efficiency. However, Kentucky is in the bottom 20 for such factors as smoking, obesity, college degrees, and women legislators.

The 32 “quality of life” measures that make up the State of the Commonwealth Index are summarized in Table 6.4. Kentucky is among the 20 best states in terms of crime, homeownership, achievement gaps, air and water quality, and government efficiency. However, the Commonwealth is among the 20 worst for multiple factors, with higher smoking and obesity rates, lower employment of persons with disabilities, and fewer women legislators.

Table 6.4
Components of the State of the Commonwealth Index, 2006

Subindex or Indicator Name	Rank Among 50 States			Rank Among 17 Peer States ^a		
	2003 Rank	1990 Rank	1990-2003 Change in Rank	2003 Rank	1990 Rank	1990-2003 Change in Rank
Communities (20%)	39	39	0	11	10	-1
1. Crime Index	11	4	-7	2	2	0
2. Employment of Persons With Disabilities	47	40	-7	14	9	-5
3. Homeownership Rate	8	31	+23	6	13	+7
4. Health Insurance Rate	25	26	+1	7	6	-1
5. Teen Birth Rate	36	36	0	9	8	-1
6. Smoking Rate	50	49	-1	17	16	-1
7. Obesity	46	36	-10	14	8	-6
8. Charitable Contributions	37	32	-5	14	13	-1
Education (20%)	41	44	+3	9	12	+3
9. High School Attainment Rate	35	47	+12	9	14	+5
10. College Attainment Rate	44	45	+1	14	12	-2
11. ACT Average Composite Score	40	43	+3	10	11	+1
12. NAEP Grade 8 Math Results	35	43	+8	9	12	+3
13. Educational Achievement Gap	17	4	-13	3	1	-2
14. Arts Occupations	45	45	0	14	15	+1
Economy (20%)	43	47	+4	12	14	+2
15. Per Capita Income	40	44	+4	11	13	+2
16. Poverty Rate	41	44	+3	11	12	+1
17. Per Capita Gross State Product	40	41	+1	11	13	+2
18. Entrepreneurial Depth	28	25	-3	8	8	0
19. U.S. Patents	37	40	+3	12	15	+3
20. Transportation Index	35	44	+9	10	14	+4
21. Home Computer Access	38	45	+7	10	12	+2
22. Internet Access	34	46	+12	8	13	+5
23. Home Broadband Access*	44	11	-33	14	1	-13
Environment (20%)	37	46	+9	8	10	+2
24. Toxic Air Emissions	42	38	-4	9	8	-1
25. Toxic Surface Water Discharges	32	32	0	6	8	+2
26. Toxic Releases to Land	41	15	-26	11	1	-10
27. Air Quality	15	18	+3	3	7	+4
28. Water Quality	15	46	+31	5	16	+11
29. Motor Fuel Use	39	39	0	13	13	0
Government (20%)	41	34	-7	14	10	-4
30. Efficiency (persons served per 100 state and local government employees)	15	6	-9	5	3	-2
31. Women in State Legislatures	48	47	-1	15	14	-1
32. Voter Participation Rate	35	42	+7	8	11	+3
Index	43	45	+2	11	11	0

Note: ^aPeer states chosen by KLTPRC: AL, AR, FL, GA, IL, IN, LA, MI, MS, MO, NC, OH, SC, TN, VA, and WV.
Source: Commonwealth. Legislative. Kentucky Long-Term. "The State" Table 1 and Appendix A.

Measuring Up

Measuring Up 2006 ranks states in the five categories listed below.

- Preparation for education and training beyond high school
- Participation in education and training beyond high school
- Affordability of higher education
- Completion of certificates or degrees in a timely manner
- Benefits to the state from a highly educated population

Kentucky ranks lowest on preparation for and completion of postsecondary education, as well as the benefits of education.

As Table 6.5 shows, Kentucky ranks below the national average on all measures. The lowest ranks pertain to preparation for and completion of postsecondary education and training, as well as the ensuing benefits to the state of a highly educated population.

Table 6.5
Measuring Up Grades and Scores, 2006

Preparation			Participation			Affordability			Completion			Benefits			
Rank	State	Grade (Score)	Rank	State	Grade (Score)	Rank	State	Grade (Score)	Rank	State	Grade (Score)	Rank	State	Grade (Score)	
5	MD	A- (91)	5	IL	A (96)	8	IL	F (59)	7	GA	A (95)	2	MD	A (99)	
7	VA	A- (90)	7	MD	A (95)	10	IN	F (57)	10	FL	A (94)	3	VA	A (97)	
10	NC	B+ (87)	20	DE	B (86)		NC	F (57)	14	DE	A- (90)	6	MO	A (95)	
15	IL	B (85)	21	MO	B (84)		TX	F (57)	15	MO	B+ (89)	9	IL	A (93)	
21	OH	B- (81)		VA			F (57)	16	IL	B+ (88)	21	OH	B+ (87)		
25	TX	B- (80)	--	U.S.	B (83)	15	OK		F (55)		24	FL	B (84)		
--	U.S.	C+ (79)	26	KY	B- (81)	17	AR		F (54)		NC	B (84)	--	U.S.	B (84)
28	GA	C+ (77)	28	NC	B- (80)	DE	MD				VA		NC	SC	25
	SC			OH		VA		NC							
30	DE	C (75)	30	OK	C+ (79)	--	U.S.	F (52)	25	MD	B (86)	28	DE	B- (82)	
	FL		33	IN	C+ (78)	26	GA	F (51)	26	OH	B (85)		GA		
	IN			TX		29	KY		F (50)	--	U.S.	B (85)	30	OK	B- (81)
	MO		AL	C (76)	29	LA	30	MS		B (84)	32	TX	B- (80)		
38	KY	C- (71)	36	AR	36	MS	F (49)	32	TN	B (83)	36	KY	C+ (78)		
40	TN	C- (70)	39	FL		C (75)		34	FL	38	AL	B- (81)		TN	
	WV		LA	C- (70)	36	MO	F (47)	41	KY	C+ (78)	40	MS	C (76)		
44	AR	D+ (69)	43	TN	C- (70)	TN		41	WV		C+ (77)	41	AR	C (75)	
45	OK	D+ (67)		WV	C- (70)	41	WV	F (46)	43	TX		43	SC		
47	MS	D- (62)	47	SC	D+ (69)	42	AL	F (43)	45	AR	C (76)	45	IN	C (74)	
48	AL	D- (61)	49	GA	D+ (67)		SC		45	OK		49	LA	D+ (68)	
50	LA	F (56)	50	MS	D (66)	45	OH	F (42)	47	LA	C- (72)	49	WV		

Note: Staff calculated U.S. average scores and grades.

Source: Natl. Ctr. for Public Policy. "Compare."

Table 6.6 summarizes the *Measuring Up* indicators that were weighted and summed to create a numeric score for each state. Letter grades reflect each state’s standing relative to the average score of the top five states.

Table 6.6
Summary of Indicators Used in *Measuring Up*

Indicators	Weight	KY Score	U.S. Avg.	Top 5 Avg.	KY Rank*
Preparation					
High School Completion	20%				
18- to 24-year-olds with high school credential (diploma or GED), 2002-2004 ^a	20%	87%	87%	94%	25
K-12 Course Taking	35%				
Students in grades 9–12 taking at least one upper-level math course, FY 2004 ^b	8.75%	53%	53%	64%	13 (of 35)
Students in grades 9–12 taking at least one upper-level science course, FY 2004 ^b	13.125%	29%	31%	40%	18 (of 35)
Grade 8 students taking algebra, FY 2004 ^b	8.75%	12%	22%	35%	28 (of 31)
Grade 12 students taking at least one upper-level math course, FY 2004 ^b	4.375%	n.a.	n.a.	66%	n.a.
K-12 Student Achievement	35%				
Students at or above proficient on NAEP Grade 8 math, 2005 ^c	3.5%	23%	28%	38%	38
Students at or above proficient on NAEP Grade 8 reading, 2005 ^c	3.5%	31%	29%	38%	24
Students at or above proficient on NAEP Grade 8 science, 2005 ^c	3.5%	31%	27%	41%	23 (of 46)
Students at or above proficient on NAEP Grade 8 writing, 2002 ^c	3.5%	25%	30%	41%	26 (of 43)
Low-income students at/above proficient on NAEP Grade 8 math, 2005 ^c	3.5%	14%	13%	22%	24
Scores in top 20% nationally on SAT/ACT exam per 1,000 high school graduates, 2005 ^{d,e}	8.75%	156	184	237	34
Scores of 3-5 on Advanced Placement test per 1,000 high school juniors and seniors, 2005 ^{d,e}	8.75%	96	147	217	32
Teacher Quality	10%				
Students in grades 7-12 whose teachers majored in subject, FY 2000 ^c	10%	62%	70%	81%	40
Overall Score and Grade for Preparation	100%	71 C-	79 C+	99 A	38
Participation					
Young Adults	60%				
Chance for college by age 19 (percentage of 9 th graders completing high school in 4 years & immediately going to college), 2002 ^f	40%	38.5%	38.0%	53.8%	25
18- to 24-year-olds enrolled in college, 2002-2004 ^a	20%	32%	35%	41%	35
Working-age Adults	40%				
25- to 49-year-olds enrolled part time, any postsecondary education, 2003 ^a	40%	3.6%	3.9%	5.1%	27
Overall Score and Grade for Participation	100%	81 B-	83 B	98 A	27
Affordability					
Family Ability To Pay consists of the 3 indicators below, weighted by number of students enrolled in each sector:	50%	(For indicators below, low percent indicates affordability)			
Percentage of income needed to pay for expenses (minus financial aid) at community colleges, FY 2006 ^{a,c,g,h,j}	enrollment	26%	24%	15%	33
Percentage of income for expenses (minus financial aid) at public 4-year colleges/universities, FY 2006 ^{a,c,g,h,j}	enrollment	30%	31%	16%	25
Percentage of income needed to pay for expenses (minus financial aid) at private 4-year colleges/universities, FY 2006 ^{a,c,g,h,j}	enrollment	61%	72%	32%	26

Continued on next page.

Table 6.6 continued

Indicators	Weight	KY Score	U.S. Avg.	Top 5 Avg.	KY Rank*
Affordability (continued)					
Strategies for Affordability	40%				
State investment in need-based financial aid as compared to the federal investment, FY 2006 ^{c,h,j}	20%	42%	40%	89%	15
At lowest-priced colleges, the share of income that the poorest families need to pay for tuition, FY 2006 ^{a,c,g}	20%	24%	16%	7%	38
Reliance on Loans	10%				
Average loan amount undergraduates borrow each year, FY 2005 ^c	10%	\$3,210	\$3,619	\$2,619	8
Overall Score and Grade for Affordability	100%	51 F	52 F	67 D	27
Completion					
Persistence	20%				
First-year community college students returning their second year, fall 2004 ^{c,e,g}	10%	51%	53%	62%	27
Freshmen at 4-year colleges/universities returning for sophomore year, Fall 2004 ^{c,e,g}	10%	70%	77%	82%	40
Completion	80%				
First-time, full-time students completing a bachelor's degree within 6 years of college entrance, FY 2004 ^c	30%	38%	55%	64%	47
Certificates, degrees, and diplomas awarded at all colleges and universities per 100 undergraduates, FY 2004 ^{c,k,m}	50%	17	17	20	23
Overall Score and Grade for Completion	100%	78 C+	85 B	102 A	41
Benefits Of Education					
Educational Achievement	37.5%				
Population ages 25 to 65 with a bachelor's degree or higher, 2002–2004 ^{c,k,m}	37.5%	23%	30%	37%	43
Economic Benefits	31.25%				
Increase in total personal income as a result of percentage of population with a bachelor's degree, 2003, 2004, and 2005 ^{a,k,m}	18.75%	9%	10%	12%	19
Increase in total personal income as a result of percentage of population with some college but no bachelor's, 2003, 2004, and 2005 ^{a,k,m}	12.5%	2%	2%	3%	8
Civic Benefits	31.25%				
Residents voting in 2002 and 2004 national elections ^a	10.5%	54%	51%	64%	19
Of those who itemize on federal taxes, percent with charitable gifts, 2003 ⁿ	10.375%	86%	87%	91%	30
Increase in volunteering rate as a result of college education, 2003–2005 ^a	10.375%	16%	18%	22%	43
Overall Score and Grade for Benefits	100%	78 C+	84 B	98 A	36

Notes: Origins of data that appear in *Measuring Up 2006*: ^aCensus Bureau; ^bRolf K. Blank and Doreen Langesen. *State Indicators of Science and Mathematics Education 2005* and unpublished data from the authors and from the Council of Chief State School Officers; ^cU.S. Dept. of Ed.; ^dCollege Board; ^eACT, Inc.; ^fThomas Mortenson. "Chance for College by Age 19 by State in 2002." Postsecondary Education Opportunity Web site; ^gNatl. Ctr. for Higher Ed. Management Systems' special analysis of IPEDS Peer Analysis System data from Natl. Ctr. for Ed. Statistics; ^hNatl. Ctr. for Higher Ed. Management Systems' Annual Survey of State Grant Aid Programs; ⁱNatl. Assoc. of State Student Grant and Aid Programs; ^kPinkerton Computer Consultants; ^mResearch Triangle Institute; ⁿU.S. Dept. of the Treasury. Internal Revenue Service.

Source: Natl. Ctr. for Public Policy and Higher Ed. "Compare" and *Technical Guide*.

Camelot Index

A founding editor of Federal Funds Information for States (FFIS) assembled the Camelot Index from an array of indicators, to counter a tendency for rankings to focus on just one area of states' performance. FFIS provides little information regarding its methodology and criteria for selecting indicators. A brief technical note mentions that the index is based on annual state rankings that were published by Morgan Quitno, which was acquired by Congressional Quarterly in 2007. After this change in ownership resulted in the discontinuation of some tables, FFIS went directly to the sources of those tables (Federal. "The 2008" 19). The overall rank is derived by averaging states' ranks on the six quality of life indices discussed below.

Healthy Economy

The Healthy Economy index is based on poverty rates, employment growth, population growth, income growth, per-capita federal tax liability (a proxy for income), robustness of the state tax base, and average retail salaries.

Healthy People

Just three measures— infant mortality rates, age-adjusted death rates, and uninsured rates—make up the Healthy People index.

Crime-free State

The Crime-free State index is based on the ratio of violent and property crimes to the number of residents. As such, it is inflated in states with heavy tourism. The influx of tourists increases the population at risk of crime, but the number of residents in the denominator does not reflect this larger population.

Educated Population

The Educated Population index is derived from Armed Forces Qualification test rankings, pupil-teacher ratios, high school graduation rates, instate college costs, and ACT and SAT scores. As discussed in Chapter 2, states' average ACT and SAT scores are highly dependent on participation rates. The Armed Forces test is voluntary and likely to have similar or other limitations. The reasons for not including NAEP scores and adult educational attainment are unclear.

Healthy Society

The Healthy Society index reflects homeownership, voter turnout, births to unwed mothers, single-parent families, and welfare recipients.

Prudently Managed Government

The Prudently Managed Government index is based on the tax burden (state and local taxes as a percentage of income), solvency (state assets minus debt and unfunded pension liabilities), structural surplus/deficit (anticipated revenue growth compared to the amount needed to maintain current services), and bond ratings.

According to the Camelot Index, Kentucky's greatest strengths are low crime and prudently managed government. The greatest challenges are the economy and education.

Table 6.7 shows Kentucky and peer state rankings overall and for each of the six indices. Based on these, Kentucky's greatest strengths are low crime and prudently managed government, with ranks of 8th and 13th, respectively. The greatest challenges are the economy, which is ranked 45th, and education, ranked 37th.

Table 6.7
Camelot Index, 2008

State	Overall Rank	Economy	Health	Crime	Education	Society	Government
VA	14	18	29	11	26	13	2
MD	22	14	26	37	34	20	7
MO	24	28	31	39	13	28	16
KY	27	45	33	8	37	28	13
DE	29	12	39	36	45	33	2
IL	31	24	28	27	38	20	44
IN	35	42	38	25	31	36	25
FL	36	20	34	46	49	35	15
OK	37	39	48	32	21	33	28
WV	38	50	43	11	32	25	43
NC	39	28	42	41	46	38	10
GA	40	31	47	35	47	42	5
OH	40	46	31	27	35	32	36
TX	42	25	40	42	44	40	19
AR	43	49	44	43	17	38	23
AL	45	44	46	34	39	30	29
TN	46	43	41	49	24	49	20
SC	48	38	45	50	50	37	25
MS	49	48	49	23	41	44	45
LA	50	34	49	46	36	47	50

Source: Federal. "The 2008" 18.

Smartest State Index

Morgan Quitno, acquired by Congressional Quarterly in 2007, has published state rankings and indices since 1990. The annual Smartest State Award is derived from the following 21 factors:

- K-12 revenue per \$1,000 personal income
- Percentage of current expenditures used for instruction
- District administrators as a percentage of staff
- Teacher salaries compared to all workers' salaries
- Percentage of school-age population in public schools
- Average daily attendance as a percentage of fall enrollment
- NAEP grade 4 reading proficiency
- NAEP grade 8 reading proficiency
- NAEP grade 4 writing proficiency
- NAEP grade 8 writing proficiency
- NAEP grade 4 math proficiency
- NAEP grade 8 math proficiency
- Average class size in public elementary schools
- Average class size in public secondary schools
- Median pupil-teacher ratio in public primary schools
- Median pupil-teacher ratio in public middle schools
- Median pupil-teacher ratio in public high schools
- Special education pupil-teacher ratio
- High school dropout rate
- Averaged freshman graduation rate
- Percentage of population graduated from high school (Congressional. *Smartest*).

Computing the Smartest State index for each state begins with comparing each indicator to the national average; a positive or negative score is assigned based on the extent to which the indicator is better or worse than the national average. The scores for all 21 indicators are then summed.

Kentucky is ranked 31st on the Smartest State Index.

Table 6.8 shows rankings for Kentucky and peer states. In FY 2007, Kentucky ranked 31st. This is a slight improvement over recent years but still below FY 2003.

Table 6.8
Smartest State Index, FY 2003-FY 2007

State*	Rankings					2007 Score
	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	
VA	37	17	12	7	6	10.07
MD	30	18	18	19	18	2.27
MO	31	28	26	21	22	0.94
NC	24	21	25	22	23	0.84
IN	9	13	17	26	24	0.06
TX	16	34	33	24	25	-0.11
SC	36	41	32	29	26	-1.19
DE	43	19	27	25	28	-2.47
FL	47	40	39	36	29	-2.90
TN	39	42	41	41	30	-3.01
KY	28	37	37	35	31	-3.24
AR	38	38	36	37	32	-3.44
OH	41	22	20	31	34	-4.00
IL	33	27	24	32	35	-4.32
OK	32	39	40	39	36	-5.81
WV	18	29	33	34	37	-5.82
GA	40	36	38	40	41	-6.92
LA	49	47	46	45	44	-10.95
AL	41	46	44	43	45	-11.00
MS	48	48	47	49	48	-14.78

Note: *States are listed in order of their 2007 score.

Source: Congressional. *Smartest*.

Chapter Summary and Conclusions

Indices based on multiple topics provide a multidisciplinary frame of reference. However, they have many disadvantages. They vary widely, depending on the measures and methodology used. In addition, organizations that produce indices on a broad array of topics may not have the specialized expertise to choose the best indicators for each specific topic, such as education.

The composite indices reviewed in this chapter represent a fraction of the state indices and rankings that are published each year. Kentucky's rank varies widely depending on the measures and methodologies used by each organization.

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Appendix A Rankings For All States

**Table A.1 (corresponds to Table 2.2)
NCES Averaged Freshman Graduation Rate, FY 2005**

All Races/Ethnicities			White Non-Hispanic			Black Non-Hispanic			Hispanic			
Rank	State	%	Rank	State	%	Rank	State	%	Rank	State	%	
1	NE	87.8	1	WI	91.8	1	ND	96.2	1	ME	97.3	
2	WI	86.7	2	NE	91.0	2	VT	92.1	2	KY	91.0	
3	IA	86.6	3	ND	89.3	3	ME	91.7	3	MO	86.4	
4	VT	86.5	4	MN	89.1	4	AZ	88.0	4	MT	84.4	
5	ND	86.3	5	AZ	88.8	5	SD	79.3	5	AR	79.6	
6	MN	85.9	6	NJ	88.7	6	RI	76.4	6	MD	78.6	
7	NJ	85.1	7	IA	87.7	7	NJ	72.5	7	NJ	78.1	
8	AZ	84.7	8	IL	87.5	8	MD	71.1	8	AZ	76.9	
9	UT	84.4		9		DC	70.4	9	VA	76.7		
10	PA	82.5	10	SD	86.4	10	KY	69.9	10	NE	76.3	
11	SD	82.3	11	PA	86.3	11	WY	69.6	11	ND	75.7	
12	MT	81.5	12	CT	86.2	12	WV	69.5	12	IA	73.2	
13	ID	81.0	13	MT	84.0		13		AR	71.9		
14	CT	80.9	14	OH	83.6	14	VA	69.0	14	HI	71.5	
15	MO	80.6	15	MD	83.5		15		IA	71.3		
16	OH	80.2	16	MO	82.9	16	CO	68.9	16	OK	71.0	
17	NH	80.1	17	MA	82.7	17	TX	68.6	17	RI	71.0	
18	VA	79.6	18	VA	82.3	18	OK	68.2	18	WI	70.9	
19	IL	79.4	19	CO	82.1	19	MA	68.0	19	SD	70.5	
20	MD	79.3	20	DC	81.7		20		UT	69.4		
21	KS	79.2	21	KS	81.6		21		CT	69.0		
22	MA	78.7	22	TX	81.5	22	MO	67.5	22	NC	66.9	
23	ME	78.6	23	CA	80.6		23		HI	66.9		
24	RI	78.4	--	U.S.	80.4	24	KS	66.6	24	TX	66.3	
25	WV	77.3	24	RI	80.2	25	PA	66.2	25	PA	66.2	
26	OK	76.9	25	VT	79.1	26	NC	65.7	26	CA	65.6	
27	CO	76.7		27		NY	79.0	27	CA	64.4	27	OR
29	KY		75.9	27	MI	79.0	29	DE	64.3	28	MN	65.1
30	AR	75.7	28	WY	78.8	29	NM	64.3	29	WY	64.6	
31	HI	75.1	29	ME	78.0	30	WA	63.3	--	U.S.	64.2	
32	WA	75.0	30	OK	77.9	31	NE	63.0	30	IN	63.7	
--	U.S.	74.7	31	WV	77.4	32	MN	62.1	31	WA	63.1	
33	CA	74.6	32	DE	77.3	33	MT	61.6	32	CT	62.9	
34	OR	74.2	33	AR	76.9	34	OH	61.3	33	FL	62.7	
35	TX	74.0	34	KY	76.8	35	TN	59.8	34	DE	62.4	
36	IN	73.2	35	WA	76.6	36	MS	59.7	35	NM	60.7	
37	DE	73.1	36	NC	76.4	37	IL	58.6	36	KS	60.1	
38	MI	73.0	37	IN	76.3	38	OR	58.4	37	AL	59.9	
39	NC	72.6	38	OR	74.9	--	U.S.	58.1	38	CO	59.6	
40	DC	68.8	39	NM	73.4	39	AL	57.2	39	UT	59.5	
41	TN	68.5	40	LA	72.2	40	LA	54.1	40	MA	56.5	
42	AL	65.9	41	HI	71.9	41	WI	52.6	41	MI	55.8	
43	NM	65.4	42	AK	71.3	42	GA	52.4	42	GA	51.2	
44	NY	65.3	43	TN	71.0	43	IN	52.2	43	DC	49.9	
45	FL	64.6	44	AL	70.5	44	FL	51.8	44	NY	43.6	
46	AK	64.1	45	FL	70.2	45	AK	51.5	45	NV	41.8	
47	LA	63.9	46	GA	66.6	46	MI	50.5	46	AK	27.6	
48	MS	63.3		47		MS	66.6	47	NY	45.8	n.a.	ID
49	GA	61.7	48	NV	62.4	48	NV	42.7	NH			
50	SC	60.1	n.a.	ID	n.a.	n.a.	n.a.	n.a.	SC			
51	NV	55.8		NH						SC		

Notes: The averaged freshman graduation rate estimates the percentage of an entering freshman class that graduates with a standard diploma in 4 years. For FY 2005, it equals the total number of diploma recipients in FY 2005 divided by the average membership of the 8th-grade class in FY 2001, the 9th-grade class in FY 2002, and the 10th-grade class

in FY 2003. Rates for Asian students are not reported because Kentucky's AFGR exceeded 100%; this can happen for small, growing subgroups.

Source: U.S. Dept. of Ed. Inst. Natl. "Data Tables."

**Table A.2 (corresponds to Table 2.3)
Cumulative Promotion Index for All Students and by Gender, FY 2004**

All Students									Gender							
2001			2005			Change (2005 Minus 2001)			Males 2005			Females 2005				
Rank	State	%	Rank	State	%	Rank	State	%	Rank	State	%	Rank	State	%		
1	NJ	83.4	1	NJ	83.3	1	TN	7.9	1	NJ	81.1	1	UT	85.2		
2	ND	79.9	2	IA	82.8	2	FL	7.8	2	IA	80.5	2	NJ	84.0		
3	ID	79.8	3	WI	80.5	3	KY	6.2	3	PA	78.1	3	IA	83.4		
	SD		4	PA	80.4		4		MN	77.3	4	PA	82.6			
5	MN	78.9	5	VT	80.2	5	AZ	6.0	5	WI	77.0	5	WI	82.4		
6	IA	78.7	6	NE	79.6		6		ND	76.3	6	MN	81.2			
7	UT	78.5	7	ND	79.2	7	ME	5.2	7	UT	76.1	7	CT	80.8		
8	WI	78.1	8	UT	78.6	8	CO	5.0	8	NE	75.0					
9	VT	78.0	9	CT	78.1	8	OH	5.0	9	CT	74.9	9	ND	80.2		
10	NE	77.7		10		PA	4.9	10	ID	74.4	10	ID	74.4	10	NY	79.2
11	MT	77.4	11	ME	77.2	11		SC	73.5	11	MO	73.5	11	MO	79.0	
12	CT	76.8	12	NH	77.1	12	IA	4.1	12	MT	73.2	12	ME	78.7		
13	PA	75.5	13	IL	76.7	13	MS	3.8		13		CO	78.4			
14	MD	75.3	14	ID	76.6	14	MA	3.6	15	VT	78.2					
15	IL	74.8	15	MO	76.5		15		TX	3.6	15	ME	72.8	15	MT	78.2
16	KS	74.3	16	OH	75.9	16	AK	3.5	16	OH	72.6	16	ID	78.1		
17	NH	74.1	17	MT	75.7		17		MO	72.0	17		IL		72.0	16
18	RI	73.5	18	SD	75.6		18		NC	3.1	18	SD	71.4	18	IL	77.9
19	OR	73.3	19	MA	74.7	19	NH	3.1	19	KS	70.8	19	AZ	77.5		
20	MO	73.0	20	KS	74.3	20	GA	2.6	20	CO	70.2	20	SD	77.2		
21	VA	72.6	21	CO	74.2	--	U.S.	2.6	21	OK	70.0	21	OR	76.8		
22	IN	72.5		21		WY	2.4	21		AR		2.4	22	WV	76.7	
23	WY	72.4	23	IN	73.6	22	WI	2.3	23	AZ	69.8	23	AR	76.5		
24	ME	72.1		23		MD	2.2	23		VT		2.2	23	OR	69.8	24
25	MA	71.0	25	AZ	73.3	24	WV	2.1	25	WY	69.4	25	WV	76.0		
	MI		26	AR	73.2	25	IL	1.9	26	AR	69.2	26	KY	76.0		
27	OH	70.9	27	VA	72.9	27	NE	1.8	27	MA	69.0	27	KS	75.8		
28	AR	70.8	28	WV	72.8	27	WY	1.8	28	VA	68.9	28	MA	75.5		
29	WV	70.7	29	KY	71.5	28	HI	1.4	29	MD	68.3	29	WY	75.3		
30	OK	70.1	30	RI	71.1	29	CT	1.3	--	U.S.	67.8	--	U.S.	75.3		
31	CA	69.2	31	OK	70.8	30	IN	1.2	30	IN	67.7	30	WA	74.6		
32	CO	69.1	--	U.S.	70.6	31	CA	0.9	31	MI	67.3	31	RI	74.3		
--	U.S.	68.0	32	MI	70.5	32	OK	0.7	32	RI	67.1	32	MI	74.2		
33	AZ	67.3	33	OR	70.4	33	VA	0.3	33	KY	66.2	33	CA	74.1		
34	HI	66.0	34	CA	70.1	34	UT	0.1	34	CA	65.7	34	VT	74.0		
35	KY	65.3	35	WA	68.8	35	KS	0.0	35	TX	64.9	35	NC	73.3		
36	DC	65.2	36	TX	68.5	36	NJ	-0.1	36	WA	64.8		35		OK	73.3
37	TX	64.9	37	NY	68.0	37	AL	-0.4	37	HI	64.6	37	TX	72.7		
38	DE	64.3	38	AK	67.6	38	MI	-0.5	38	AK	61.8	38	AK	71.7		
39	AK	64.1	39	HI	67.4	39	ND	-0.7	39	NC	61.3	39	HI	70.4		
	LA		40	NC	67.0	40	MN	-0.8	40	FL	56.1	40	MS	68.6		
41	NC	63.5	41	TN	65.4	41	MD	-1.7	41	MS	55.4	41	FL	65.5		
42	WA	62.8	42	MS	61.8		42		DE	55.0	42	DE	55.0	42	DE	64.0
43	NY	61.8	43	AL	61.3	43	RI	-2.4	43	GA	52.8	43	GA	63.8		
44	AL	61.6	44	FL	60.8	44	OR	-2.9	44	DC	51.2	44	LA	60.5		
45	NM	61.4	45	DE	60.1	45	ID	-3.2	45	NM	49.1	45	NM	59.8		
46	MS	58.0	46	GA	58.1	46	DE	-4.2	46	LA	48.3	n.a.	AL	n.a.		
47	TN	57.5	47	DC	57.6		47		SD	-4.2	n.a.		AL		n.a.	DC
48	GA	55.5	48	SC	55.6	48	NM	-7.3	n.a.	NV	n.a.		NV		n.a.	
49	NV	54.7	49	LA	54.7	49	DC	-7.5	n.a.	NH	n.a.		NH		n.a.	
50	FL	53.0	50	NM	54.1	50	NV	-9.3	n.a.	SC	n.a.		SC		n.a.	
51	SC	50.8	51	NV	45.4	51	LA	-9.4	n.a.	TN	n.a.		TN		n.a.	

Source: Editorial Projects in Education. *Education Week's Diplomas Count*.

**Table A.3 (corresponds to Table 2.4)
Cumulative Promotion Index by Race and Ethnicity, FY 2004**

Asian			Hispanic			Black			White						
Rank	State	%	Rank	State	%	Rank	State	%	Rank	State	%				
1	MD	91.8	1	NJ	67.0	1	UT	65.5	1	UT	88.6				
2	TX	86.9	2	KY	66.5	2	HI	65.0	2	DC	86.3				
3	LA	85.0	3	MD	64.9	3	AR	64.1	3	CT	85.5				
4	NJ	84.7	4	LA	62.5	4	CT	63.5	4	NJ	84.6				
5	KY	84.5	5	UT	61.7	5	NJ	62.5	5	NE	84.5				
6	CA	83.7	6	CA	60.0	6	MD	62.0	6	ND	83.9				
7	IL	83.4	7	WV	59.9	7	TX	61.7	7	PA	83.6				
8	VA	83.0	8	HI	59.8	8	VA	61.0	8	IA	82.8				
9	FL	82.2		9		WV	60.7	9	WI	82.6					
10	CO	80.4	10	FL	59.0	10	AK		59.3						
--	U.S.	80.2	11	TX	57.9	11	KY	59.2	11	IL	82.5				
11	UT	79.4	--	U.S.	57.8	12	DC	58.5	12	SD	82.3				
12	CT	79.3	12	MO	57.4	13	MS	58.0	13	MD	81.8				
	OK		13	VA	57.1	14	CO	57.9	14	CO	81.4				
14	PA	78.3	14	OR	56.0	15	AZ	57.8	15	VT	80.9				
15	VT	77.7		16		CA	57.3	16	MA	79.4					
16	NE	76.2	16	AK	55.7	17	RI		57.2						
17	MA	75.8	17	NM	55.3	18	NC	57.0	18	OH	78.8				
18	OR	75.7	18	AZ	54.8		19		OK	78.5					
19	NC	75.5	19	RI	54.4	20	MA	56.6	20	VA	78.2				
20	GA	75.4	20	CO	53.8	21	MO	55.8	21	MO	78.0				
21	KS	75.3		22		LA	54.6	22	ID	77.7					
	OH			23		NM	54.1		23		WY				
23	WI	74.8	23	CT	53.6	24	IA	54.0	24	CA	76.7				
24	WA	72.9		24		WI	--	U.S.	53.4	--	U.S.	76.2			
25	NM	72.3	25	OK	52.6	25	KS	53.0	25	ME	76.1				
26	WV	70.8	26	ID	52.3	26	PA	52.6	26	MI	75.9				
27	IN	69.8	27	MT	51.5	27	IL	51.8	27	TX	75.6				
28	MI	69.4	28	IN	50.2	28	AL	49.9	28	OK	75.0				
29	AZ	68.1	29	WA	50.1	29	OH	48.0	29	AR	74.9				
30	AL	66.2	30	KS	49.0	30	NE	47.4	30	IN	74.6				
31	AK	65.7	31	IA	47.6		31		ND	74.3					
32	HI	65.3	32	MS	47.5	32	FL	46.7	32	WV	72.6				
33	MN	64.6	33	PA	47.3	33	WA	45.7	33	NC	71.7				
34	MS	63.4	34	OH	46.8	34	WY	45.1	34	OR	71.1				
35	WY	62.0	35	SD	44.2	35	WI	44.8	35	AK	70.5				
36	DC	61.3	36	MA	44.0	36	GA	44.4	36	KY	70.3				
37	ME	57.2	37	DE	41.4	37	MN	42.7	37	WA	70.0				
38	RI	53.7	38	DC	39.7	38	IN	41.6	38	DE	69.0				
n.a.	AR	n.a.	39	GA	38.6	39	MI	35.2	39	NM	68.0				
	DE		40	MI	37.0	40	OR	32.7	40	LA	66.2				
	IA		41	AL	36.5	n.a.	DE	n.a.	41	FL	66.0				
	ID		42	ND	33.2		ID		65.6						
	MO		n.a.	AR	n.a.		ME		65.2						
	MT			ME			60.9								
	ND			MN			59.2								
	NH			NH			58.5								
	NV			NV			n.a.		NV	n.a.	46	AZ	58.5		
	NY			NY					n.a.		NY	n.a.	n.a.	NH	n.a.
	SC			SC							NY				
	SD			TN							SC				
	TN			VT							SD				
											TN				
		VT													

Source: Editorial Projects in Education. *Education Week's Diplomas Count.*

**Table A.4 (corresponds to Table 2.5)
State-reported Graduation Rates Compared to AFGR and CPI, FY 2005**

State-Reported Graduation Rate			NCES Averaged Freshman Graduation Rate (AFGR)			Education Week/Urban Institute Cumulative Promotion Index (CPI)			State-AFGR Percentage Point Difference *			State-CPI Percentage Point Difference*		
Rank	State	%	Rank	State	%	Rank	State	%	Rank	State	%	Rank	State	%
1	NC	95.0	1	NE	87.8	1	NJ	83.3	1	NC	22.4	1	NM	30.9
2	NJ	91.3	2	WI	86.7	2	IA	82.8	2	MS	21.7	2	NC	28.0
3	CT	91.2	3	IA	86.6	3	WI	80.5	3	NM	19.6	3	DE	23.6
4	IA	90.7	4	VT	86.5	4	PA	80.4	4	SC	17.0	4	MS	23.2
5	KS	90.2	5	ND	86.3	5	VT	80.2	5	IN	16.7	5	SC	21.5
6	MN	90.1	6	MN	85.9	6	NE	79.6	6	MI	14.7	6	NV	19.5
7	IN	89.9	7	NJ	85.1	7	ND	79.2	7	NY	11.7	7	MI	17.2
8	SD	89.1	8	AZ	84.7	8	UT	78.6	8	KS	11.0	8	IN	16.3
9	WI	88.8	9	UT	84.4	9	CT	78.1	9	DE	10.6	9	KS	15.9
10	NE	88.0	10	PA	82.5		10		CA	10.4	10	TX	15.5	
11	MI	87.7	11	SD	82.3	11	ME	77.2	11	CT	10.3	11	CA	14.9
12	PA	87.6	12	MT	81.5	12	NH	77.1	12	TX	10.0	12	RI	13.9
13	IL	87.4	13	ID	81.0	13	IL	76.7	13	TN	9.4	13	SD	13.5
14	ME	87.2	14	CT	80.9	14	ID	76.6	14	NV	9.1	14	CT	13.1
	VT		15	MO	80.6	15	MO	76.5	15	ME	8.6	15	TN	12.5
16	ND	86.7	16	OH	80.2	16	OH	75.9	16	IL	8.0	16	DC	12.3
17	ID	86.6	17	NH	80.1	17	MT	75.7	17	GA	7.7	17	HI	12.2
	NH		18	VA	79.6	18	SD	75.6	18	OR	7.5	18	MN	12.0
19	OH	86.2	19	IL	79.4	19	MA	74.7	19	WV	7.0	19	OK	11.6
20	MO	85.8	20	MD	79.3	20	KS	74.3	20	KY	6.9	20	WV	11.5
21	NM	85.0	21	KS	79.2	21	CO	74.2	21	SD	6.8	21	GA	11.3
	MS		22	MA	78.7		22		RI	6.6				
	CA		23	ME	78.6	23	NH	6.5						
	RI		24	RI	78.4	23	MD	73.6	24	NJ	6.2	24	MD	11.2
25	MD	84.8	25	WV	77.3	25	AZ	73.3	25	OH	6.0	25	IL	10.7
27	MT		26	OK	76.9	26	AR	73.2	26	AR	5.6	26	WA	10.5
28	WV	84.3	27	CO	76.7	27	VA	72.9	28	ID	5.5	27	OH	10.3
28	TX	84.0		28		WV	72.8	28		MD		5.5	28	ID
29	DE	83.7	29	KY	75.9	29	KY	71.5	29	OK	5.5	28	ME	10.0
30	KY	82.8	30	AR	75.7	30	RI	71.1	30	MO	5.2	30	NH	9.5
31	OK	82.4	31	HI	75.1	31	OK	70.8	31	PA	5.1	31	MO	9.3
32	UT	82.1	32	WA	75.0	--	U.S.	70.6	32	WY	4.8	32	MT	9.1
33	OR	81.7	--	U.S.	74.7	32	MI	70.5	33	HI	4.5	33	NY	9.0
34	WY	81.5	33	CA	74.6	33	OR	70.4	34	FL	4.4	34	NE	8.4
35	AR	81.3	34	OR	74.2	34	CA	70.1	35	WA	4.3	35	WI	8.3
36	CO	80.1	35	TX	74.0	35	WA	68.8	36	MN	4.2	36	FL	8.2
37	HI	79.6	36	IN	73.2	36	TX	68.5	37	IA	4.1	37	AR	8.1
38	VA	79.5	37	DE	73.1	37	NY	68.0	38	CO	3.4	38	NJ	8.0
39	WA	79.3	38	MI	73.0	38	AK	67.6	39	MT	3.3	39	IA	7.9
40	TN	77.9	39	NC	72.6	39	HI	67.4	40	WI	2.1	40	ND	7.5
41	SC	77.1	40	DC	68.8	40	NC	67.0	41	DC	1.1	41	WY	7.3
42	NY	77.0	41	TN	68.5	41	TN	65.4	42	VT	0.7	42	PA	7.2
43	AZ	75.0	42	AL	65.9	42	MS	61.8	43	ND	0.4	43	VT	7.0
44	DC	69.9	43	NM	65.4	43	AL	61.3	44	NE	0.2	44	VA	6.6
45	GA	69.4	44	NY	65.3	44	FL	60.8	45	VA	-0.1	45	CO	5.9
46	FL	69.0	45	FL	64.6	45	DE	60.1	46	UT	-2.3	46	UT	3.5
47	NV	64.9	46	AK	64.1	46	GA	58.1	47	AK	-2.7	47	AZ	1.7
48	AK	61.4	47	LA	63.9	47	DC	57.6	48	AZ	-9.7	48	AK	-6.2
--	U.S.	--	48	MS	63.3	48	SC	55.6	--	U.S.	--	--	U.S.	--
n.a.	AL	n.a.	49	GA	61.7	49	LA	54.7	n.a.	AL	n.a.	n.a.	AL	n.a.
	LA		50	SC	60.1	50	NM	54.1		LA				
	MA		51	NV	55.8	51	NV	45.4		MA				

Sources: Editorial Projects in Education. *Implementing Graduation Accountability and Education Week's Diplomas*; U.S. Dept. of Ed. Inst. Natl. Public 13-14.

**Table A.5 (corresponds to Table 2.6)
Annual High School Dropout Rate by Grade, FY 2005**

Total			Grade 9			Grade 10			Grade 11			Grade 12						
Rank	State	%	Rank	State	%	Rank	State	%	Rank	State	%	Rank	State	%				
1	AK	8.2	1	LA	8.1	1	NY	10.4	1	AK	8.6	1	AK	10.3				
2	CO	7.8	2	DE	7.2	2	AK	7.6	2	CO	8.2	2	CO	10.0				
3	LA	7.5	3	AK	6.7	3	CO	7.2	3	LA	6.7	3	AZ	9.5				
4	AZ	6.2	4	CO	6.1	4	LA	6.6	4	AZ	6.4	4	UT	9.1				
5	NV	5.8	5	GA	5.6	5	GA	5.9	5	GA	5.8	5	LA	8.3				
6	NY	5.7	6	NC	5.2	6	NC	5.6	6	WY	5.6	6	NV	8.0				
7	GA	5.6	7	NV	5.0	7	AZ	5.5	7	HI	5.4	7	HI	6.7				
8	DE	5.3	8	MD	4.4		NV			NC			NH					
9	NC	5.2	9	IL	4.3	9	DE	5.2	9	AR	5.3	9	WY	6.6				
10	WY	4.8	10	NM	4.2	10	HI	4.7	10	NV	5.2	10	MN	6.4				
11	HI	4.7	11	AZ	4.1	11	NM	4.5	11	WA	4.9	11	AR	6.3				
12	IL	4.5		RI		12	RI	4.4	12	RI	4.8	12	CA	6.1				
	WA		MI	3.9	13		SD		4.7	13	NY	4.7	13	SD	5.8			
14	SD	4.4	14	WA	3.8		14		WV	4.5	14	DE	5.6					
15	AR	4.3	15	OH	3.7				IL		5.4	15	WI	5.4				
16	NM	4.2	16	SC	3.6	16	IL	4.3	16		MO	5.0						
17	RI	4.1	17	SD	3.4	17	AR	4.0	17		WV	4.9						
17	WV	4.1		18		MD	3.9	18	NM	4.4	17	GA	4.9					
--	U.S.	3.9	19	FL	3.3	18	MO	3.9	19	NH	4.3	19	NY	4.8				
19	MD	3.9	--	U.S.	3.1		WA		20	MA	4.1	19	MA	4.8				
19	MI	3.9	20	NY	3.1	--	U.S.	3.8	20	SD	4.1	20	MA	4.7				
	21			MA		3.8	21	KY		3.8		22	KY	4.0	22	NC	4.6	
22	MO	3.7	22	MA	3.0	21	MI	3.7	22	MI	3.9	22	OH	4.6				
	24		UT	23	HI		2.8		23	MA			3.7		24	OK	3.9	
24	TX	3.6	24	WY	2.7	23	OK	3.6	--	U.S.	3.8	23	FL	4.3				
25	FL	3.5	25	TX	2.6		25		SC	3.6	25		MT		3.8	26	MO	4.2
	KY		26	MO	2.5	27	TX	3.3	26	ID	3.7	27	WV	4.1				
	NH			AR			28		KY	2.4	29	AL	3.1	27	MD	3.6	28	ME
	OH		MS	29	AL	3.1		30	MS	3.0	27	TX	3.5		28			ID
30	MT	3.4	31	AL	2.3	30	MS	3.0	29	OH	3.5	28	TN	3.9				
31	SC	3.3		31		VA	2.9	31		PA			2.9		31	PA	3.4	31
32	CA	3.1	33	CA	2.1	32	ID	2.8	32	ME	3.3	33	PA	3.7				
33	ID	3.0		33			CA			2.1			32		VT	2.8	32	SC
34	PA	2.9	34	ID	1.9	34	NE	2.6	34	IN	3.2	35	NE	3.6				
35	AL	2.8	35	TN	1.8		34			NH			2.6		34	TN	3.2	35
	ME		36	NE	1.7	36	ME	2.4	37	VT	3.1	36	DE	3.5				
	38		MS	37	PA	1.6	37	ND	2.3	37	AL		3.1		36	MD	3.5	
38	NE	2.7	38	WI	1.5	39		OH			2.2	37		MS	3.1	36	NM	3.5
	39		TN	39	ME		1.4	39	CA	2.2			37	UT			3.1	
40	VT	2.6	41	VT	1.3	40	IN	2.2	40	NE	3.0	40	VA	3.4				
41	IN	2.5		41			IN			1.3			41		TN	2.2	40	MN
	43		VA	42	IA	1.2	43	VA	2.0	42	CA	2.7	42	AL	3.0			
44	WI	4.2	42		KS			1.2		43	KS	2.0		43		KS	2.6	42
44	IA	2.2	44	ND	1.1	45	UT	1.8	44	IA	2.3	44	KS	2.8				
45	KS	2.1	45	UT	1.0		45		CT	1.8	45		CT		2.2	45	MS	2.7
46	ND	1.9	46	NH	0.9	46	MN	1.7	46	NJ	2.1	46	SC	2.4				
n.a.	CT	n.a.	n.a.	CT	n.a.		47			IA			1.7		48	VA	2.0	47
	DC			48		WI	1.1	48	ND	2.0	48	NJ	2.0					
	MN			n.a.		n.a.	DC	n.a.	n.a.	DC	n.a.	n.a.	49	WI	1.6	49	CT	1.9
	NJ						NJ			1.9			49	WI	1.6	49	CT	1.9
	OR						OR			1.9			49	WI	1.6	49	CT	1.9
OR	OR	1.9	49	WI	1.6	49	CT	1.9	n.a.	DC	n.a.	n.a.	OR	n.a.				

Notes: Districts assign ungraded dropouts to the grade that most closely matches their ages. Ungraded student enrollments are prorated into grades based on graded enrollments to calculate denominators for dropout rates. A state's total dropout rate is included only if the state reports dropouts and membership for each grade.

Source: U.S. Dept. of Ed. Inst. Natl. *Numbers and Rates 7*.

**Table A.6 (corresponds to Table 2.7)
Annual High School Dropout Rate Trends, FY 2003 to FY 2005**

FY 2003			FY 2004			FY 2005				
Rank	State	%	Rank	State	%	Rank	State	%		
1	AZ	8.5	1	LA	7.9	1	AK	8.2		
2	AK	7.6	2	AK	7.0	2	CO	7.8		
3	LA	7.5	3	AZ	6.7	3	LA	7.5		
4	WA	6.2	4	WA	6.5	4	AZ	6.2		
5	NV	6.1	5	DE	6.1	5	NV	5.8		
6	GA	5.8	6	NV	6.0	6	NY	5.7		
7	IL	5.7	7	NY	5.6	7	GA	5.6		
8	DE	5.5	8	CO	5.4	8	DE	5.3		
	NY			9		NC	5.2			
10	NC	5.2	10	IL	5.3	10	WY	4.8		
11	HI	4.7	11	NM	5.2	11	HI	4.7		
	NM			12		IL	4.5			
13	AR	4.6	13	HI	4.8	12		WA	4.5	
14	MI	4.5	14	AR	4.7	14	SD	4.4		
	WY			15		MI	4.6	15	AR	4.3
16	OR	4.4	15	WY	4.6	16		NM	4.2	
17	OK	4.0	17	WV	4.3	17	RI	4.1		
	RI		18	SD	4.2		WV		4.1	
--	U.S.	3.9	--	U.S.	4.1	--	U.S.	3.9		
19	ID	3.9	19	MD	4.1	19	MD	3.9		
	UT		20	OK	3.9		MI		3.9	
21	MN	3.8	21	NH	3.8	21	MA	3.8		
	NH			22		MO	3.7			
23	MS	3.7	23	MA	3.7	22		UT	3.7	
	WV		24	TX	3.6	24	TX	3.6		
25	MD	3.6	25	FL	3.4	25	FL	3.5		
	MT			MT			KY			
	TX			RI			NH			
28	AL	3.5	29	SC	3.3	30	OH	3.4		
	CO			AL			CA		MT	3.4
	VT			CA			KY		31	SC
31	FL	3.4	29	MO	3.3	32	CA	3.1		
32	KY	3.3		OH		3.1	33	ID	3.0	
	MA			35			ID	3.1	34	PA
	MO		36	36	MS		3.2	35	AL	2.8
SD	36	PA		2.9	ME	2.8				
CA	38	NE		2.8	38	NE		2.7		
PA		VT	2.7							
SC		VA	2.6							
40	NE	3.1	41	ME	2.7	40	VT	2.6		
41	OH	3.0		41		ME	2.7	41	IN	2.5
	VA			42		IN	2.5		VA	
43	ME	2.8	43	KS	2.2	43	WI	2.4		
44	KS	2.4	44	ND	2.0	44	IA	2.2		
45	IN	2.2	n.a.	CT	n.a.	45	KS	2.1		
	ND			46		ND	1.9			
47	CT	2.1		n.a.		CT	n.a.			
48	WI	2.0				DC		n.a.		
49	IA	1.9				MN		n.a.		
50	NJ	1.8				NJ		n.a.		
n.a.	DC	n.a.				OR		n.a.		

Source: U.S. Dept. of Ed. Inst. Natl. Numbers and Rates 9.

**Table A.7 (corresponds to Table 2.8)
Percentage of Teenagers Age 16-19 Not Enrolled in School and
Having No High School Credential, 2006**

Rank	State	%
1	Louisiana	11.4%
2	Mississippi	10.4%
3	New Mexico	10.3%
4	Nevada	10.0%
5	Georgia, Arizona	9.1%
7	Colorado	9.0%
8	Alabama, Kentucky	8.8%
10	Montana	8.7%
11	West Virginia	8.3%
12	Florida	7.9%
13	South Carolina, Indiana	7.6%
15	Oklahoma	7.5%
16	Texas	7.4%
17	District of Columbia, North Carolina	7.3%
19	Idaho	7.2%
21	Alaska	7.0%
22	Oregon, Delaware, Wyoming	6.9%
25	Rhode Island, South Dakota	6.7%
--	United States	6.6%
26	California, Maryland	6.4%
28	Washington	6.3%
29	Arkansas, Tennessee, Missouri	6.1%
32	Michigan, Hawaii	6.0%
34	Utah	5.9%
35	Pennsylvania	5.7%
36	New York	5.6%
37	Illinois, Nebraska	5.5%
39	Ohio	5.4%
40	Virginia	5.2%
41	Wisconsin	4.9%
42	New Jersey	4.7%
43	Iowa	4.5%
44	Kansas	4.4%
45	Maine	4.2%
46	Minnesota, Massachusetts, New Hampshire	4.1%
49	Vermont	4.0%
50	Connecticut	3.9%
51	North Dakota	3.5%

Source: U.S. Dept. of Commerce. Census. "American Community Survey."

Table A.8 (corresponds to Table 2.11)
Percentage of Students At or Above Proficient on NAEP Reading Assessment, 2007

Grade 4			Grade 8		
State	%	Sig.	State	%	Sig.
MA	49	>	MA	43	>
NJ	43		VT	42	
CT	41		MT	39	
NH			NJ		
VT			CT	37	
PA			ME		
MT	39		MN		
VA	38		NH		
MN	37		SD	36	
CO	36		IA		
IA		OH			
KS		PA	35		
MD		CO			
ME		NY	34		
OH		OR			
WA		36	VA		
WI		35	WA		
WY		35	MD	33	
ID			WI		
ND	35		WY		
NE	34		ID	32	
DE		ND			
FL		34	NY		
SD		33	DE	31	
UT			IN		
IN			MO		
KY			IL		30
IL		UT			
MI		32	U.S.	29	
MO		32	FL		
U.S.	32	KY			
RI	31	MI	28		
TX	30	NC			
AL	29	TX			
AK		AK		27	
AR		RI			
NC		GA	26		
GA	OR				
OR	28	TN	25		
WV	27	AR			
OK		SC			
TN		27	AZ	24	
HI		26	WV		
SC	24	NV	22		
AZ		AL			
NM		CA			
NV		24		HI	
CA	23	LA	20		
LA	20	MS			
MS	19	NM			
DC	14	DC		12	

Note: > indicates states with achievement levels significantly better than Kentucky's, = indicates states that are not significantly different, and < indicates states that are significantly worse than Kentucky, based on statistical testing with a 95% significance level.

Source: U.S. Dept. of Ed. Inst. Natl. *NAEP Data*.

**Table A.9 (corresponds to Table 2.13)
Percentage of Students At or Above Proficient, NAEP Writing, 2002 and 2007**

Grade 4			Grade 8								
2002			2002			2007					
State	%	Sig.	State	%	Sig.	State	%	Sig.			
CT	49	>	CT	45	>	NJ	56	>			
MA	44		MA	42		CT	53				
NY	37		VT	41		MA	46				
DE	35		OH	38		VT	40				
FL	33		ME	36		NH	39				
NC	32	=	DE	35		=	CO		38	=	
VT			MD				NC				34
ME			WA	OR			33		F		
RI			FL	KS			32		PA		35
WA			VA	NE					31		
MD	30		PA	31	WA			33			
VA	29		TX	30	MT				32		
MN			OH	28	RI		31				
TX			IA	27	NY			30			
PA			28	U.S.	30		MT		29		
OH		27	IN	26	RI	32					
IA	GA		25	OH	31						
KY	27		WY	28		IA	31				
NE	26		OR	27	U.S.	31					
U.S.			27	WV	27		NY	31			
IN		23	MO	26	VA	30					
GA			23	IN	26		UT*	29			
WY			22	GA	25	TN	30				
TN	23			KY	24	ID		29			
CA	20			MI	24	GA	27				
OR		22		TN		27		NC	26		
ID		<		ND	23		AR	27			
HI			22	CA		21	ND		26		
MO			21	WV	20		MI	25			
MT*	21			SC		19	TX		24		
KS	20			AZ	18		CA	23			
UT		20		AR		18	AL		23		
ND		19		LA	16		SC	22			
MI			19	HI		13	WV		21		
WV			18	NV	10		NV	20			
AR	18			MS		17	CA		20		
NV	17			DC	n.a.		HI	17			
NM		17		AK		n.a.	NM		15		
SC		16		IA	n.a.		MS	n.a.			
OK			16	CO		n.a.	AK		n.a.		
AL			15	IL	n.a.		DC	n.a.			
AZ	15			MN		n.a.	MD		n.a.		
LA	14			NH	n.a.		NE	n.a.			
MS		14		NJ		n.a.	OR		n.a.		
DC		13		SD	n.a.		SD	n.a.			
AK			13	WI		n.a.	SD		n.a.		
WI			11	WI	n.a.		SD	n.a.			
AK	n.a.		IA	n.a.		SD	n.a.				
CO			n.a.		IL	n.a.		SD	n.a.		
IL		n.a.		MN	n.a.		SD	n.a.			
NH				n.a.		NH	n.a.		SD	n.a.	
NJ					n.a.	NJ		n.a.	SD		n.a.
SD	n.a.					SD	n.a.		SD	n.a.	
WI			n.a.			WI		n.a.	SD		n.a.

Notes: *Statistical significance can differ for states with the same average score because statistical tests use unrounded percentages and take into account each state's sample size and variation in scores. Grade 4 writing was not assessed in 2007. > indicates states scoring significantly better than Kentucky, = indicates states that are not significantly different, and < indicates states scoring significantly worse than Kentucky, based on statistical testing with a 95% significance level.

Source: U.S. Dept. of Ed. Inst. Natl. NAEP Data.

**Table A.10 (corresponds to Table 2.15)
Percentage of Students At or Above Proficient, NAEP Math, 2007**

Grade 4			Grade 8				
State	%	Sig.	State	%	Sig.		
MA	58	>	MA	51	>		
NH	52		MN	43			
NJ			KS	41			
KS	51		VT	40			
MN			NJ			39	
VT	49		SD	38			
PA	47		MT			37	
WI			IN				36
IN	46		WA				35
ND			CT	34			
OH	45		ME			32	
CT			IA				
MT	44		IN				30
WA			NE	29			
WY	43		OH			28	
IA			42	OR			27
NY	VA			26			
ME	41		TX			25	
VA			DE	24			
CO	40		ID			23	
NC		FL	21				
SD	39	MD		19			
DE		38	TX		18		
FL	37		AK	17			
ID		36	SC		14		
MD	35		UT	8			
TX		34	U.S.				
U.S.	39		DE				
UT	39	IL					
AK		38	MO				
MO	37		NY				
NE		36	MI				
AR	35		RI				
MI		34	FL				
IL	33		KY				
SC		32	AZ				
OR	31		GA				
RI		30	AR				
HI	29		CA				
OK		28	NV				
WV	27		TN				
GA		26	HI				
AZ	25		OK				
KY		24	LA				
CA	23		WV				
NV		21	AL				
TN	19		NM				
AL		18	MS				
LA	17		DC				
NM		14					
MS	8						
DC							

Notes: > indicates states scoring significantly better than Kentucky, = indicates states that are not significantly different, and < indicates states scoring significantly worse than Kentucky, based on statistical testing with a 95% significance level.

Source: U.S. Dept. of Ed. Inst. Natl. NAEP Data.

**Table A.11 (corresponds to Table 2.17)
Percentage of Students At or Above Proficient, NAEP Science, 2005**

2000						2005							
Grade 4			Grade 8			Grade 4			Grade 8				
State	%	Sig.	State	%	Sig.	State	%	Sig.	State	%	Sig.		
MA	42	>	MT	44	>	VA	40	=	ND	43	>		
VT	38		MN	41		MA	38		MT	42			
ME	37		MA	39		VT	37		MA	41			
IA	36		OH			VT			NH			39	
MT			ND			ME			SD				
ND	35		NE	38		KY	36		VT	35		MN	39
CT	34		ID	37		MO			ND			WI	
MN			32	CT		35	OH		35	WY		36	WY
MO	31		ME	MI			SD			33		ID	36
IN			MI	OR		WI	WI		33			MI	35
VA	29	UT	34	CT	32	OH	35	OH		35			
IL		OH	WY	33		MN		32	CO*		34	CO*	34
OH	27	IN	29		UT	30	VA*		34	VA*		34	
UT		26		MO	28		CO	29		ME*	34		ME*
WY	25		IL	27		WY	28		CT	33		CT	33
ID		24	VA		25	NJ*		27	MO		33	MO	
KY	23		U.S.	24		MI	27		NJ	32		UT	32
OR		22	KY		25	ID		27	UT		31	WA	
NE	21		NY	24		WA	27		WA	31		OR	32
OK		20	MD		23	DE		28	KY		31	KY	
U.S.	19		RI	22		IL	29		DE	29		DE	29
RI		18	NC		21	IN		27	IN		27	IN	
MD	17		OK	20		MD	27		IL	27		IL	27
NY		16	TN		19	U.S.		27	U.S.		27	U.S.	
TN	15		WV	18		FL	26		MD	26		MD	26
WV		14	AL		23	OR		25	RI		25	RI	
AR	13		AZ	22		TN	24		GA	23		GA	23
GA		12	GA		20	GA		24	OK		22	OK	
NC	11		TX	18		NC	23		NC	21		TN	21
TX		10	AR		17	OK		22	OK		21	AR	
AL	9		NV	16		SC	21		SC	20		SC	20
AZ		8	SC		15	TX		20	TX		19	TX	
SC	7		LA	14		AR	19		WV	18		WV	18
NV		6	MS		13	WV		18	NC		17	NC	
LA	5		CA	12		RI	17		FL	16		FL	16
NM		4	HI		11	AL		16	AL		15	AL	
HI	3		AK	10		LA	15		AZ	14		AZ	14
CA		2	CO		9	HI		14	LA		13	LA	
MS	1		DC	8		AZ	13		LA	12		LA	12
AK		n.a.	DE		7	NM		12	NV		11	NV	
CO	n.a.		FL	6		CA	11		CA	10		CA	10
DC		n.a.	IA		5	NV		10	NM		9	NM	
DE	n.a.		KS	4		MS	9		CA	8		CA	8
FL		n.a.	NH		3	AK		8	HI		7	HI	
KS	n.a.		NJ	2		DC	7		IA	6		IA	6
NH		n.a.	PA		1	IA		6	KS		5	KS	
NJ	n.a.		SD	0		KS	5		NY	4		NY	4
PA		n.a.	WA		0	NY		4	PA		3	PA	
SD	n.a.			0		PA	3			3			3
WA		n.a.			0			3			3		

Notes: *Statistical significance can differ for states with the same average score because statistical tests use unrounded percentages and take into account each state's sample size and variation in scores. > indicates states scoring significantly better than Kentucky, = indicates states that are not significantly different, and < indicates states scoring significantly worse than Kentucky, based on statistical testing with a 95% significance level.
Source: U.S. Dept. of Ed. Inst. Natl. NAEP Data.

**Table A.13 (corresponds to Table 2.22)
Percentage of High School Graduates Participating in SAT and Average SAT Scores, 2007**

Participation in SAT			Critical Reading			Math			Writing				
Rank	State	%	Rank	State	Score	Rank	State	Score	Rank	State	Score		
1	ME	100%	1	IA	608	1	IA	613	1	IL	588		
2	NY	89%	2	MN	596	2	IL	611	2	MO	587		
3	MA	85%	3	IL	594	3	MN	603	3	IA	586		
4	CT	84%		MO		4	SD	602	4	MN	577		
5	NH	83%	5	SD	589	5	WI	598	5	WI	575		
6	NJ	82%	6	WI	587	6	ND	596	6	KS	569		
7	DC	78%	7	ND	584	7	MO	594	7	TN	568		
8	PA	75%	8	KS	583	8	KS	590	8	SD	567		
9	VA	73%	9	NE	579	9	NE	585	9	AR	565		
10	DE	72%	10	OK	578	10	MI	579	10	LA	563		
11	NC	71%		AR		11	WY	571	11	NE	562		
12	MD	70%	TN	OK	13		TN		569	13		MS	560
13	GA	69%	13	LA	569	14	LA	567	14	OK	559		
14	RI	68%	14	MI	568	15	AR	566	15	AL	554		
15	VT	67%		MS		16	CO	565	16	KY	553		
16	FL	65%	16	KY	567	16	KY		MI	549			
17	IN	62%	17	WY	565	18	AL	556	18	CO	549		
	SC		18	AL	563		UT		19	WY	544		
19	HI	61%	19	CO	560	20	MS	549	19	UT		544	
20	OR	54%	20	UT	558	20	NM	546	21	NM	540		
21	WA	53%	21	NM	555	21	ID	543	22	MT	522		
22	TX	52%	22	ID	541	22	MT	543	22	OH		522	
23	CA	49%	23	MT	538	23	OH	542	24	ID	519		
24	AK	48%	24	OH	536	24	ID	539	25	NH	512		
--	U.S.	48%	25	WA	526	25	WA	531	26	MA	511		
25	NV	41%	26	OR	522	26	OR	526	26	CT		511	
26	AZ	32%	27	NH	521	27	AZ	525	28	WA	510		
27	MT	28%	28	AK	519	28	MA	522	29	VT	508		
28	OH	27%		AZ		29	NH	521	30	VT	518	30	WV
29	CO	24%	30	VT	516	30	VT	518	31	OR	502		
30	WV	20%		WV		31	AK	517	31	AZ		502	
31	ID	19%	32	MA	513	32	CA	516	33	VA	498		
32	TN	13%	33	VA	511	--	U.S.	515	33	CA		498	
33	NM	12%	34	CT	510	33	CT	512	34	MD	496		
34	KY	10%	--	U.S.	502	34	VA	511	35	NJ	494		
35	AL	9%	35	MD	500	35	NJ	510	36	NJ	494		
	MI		NV	36		NC	509	--	U.S.	494			
	MN		37	CA	499	37	IN	507	37	RI	492		
38	IL	8%	38	DE	497		37		TX	38	AK	491	
	KS			FL		39	DE	486					
	WY			IN		40	HI	506	40	GA	483		
41	LA	7%	41	RI	496	40	IN		483				
42	MO	6%	42	NJ	495	42	NY	505	42	NY	482		
	NE			NC		43	MD	502		42		PA	482
	OK		44	GA	494	44	PA	499		46		NV	
	UT		45	PA	493	45	RI	498		47		FL	479
	WI		46	TX	492	46	DE	496	48	SC	475		
47	AR	5%	47	NY	491		47		FL	479			
48	IA	4%	48	SC	488	49	GA	495	48	SC	475		
	MS		49	HI	484		49	GA	495	49	HI	473	
	ND		50	DC	478	50	ME	465	50	DC	471		
51	SD	3%	51	ME	466	51	DC	462	51	ME	457		

Note: Average scores are negatively correlated with participation rates. The College Board strongly discourages the comparison or ranking of states on the basis of SAT scores alone. The denominators for participation rates are Western Interstate Commission for Higher Education estimates of high school graduates.

Source: College Board. *College-Bound Seniors 2007* Table 3. Copyright (c) 2007-2008 The College Board, www.collegeboard.com. Reproduced with permission.

**Table A.14 (corresponds to Table 2.23)
Advanced Placement Exam, 2000 and 2007**

High School Class of 2000						High School Class of 2007					
Took an AP Exam in High School			Scored 3 or Higher			Took an AP Exam in High School			Scored 3 or Higher		
Rank	State	%	Rank	State	%	Rank	State	%	Rank	State	%
1	NY	27.3	1	NY	17.9	1	DC	39.7	1	NY	23.4
2	VA	25.0	2	UT	17.4	2	FL	38.0	2	MD	22.4
3	UT	24.5	3	VA	15.9	3	NY	35.5	3	VA	21.5
4	FL	22.7	4	CA	15.0	4	MD	35.3	4	FL	20.3
5	CA	22.2	5	MA	14.5	5	VA	34.4			
6	MD	20.2	6	MD	14.1	6	AR	32.2	6	CT	20.1
7	NC	19.7	7	CT	13.6	7	NC	31.9	7	VT	19.9
8	MA	19.6	8	FL	13.5	8	CO	30.8	8	CA	19.7
9	CT	19.1	9	NJ	12.9	9	CA	30.1	9	UT	19.5
10	CO	18.6	10	CO	12.2	10	VT	29.1	10	CO	19.2
11	NJ	17.9	11	VT	11.5	11	UT	28.9	11	NC	18.5
12	SC	17.7	12	NC	11.3	12	ME	28.8	12	ME	17.8
13	DC	17.3	13	WI	10.5	13	GA	28.6	13	NJ	17.1
14	GA	17.2	--	U.S.	10.2	14	MA	28.1	14	WI	16.5
15	TX	16.6	14	ME	10.1	15	CT	27.7	15	GA	15.3
	VT		16	AK		16	DE	27.4			
--	U.S.	15.9	16	SC	10.0	17	TX	27.3	--	U.S.	15.2
17	AK	15.4	17	IL	9.9	--	U.S.	24.9	17	IL	14.9
18	WI	15.2		18		WA	24.3				
19	NV	15.1	19	GA	9.7	19	NV	24.0	19	DE	14.5
20	ME	14.8	20	NH	9.2	20	WI	23.9			
21	MI	13.9	21	NV	9.1	21	NJ	23.7	21	MN	13.4
22	IL	13.4	22	MI	8.8	22	SC	22.7	22	NV	13.3
	MN		23	PA	8.3	23	IL	22.0			
24	DE	13.3	24	MN	8.1	24	MN	21.6	24	AK	12.8
	NH		25	DE	7.6	25	NH	21.3			
26	PA	12.4	25	WA		7.6	26	AK	20.0	26	OR
27	IN	11.9	27	AZ	7.2	27	OK	19.8	27	PA	11.7
28	WA	11.5	28	OH	7.1	28	MI	19.7	28	OH	11.0
29	AZ	11.3		29		OR	19.6	29	KY	19.6	29
	OH		30	RI	6.9	30	NM	19.2	30	ID	10.1
31	NM	11.1	31	MT	6.8	31	OR	19.1	31	AZ	10.0
32	RI	10.7	32	DC	6.6	32	IN	19.0			
33	HI	10.6	33	ID	6.5	33	TN	18.3	33	IN	9.7
	KY		34	TN	6.2	34	OH	18.0			
35	OR	10.5	35	NM	6.1	35	PA	17.7	35	SD	9.6
36	TN	10.4	36	IN	6.0	36	AZ	16.8	36	AR	9.6
37	MT	10.1	37	SD	5.9	37	HI	16.3	37	OK	9.3
38	ID	9.6	38	HI	5.8	38	MT	15.8	38	NM	9.2
	SD		39	KY	5.5	39	ID	15.8	39	RI	8.7
40	OK	9.5	40	OK	5.4	40	WY	15.7	40	WY	8.4
41	WV	8.4	41	IA	4.9	41	SD	15.5	41	HI	8.3
42	AR	8.1	42	WV	4.6	42	WV	15.2	42	DC	8.1
43	AL	7.2	43	KS	4.4	43	RI	14.0	43	IA	8.0
44	KS	7.0		44		KS	12.5	44	KS	12.5	44
45	IA	6.9	45	AR	4.3	45	IA	12.2	45	ND	7.4
46	WY	6.1	46	AL	3.9	46	MS	11.5	46	WV	7.0
47	ND	5.9	47	WY	3.8	47	AL	11.4	47	MO	6.7
48	MS	5.6	48	MO	3.7	48	MO	10.6	48	AL	6.4
49	MO	5.5	49	NE	3.2	49	ND	10.5	49	NE	5.9
50	NE	5.0	50	MS	2.3	50	NE	10.0	50	MS	3.7
51	LA	3.2	51	LA	1.9	51	LA	5.7	51	LA	2.7

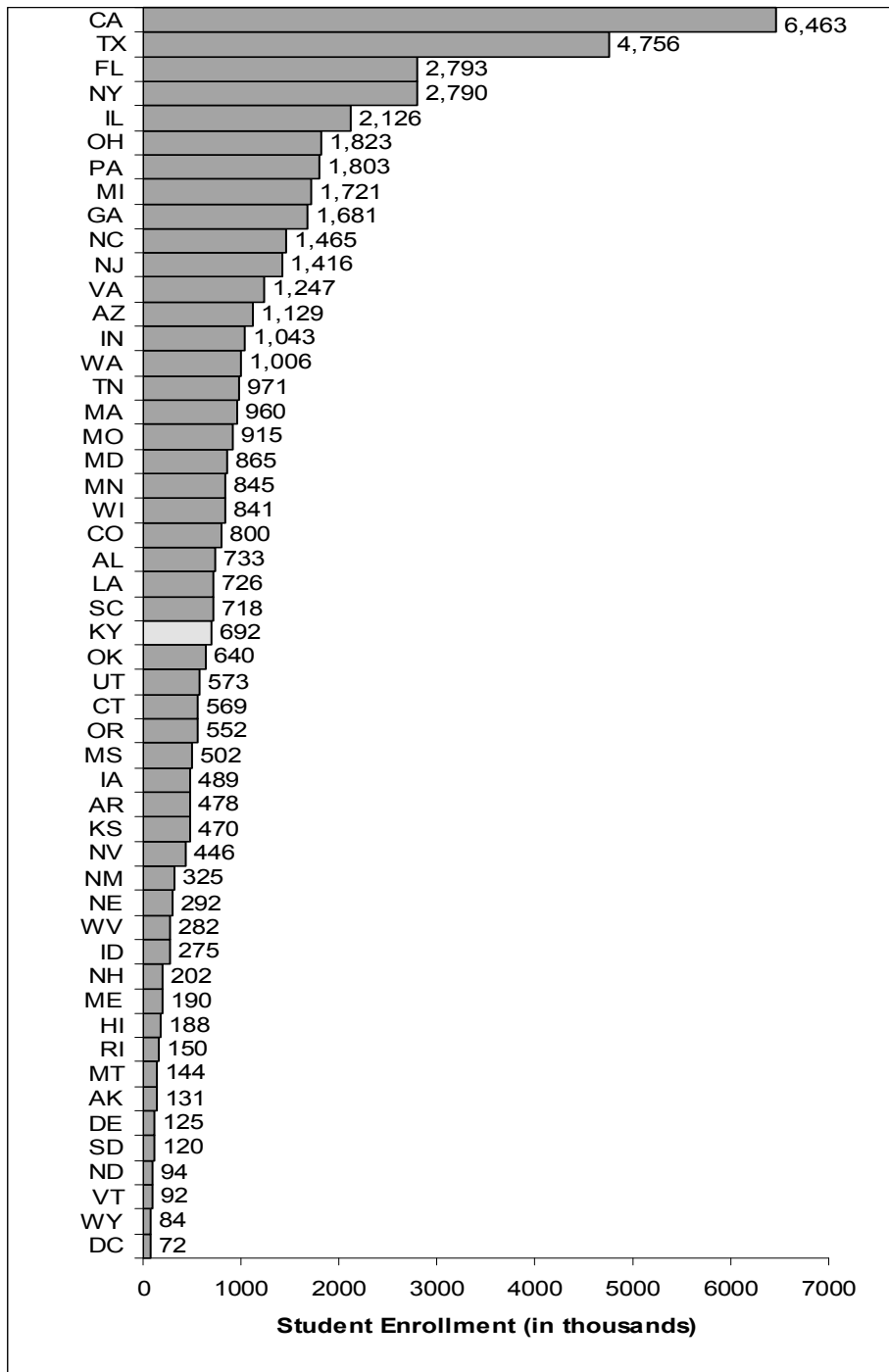
Source: College Board. *Advanced Placement Report to the Nation 2005* 48 and *2008* 52. Copyright (c) 2008 The College Board, www.collegeboard.com. Reproduced with permission.

Table A.15 (corresponds to Table 2.24)
Education Week's Quality Counts Achievement Index, 2008

Rank	State	Total Score	Grade
1	MA	85.2	B
	MD		
3	NJ	80.6	B-
4	VT	79.2	C+
5	PA	77.2	C+
6	VA	76.2	C
7	FL	75.2	C
8	MN	74.3	C
9	NH	73.9	C
10	ME	73.6	C
11	ND	73.4	C
12	KS	73.3	C
13	TX	72.6	C
14	OH	72.4	C-
15	MT	72.3	C-
16	DE	72.2	C-
17	ID	72.1	C-
18	NY	71.9	C-
19	CO	71.5	C-
	IA		
21	WI	71.4	C-
22	WA	70.9	C-
23	SD	70.5	C-
24	WY	70.4	C-
25	IN	70.0	C-
26	UT	69.9	C-
--	U.S.	69.4	D+
27	IL	69.1	D+
28	GA	68.1	D+
29	TN	67.0	D+
30	AK	66.9	D+
31	NE	66.7	D+
	NC		
33	KY	66.5	D+
34	AR	66.3	D
35	CT	66.2	D
36	OK	66.0	D
37	HI	65.1	D
38	CA	64.7	D
	MO		
40	OR	64.5	D
	SC		
42	RI	63.8	D
43	MI	63.5	D
44	AZ	62.6	D
45	NV	62.2	D-
46	NM	60.3	D-
	LA		
48	AL	59.1	F
49	WV	58.1	F
50	DC	57.7	F
51	MS	55.9	F

Source: Editorial Projects in Education. *Education Week's Quality Counts 2008*.

**Figure A.A (corresponds to Figure 3.A)
Total P-12 Student Enrollment (in thousands), FY 2008**



Source: U.S. Dept. of Ed. Inst. Natl. Projections 44-45.

**Table A.16 (corresponds to Table 3.1)
Projected Percent Changes in P-12 Enrollment, Fall 2000–Fall 2016**

2000-2008			2008-2016		
Rank	State	%	Rank	State	%
1	NV	30.8	1	NV	22.6
2	AZ	28.6	2	TX	18.6
3	UT	19.1	3	AZ	18.3
4	TX	17.1	4	ID	17.1
5	GA	16.3	5	UT	16.4
6	FL	14.7	6	FL	16.1
7	NC	13.2	7	GA	15.3
8	ID	12.2	8	HI	13.8
9	CO	10.3	9	NC	11.9
10	VA	8.9	10	AK	11.5
11	DE	8.7	11	CO	10.4
12	NJ	7.8	12	VA	9.1
13	TN	6.8	13	TN	8.9
14	AR	6.2	14	DE	8.8
15	SC	6.1	15	MN	8.3
--	U.S.	5.5	16	NE	7.9
16	IN	5.5	17	MT	7.6
17	CA	5.2	18	AR	7.3
18	DC	4.3	19	OR	7.2
19	KY	3.9	20	WY	7.1
20	IL	3.8	--	U.S.	7.0
21	OK	2.7	21	OK	6.4
22	HI	2.2	22	MD	6.1
23	NE	2.1	23	IA	5.9
24	NM	1.6	24	NM	5.8
25	MD	1.4	25	KS	5.7
26	CT	1.2	26	MO	5.1
27	OR	1.1	27	CA	4.9
28	MS	0.8	28	WA	4.8
29	MO	0.2	29	SC	4.7
30	WA	0.1	30	NH	4.5
31	MI	0.0	31	LA	4.1
32	KS	-0.2	32	KY	3.9
33	PA	-0.6	33	SD	3.3
34	OH	-0.7		WI	
35	AL	-0.9	35	DC	2.8
36	MN	-1.1		NJ	
37	IA	-1.2	37	ME	2.1
38	WV	-1.4	38	MS	1.8
39	AK	-1.5	39	IN	1.5
	MA		40	WV	0.7
41	LA	IL			
42	NH	-2.9	42	AL	0.5
43	NY	-3.2	43	PA	0.4
44	WI	-4.3	44	OH	0.3
45	RI	-4.5	45	VT	0.0
46	WY	-6.7	46	MA	-0.5
47	SD	-7.0	47	MI	-0.6
48	MT	-7.1	48	CT	-0.9
49	ME	-8.2	49	NY	-1.2
50	VT	-9.8	50	ND	-3.2
51	ND	-13.8	51	RI	-3.3

Source: U.S. Dept. of Ed. Inst. Natl. *Projections* 44-45.

Table A.17 (corresponds to Table 3.2)
Enrollment of 3- and 4-Year-Olds in State-Funded Preschool, 2007

3-Year-Olds			4-Year-Olds		
Rank	State	%	Rank	State	%
1	IL	18.5	1	OK	68.4
2	VT	15.6	2	FL	56.7
3	NJ	15.1	3	GA	53.3
4	AR	10.8	4	WV	45.8
5	KY	10.7	5	TX	45.2
6	MA	9.2	6	VT	44.9
7	WV	5.1	7	SC	37.8
8	CA	5.0	8	WI	36.1
9	CT	4.5	9	NY	34.6
10	TX	4.4	10	MD	34.0
--	U.S.	3.2	11	KY	29.3
11	CO	3.1	12	IL	26.7
12	OR	2.6	13	NJ	25.3
13	PA	2.2	14	LA	24.4
	MO		--	U.S.	21.8
15	NE	2.0	15	AR	21.4
16	WA	1.4	16	MI	16.9
17	IA	1.4	17	ME	16.3
18	OH	1.3	18	CT	15.6
	MN				
20	MD	1.2		TN	
21	TN	1.0	21	NC	14.8
22	NM	0.9	22	CO	14.6
23	WI	0.8	23	VA	12.5
24	SC	0.6	24	CA	10.8
25	NY	0.5	25	MA	10.3
26	NV	0.4	26	NM	8.9
27	OK	0.0	27	DE	7.6
	FL		28	PA	7.2
	GA		29	WA	5.8
	LA		30	AZ	5.5
	MI		31	OR	4.8
	ME		32	MO	4.3
	KS		33	IA	4.0
	NC				
	VA		35	OH	3.4
	DE		36	NV	2.2
	AZ		37	MN	1.9
AL	38	AL	1.8		
n.a.	AK	No program	n.a.	AK	No program
	HI			HI	
	ID			ID	
	IN			IN	
	MS			MS	
	MT			MT	
	NH			NH	
	ND			ND	
	RI			RI	
	SD			SD	
UT	UT				
WY	WY				

Note: Nationwide, an additional 17,440 children of other ages are enrolled in state prekindergarten, for a total enrollment of 1,026,037.

Source: Natl. Inst. *The State* 15.

**Table A.18 (corresponds to Table 3.3)
Racial and Ethnic Composition of Students, FY 2006**

American Indian/Alaska Native			Asian/Pacific Islander			Hispanic			Black, Non-Hispanic			White, Non-Hispanic				
Rank	State	%	Rank	State	%	Rank	State	%	Rank	State	%	Rank	State	%		
1	AK	26.6	1	HI	72.8	1	NM	54.0	1	DC	83.3	1	VT	95.5		
2	OK	18.9	2	CA	11.7	2	CA	48.5	2	MS	51.2	2	ME	95.1		
3	MT	11.3	3	WA	8.1	3	TX	45.3	3	LA	44.4	3	WV	93.6		
4	NM	11.1	4	NJ	7.5	4	AZ	39.0	4	SC	40.3	4	NH	93.3		
5	SD	10.5	5	NV	7.3	5	NV	33.6	5	GA	39.2	5	ND	87.2		
6	ND	8.6	6	AK	6.9	6	CO	27.1	6	MD	38.1	6	IA	86.6		
7	AZ	6.2		7		FL	23.9	7	AL	36.0	7	KY	86.3			
8	WY	3.5	8	MN	5.7	8	NY	20.1	8	DE	32.5	8	SD	85.0		
9	WA	2.7	9	MD	5.2	--	U.S.	19.8	9	NC	31.5	9	WY	84.9		
10	OR	2.4		VA		9	IL	19.0	10	VA	27.0	10	MT	84.3		
11	MN	2.1	11	OR	4.9	10	NJ	18.2	11	TN	25.1	11	ID	83.0		
12	NE	1.7	12	MA	4.7	11	RI	17.3	12	FL	23.9	12	UT	81.8		
13	ID	1.6	--	U.S.	4.6	12	OR	15.9	13	AR	23.0	13	IN	80.3		
	NV		13	IL	3.8	13	CT	15.4	14	IL	20.6	14	OH	79.0		
15	KS	1.5	14	CT	3.6	14	WA	13.6	15	MI	20.3	15	MN	78.3		
	UT			15		MA	13.1	16	NY	19.8	16	WI	77.8			
	WI		16	CO	3.3	16	ID	12.8	17	MO	18.2	17	NE	77.5		
18	NC	1.4	17	RI	3.1	17	UT	12.3	18	NJ	17.6	18	MO	76.6		
--	U.S.	1.2		TX		18	KS	12.1	--	U.S.	17.2	19	KS	75.4		
19	CO	1.2	UT	2.8	19	NE	11.5	19	OH	17.1	20	PA	74.8			
20	MI	1.0	DE		20	DC	10.6	20	PA	16.2	21	OR	73.6			
21	AL	0.8	20	GA	2.5	21	DE	9.2	21	TX	14.7	22	MA	73.5		
	CA			22		AZ	9.0	22	CT	13.7	23	MI	71.9			
	LA		23	PA	8.9	23	IN	12.5	24	RI	70.4					
24	AR	0.7	24	KS	2.4	24	GA	8.7	24	NV	11.1	25	WA	69.8		
25	HI	0.6		MI		25	NC	8.4	25	OK	10.9	26	TN	69.5		
	IA		26	FL	2.2	26	VA	7.7	26	KY	10.6	27	AR	68.2		
	RI		27	NC	2.1	27	MD	7.6	27	WI	10.5	28	CT	67.0		
28	ME	0.5	28	IA	1.9	28	AR	6.8	28	KS	8.6	29	CO	62.5		
	NY			NH		29	WI	6.7		30		VA	59.8			
30	CT	0.4	30	NE	1.8	30	PA	6.4	30	MN	8.5	31	OK	59.6		
	MD		31	OK	1.7	31	IA	5.8	31	MA	8.4	32	AL	59.4		
	MO		32	ID	1.6	32	IN	5.7	32	CA	8.0	33	AK	57.7		
	VT			MO		33	MN	5.4	33	NE	7.6	--	U.S.	57.1		
34	DE	0.3	35	VT	1.4	34	HI	4.5	34	CO	6.0	34	NC	56.6		
	FL			AR		35	MI	4.4	35	WA	5.7	35	NJ	56.5		
	IN			DC		36	AK	4.2	36	AZ	5.2	36	IL	56.4		
	MA			ME		37	SC	4.0	37	IA	5.1	37	DE	55.1		
	NH			OH		38	TN	3.8	38	WV	5.0	38	SC	54.0		
	SC		TN	39	MO	3.2	39	AK	4.6	39	NY	52.7				
	TX		40	LA	1.3	40	AL	2.8	40	OR	3.2	40	LA	51.5		
	VA			NM		41	NM		2.5	41	FL	49.6				
	42		IL	0.2	43	SC	1.2	42	MT	2.4	42	HI	2.4	42	GA	49.2
			KY			IN		43	OH	43	ME	2.0	43	MD	48.6	
MS		44	MT		1.1	44	KY	2.1	44	NH	1.7	44	AZ	47.2		
NJ			WY			45	LA	45	SD	1.6	45	MS	46.5			
TN			AL			46	SD	2.0	46	ND	1.5	46	NV	46.4		
47	DC	0.1	46	SD	1.0	47	ND	1.7		47		TX	36.5			
	GA			48		KY	0.9	48	MS	1.4	48	NM	31.1			
	OH		50	ND	0.8	49	VT	1.0	49	UT	1.3	49	CA	31.0		
	PA			MS		50	ME	0.9	50	ID	1.0	50	HI	19.8		
WV	51	WV	0.6	51	WV	0.7	51	MT	0.9	51	DC	4.5				

Source: U.S. Dept. of Ed. Inst. Natl. *Public 9*.

**Table A.19 (corresponds to Table 3.4)
Median Family Income in Nominal Dollars, 1989, 1999, and 2006**

1989			1999			2006			Sig.
Rank	State	\$	Rank	State	\$	Rank	State	\$	
1	CT	49,199	1	CT	65,521	1	CT	78,154	
2	NJ	47,589	2	NJ	65,370	2	NJ	77,875	
3	AK	46,581	3	MD	61,876	3	MD	77,839	
4	MD	45,034	4	MA	61,664	4	MA	74,463	
5	MA	44,367	5	AK	59,036	5	NH	71,176	
6	HI	43,176	6	NH	57,575	6	HI	70,277	
7	NH	41,628	7	HI	56,961	7	AK	69,872	
8	CA	40,559	8	MN	56,874	8	VA	66,886	
9	DE	40,252	9	CO	55,883	9	MN	66,809	
10	NY	39,741	10	IL	55,545	10	RI	64,733	
11	RI	39,172	11	DE	55,257	11	CO	64,614	
12	IL	38,664	12	VA	54,169	12	CA	64,563	
13	VA	38,213	13	WA	53,760	13	WA	63,705	
14	MN	36,916	14	MI	53,457	14	IL	63,121	
15	WA	36,795	15	CA	53,025	15	DE	62,623	
16	MI	36,652	16	WI	52,911	16	NY	62,138	
17	DC	36,256	17	RI	52,781	17	NV	61,466	
18	CO	35,930	18	NY	51,691	18	DC	61,105	
19	NV	35,837	19	UT	51,022	19	WI	60,634	
--	U.S.	35,225	20	NV	50,849	--	U.S.	58,526	
20	WI	35,082	21	IN	50,261	20	VT	58,163	
21	PA	34,856	--	U.S.	50,046	21	PA	58,148	
22	VT	34,780	22	OH	50,037	22	UT	58,141	
23	OH	34,351	23	KS	49,624	23	MI	57,996	
24	IN	34,082	24	GA	49,280	24	WY	57,505	
25	GA	33,529	25	PA	49,184	25	NE	56,940	
26	UT	33,246	26	OR	48,680	26	KS	56,857	
27	KS	32,966	27	VT	48,625	27	OH	56,148	
28	ME	32,422	28	NE	48,032	28	GA	56,112	
29	OR	32,336	29	IA	48,005	29	OR	55,923	
30	WY	32,216	30	AZ	46,723	30	IN	55,781	
31	FL	32,212	31	NC	46,335	31	IA	55,735	
32	AZ	32,178	32	DC	46,283	32	AZ	55,709	
33	MO	31,838	33	MO	46,044	33	ND	55,385	
34	IA	31,659	34	TX	45,861	34	FL	54,445	
35	NE	31,634	35	WY	45,685	35	SD	53,806	
36	TX	31,553	36	FL	45,625	36	MO	53,026	
37	NC	31,548	37	ME	45,179	37	ME	52,793	
38	SC	30,797	38	SC	44,227	38	TX	52,355	
39	TN	29,546	39	ND	43,654	39	NC	52,336	
40	ID	29,472	40	TN	43,517	40	ID	51,640	
41	ND	28,707	41	ID	43,490	41	MT	51,006	
42	AL	28,688	42	SD	43,237	42	SC	50,334	
43	OK	28,554	43	AL	41,657	43	TN	49,804	
44	MT	28,044	44	KY	40,939	44	AL	49,207	
45	NM	27,623	45	OK	40,709	45	KY	48,726	
46	SD	27,602	46	MT	40,487	46	LA	48,261	
47	KY	27,028	47	LA	39,774	47	NM	48,199	
48	LA	26,313	48	NM	39,425	48	OK	47,955	
49	WV	25,602	49	AR	38,663	49	AR	45,093	
50	AR	25,395	50	MS	37,406	50	WV	44,012	
51	MS	24,448	51	WV	36,484	51	MS	42,805	

Notes: Incomes for 1989 and 1999 are from decennial censuses. Incomes for 2006 are from the 2006 American Community Survey, which is subject to sampling error. Each difference between Kentucky and another state was tested for statistical significance with a 95 percent confidence level; > indicates states with significantly higher incomes than Kentucky, = indicates states not significantly different, and < indicates states with significantly lower incomes than Kentucky. Statistical tests used unrounded percentages and took into account each state's sample size and variance; therefore, states with the same percentages can have different levels of significance.

Sources: U.S. Dept. of Commerce. Census. "American Community Survey" and "Decennial Census."

**Table A.20 (corresponds to Table 3.5)
Children Living Below the Federal Poverty Line
1989, 1999, and 2005**

1989			1999			2005			Sig.	
Rank	State	%t	Rank	State	%	Rank	State	%		
1	MS	25.2	1	DC	20.2	1	DC	32.6	>	
2	LA	23.6	2	MS	19.9	2	MS	29.5		
3	NM	20.6	3	LA	19.6	3	LA	27.8		
4	WV	19.7	4	NM	18.4	4	NM	25.6		
5	AR	19.1	5	WV	17.9	5	WV	25.2		
6	KY	19.0	6	AL	16.1	6	AR	24.3		
7	AL	18.3	7	AR	15.8		OK			
8	TX	18.1		KY			8	TX		23.9
9	DC	16.9	9	TX	15.4	9	AL	23.0		=
10	OK	16.7	10	OK	14.7	10	KY	22.8		
11	MT	16.1	11	MT	14.6	11	TN	22.7		
12	SD	15.9		NY			12	SC		22.1
13	AZ	15.7	13	CA	14.2	13	GA	20.2	<	
	TN		14	SC	14.1		NC			
15	SC	15.4	15	AZ	13.9	15	NY	20.0		
16	GA	14.7	16	TN	13.5	16	AZ	19.5		
17	ND	14.4	17	SD	13.2	17	OH	18.7		
18	MO	13.3	18	GA	13.0	18	MO	18.6		
	ID		19	FL	12.5	--	U.S.	18.3		
--	U.S.	13.1	--	U.S.	12.4	19	MI	18.3		
20	MI	13.1	20	NC	12.3	20	CA	18.1		
21	NY	13.0	21	RI	11.9	21	IN	17.9		
	NC			ND		22	ME	17.6		
23	FL	12.7	23	ID	11.8	23	FL	17.5		
24	OH	12.5	24	MO	11.7	24	MT	17.3		
	CA		25	OR	11.6	25	IL	17.1		
26	OR	12.4	26	WY	11.4	26	PA	16.9		
27	IL	11.9	27	PA	11.0	27	OR	16.8		
	WY		28	ME	10.9		SD			
29	CO	11.7	29	HI	10.7	29	DE	15.8		
30	IA	11.5		IL			30	CO		15.7
	KS		31	WA	10.6	31	KS	15.6		
32	UT	11.4		OH			32	WA		15.4
33	NE	11.1	33	MI	10.5	33	AK	15.1		
	PA			NV			ID			
35	WA	10.9	35	KS	9.9		RI			
36	ME	10.8	36	NE	9.7	36	WI	14.9		
37	WI	10.7	37	VA	9.6	37	NE	14.4		
	IN		38	IN	9.5	38	NV	13.9		
39	VA	10.2	39	VT	9.4	39	IA	13.7		
	MN			UT		40	VT	13.2		
	NV			AK		41	ND	13.0		
42	VT	9.9	42	MA	9.3	42	MA	12.4		
43	RI	9.6		CO			43	MN		12.2
44	AK	9.0	44	DE	9.2	VA				
45	MA	8.9	45	IA	9.1	45	WY	12.0		
46	DE	8.7	46	WI	8.7	46	UT	11.9		
47	MD	8.3	47	NJ	8.5	47	NJ	11.8		
	HI			MD		48	HI	11.4		
49	NJ	7.6	49	MN	7.9	49	CT	11.0		
50	CT	6.8		CT			50	MD	9.7	
51	NH	6.4	51	NH	6.5	51	NH	9.6		

Notes: > indicates states scoring with significantly higher percentages than Kentucky, = indicates states not significantly different, and < indicates states with significantly lower percentages than Kentucky. Statistical tests used unrounded percentages and took into account each state's sample size and variance; therefore, states with the same percentages can have different levels of significance.

Source: U.S. Dept. of Commerce. Census. "American Community Survey" and "Decennial Census."

**Table A.21 (corresponds to Table 3.6)
NCES Comparable Wage Index, 2005**

Rank	State	Average CWI for All Labor Markets in State	Range of CWI Across All Labor Markets in State				
			Rank	State	Range	Lowest	Highest
1	DC	1.554	--	U.S.	0.835	0.833	1.669
2	NJ	1.429	1	CA	0.829	0.840	1.669
3	NY	1.415	2	WV	0.574	0.980	1.554
4	CT	1.391	3	NY	0.554	1.004	1.558
5	CA	1.387	4	TX	0.534	0.855	1.389
6	MA	1.376	5	MD	0.491	1.063	1.554
7	VA	1.369	6	VA	0.488	1.066	1.554
8	MD	1.368	7	PA	0.483	0.984	1.467
9	WA	1.314	8	CT	0.476	1.106	1.583
10	IL	1.306	9	FL	0.432	0.833	1.265
11	DE	1.286	10	MA	0.430	1.004	1.435
12	RI	1.278	11	IL	0.424	0.964	1.387
--	U.S.	1.265	12	NM	0.411	0.902	1.313
13	NV	1.258	13	TN	0.395	0.894	1.290
14	TX	1.251	14	AR	0.380	0.910	1.290
15	GA	1.242	15	KY	0.379	0.913	1.293
16	MI	1.235	16	NC	0.365	0.942	1.308
17	MN	1.223	17	MS	0.360	0.930	1.290
18	CO	1.213	18	MO	0.349	0.897	1.246
19	OH	1.211	19	CO	0.347	0.931	1.278
20	PA	1.205	20	WI	0.345	1.027	1.371
21	AK	1.201	21	NJ	0.339	1.220	1.558
22	WI	1.200	22	MN	0.323	0.983	1.305
23	HI	1.198	23	GA	0.314	0.991	1.305
24	NC	1.194	24	IN	0.313	0.979	1.293
25	NH	1.177	25	DE	0.308	1.031	1.338
26	FL	1.171	26	MI	0.307	1.026	1.333
27	TN	1.163		KS		0.903	1.209
28	UT	1.159	28	WA	0.302	1.085	1.387
	AZ		29	OH	0.300	0.992	1.293
30	OR	1.156	30	LA	0.290	0.913	1.203
31	MO	1.144	31	IA	0.257	0.923	1.179
32	SC	1.140	32	OR	0.254	0.980	1.234
33	IN	1.123	33	NE	0.252	0.922	1.174
34	KY	1.117	34	AZ	0.236	0.970	1.205
35	NM	1.109	35	SC	0.229	1.079	1.308
36	AL	1.108	36	OK	0.223	0.905	1.128
37	LA	1.097	37	ID	0.213	0.854	1.068
38	WV	1.071	38	NV	0.211	1.095	1.306
39	KS	1.070	39	ME	0.210	0.931	1.142
	NE		40	AL	0.205	0.970	1.174
	VT		41	NH	0.204	1.060	1.264
42	OK	1.064	42	UT	0.186	1.009	1.194
43	IA	1.059	43	SD	0.180	0.878	1.058
44	ME	1.056	44	MT	0.137	0.883	1.020
45	MS	1.051	45	WY	0.113	0.983	1.096
46	AR	1.041	46	AK	0.111	1.145	1.256
47	WY	1.024	47	ND	0.107	0.967	1.074
48	ID	1.018	48	VT	0.080	1.030	1.110
49	ND	1.014	49	RI	0.000	1.283	1.283
50	SD	0.962		HI		1.198	1.198
51	MT	0.936		DC		1.554	1.554

Source: U.S. Dept. of Ed. Inst. Natl. "NCES Comparable."

**Table A.22 (corresponds to Table 3.7)
Students in Title I Schools or Eligible for National School Lunch Program, FY 2006**

All Title I Schools			Title I Schools with Schoolwide Programs			Eligible for Free Lunch			Eligible for Reduced-price Lunch			Eligible for Free or Reduced-price Lunch		
Rank	State	%	Rank	State	%	Rank	State	%	Rank	State	%	Rank	State	%
1	OR	99.9	1	DC	81.3	1	MS	62.3	1	HI	11.3	1	MS	69.5
2	IN	96.1	2	MS	61.6	2	LA	53.9	2	OK	10.4	2	LA	61.2
3	DC	85.4	3	TX	60.4	3	DC	49.1	3	WY	10.1	3	NM	55.7
4	MT	79.3	4	HI	53.6	4	NM	47.9	4	ID	10.0	4	OK	54.5
5	ID	67.9	5	KY	52.8	5	OK	44.1	5	KS	9.9	5	DC	53.4
6	AR	67.1	6	LA	51.0	6	AR	44.0	6	WV	9.8	6	AR	52.9
7	HI	65.9	7	NM	47.3	7	KY	43.8	7	CA	9.2	7	KY	52.4
8	OK	65.8	8	OK	46.1	8	SC	43.7		NE		8	AL	51.7
9	MS	65.6	9	AR	45.8	9	AL	43.0	9	UT	9.1	9	SC	51.5
10	TX	64.7	10	AL	45.1	10	GA	41.5	10	SD	9.0	10	GA	49.8
11	OH	63.8	11	TN	38.6	11	TX	40.0	11	AR	8.8	11	WV	49.1
	ME		12	CA	37.9	12	CA	39.3	12	FL	8.7	12	CA	48.5
13	NY	63.5	13	GA	37.5				WV		13	KY	8.6	13
14	PA	63.4	14	SC	34.4	14	FL	37.1		AL		14	TN	47.1
15	KY	60.6	15	FL	34.1	15	AZ	36.9	15	OR	8.5	15	FL	45.8
16	NM	59.2	16	AZ	32.8	16	NY	36.8	16	MT	8.4	16	AZ	45.0
17	WI	58.2	17	NY	31.7	17	NC	35.2	17	GA	8.2	17	NY	44.4
18	CA	58.0	--	U.S.	31.3	18	OR	34.6				TX		18
19	LA	57.7	18	DE	29.8	--	U.S.	32.4	19	WA	8.1	19	NC	42.6
20	VT	56.0	19	NC	29.7	19	IL	31.5				AZ		--
21	AL	55.5	20	VA	27.4				MO		21	ND	8.0	20
22	ND	55.2	21	VT	26.3	21	DE	30.7	22	IN	7.9	21	HI	40.5
23	IL	54.4				MI		22		HI		29.2		SC
--	U.S.	52.3	23	WV	26.2	23	MI	29.1	24	NM	7.8	23	KS	38.8
24	AZ	51.6	24	IL	24.8	24	KS	28.9	25	IA	7.7	24	ID	37.8
	WA		25	MA	22.0	25	RI	28.4				MO		25
26	MA	50.8	26	OH	21.6	26	WA	28.3		NY		26	WA	36.5
27	WY	47.8	27	OR	21.5	27	IN	28.2	--	U.S.	7.4	27	DE	36.1
28	CO	46.1	28	WA	21.0	28	ID	27.8	28	NC	7.4		IN	
29	GA	45.9	29	MT	19.8	29	CO	26.9				ME		29
30	TN	45.3	30	KS	19.6	30	ME	26.4	30	MN	7.3	30	RI	35.3
31	SD	45.1	31	RI	19.3					OH				LA
32	DE	44.6	32	PA	18.5	32	MT	26.1		MS		32	MT	34.5
33	MO	42.7	33	CO	18.0	33	NE	25.5	33	MD	7.2	33	ME	33.8
34	CT	41.9	34	NE	17.6	34	PA	25.0	34	VT	6.9	34	CO	33.1
35	KS	39.4	35	SD	17.5	35	AK	24.7	35	RI	6.8	35	OH	32.5
36	RI	39.3				AK		36		MD		24.4		VA
37	MN	38.4	37	WY	17.2		IA			37	AK		6.7	37
38	NH	38.0	38	MD	16.8	38	VA	24.3	38	MI	6.5	38	SD	32.0
39	IA	37.4	39	NV	16.5	39	UT	23.2	39	PA	6.4	39	WY	31.6
40	NC	37.3	40	MO	15.8	40	MA	23.1	40	CO	6.2			
41	SC	36.9	41	WI	15.6	41	SD	23.0				OH		41
42	WV	36.7					UT				MN		42	IL
43	FL	34.9	43	CT	12.4	43	ND	21.6	43	CT	5.6	43	VA	31.1
44	NE	34.5	44	ID	12.2	44	WY	21.5				NJ		44
45	AK	33.8	45	ND	11.4	45	NJ	21.2	45	DE	5.4	45	ND	29.6
46	VA	27.4	46	MN	9.9	46	CT	20.9	46	MA	5.2	46	WI	29.3
47	MI	26.3	47	IA	8.6	47	VT	19.5	47	NH	5.1	47	MA	28.2
48	MD	20.1	48	IN	6.8	48	NH	11.9	48	DC	4.3	48	NJ	26.8
49	UT	19.6	49	NH	5.6	n.a.	NV	n.a.	n.a.	NV	n.a.	49	CT	26.5
50	NV	16.5	50	ME	4.5					TN				TN
n.a.	NJ	n.a.	n.a.	NJ	n.a.		WI			WI		51	NH	17.1

Source: U.S. Dept. of Ed. Inst. Natl. Numbers and Types of Public Elem. and Secondary Schools 4-5 and Common.

Table A.23 (corresponds to Table 3.8)
Students Receiving English Language Learner Services, FY 2006

Rank	State	%
1	CA	24.9
2	NM	19.2
3	AZ	16.0
4	TX	15.7
5	AK	15.6
6	NV	15.5
7	CO	12.8
8	OR	12.0
9	HI	9.9
10	UT	9.8
--	U.S.	8.6
11	FL	8.3
12	OK	7.5
13	WA	7.3
14	ID	6.9
	NY	
	MN	
17	DC	6.5
18	NE	6.1
19	VA	6.0
20	IN	5.5
21	GA	5.4
22	MA	5.3
	KS	
24	NC	5.2
	CT	
26	DE	4.9
	RI	
28	MT	4.6
29	AR	4.4
30	SD	4.2
31	MI	3.8
32	MD	3.7
33	NJ	3.6
	WY	
35	WI	3.4
36	IA	3.1
37	AL	2.2
38	SC	2.1
39	MO	2.0
40	VT	1.8
	LA	
42	ME	1.7
43	OH	1.6
44	KY	1.5
45	WV	0.7
46	MS	0.6
n.a.	IL	n.a.
	ND	
	NH	
	PA	
	TN	

Source: U.S. Dept. of Ed. Inst. Natl. *Common.*

**Table A.24 (corresponds to Table 3.9)
Students With Individualized Education Programs, FY 2006**

Rank	State	%
1	NJ	26.7
2	NM	19.7
3	RI	18.0
4	AZ	18.0
5	WV	17.6
6	DC	17.4
7	IN	17.1
8	ME	16.9
9	AL	16.8
10	NE	16.2
11	KY	16.0
12	SC	15.6
13	MA	15.4
14	IL	15.3
15	OK	15.2
16	SD	15.1
17	FL	14.9
18	WI	14.8
	NH	
	IA	
21	DE	14.7
22	OR	14.6
	PA	
24	OH	14.5
25	VA	14.4
26	MI	14.1
	ND	
28	KS	14.0
29	MN	13.8
30	MS	13.7
--	U.S.	13.6
31	NC	13.6
32	AK	13.5
	WY	
34	TN	13.3
35	NY	13.2
	UT	
	MT	
38	LA	13.0
39	MD	12.8
40	GA	12.4
41	AR	12.3
42	WA	12.0
	HI	
44	CT	11.6
45	TX	11.3
	VT	
47	NV	11.1
48	ID	11.0
49	CA	10.7
50	CO	10.1
51	MO	0.0

Source: U.S. Dept. of Ed. Inst. Natl. *Common.*

Table A.25 (corresponds to Table 3.11)
Overall Child Well-being, 2007 KIDS COUNT Data Book

Overall Rank	State
1	Minnesota
2	New Hampshire
3	Connecticut
4	Utah
5	Massachusetts
6	Vermont
7	Iowa
8	North Dakota
9	New Jersey
10	Nebraska
11	Hawaii
12	Wisconsin
13	Washington
14	Virginia
15	Maine
16	Kansas
17	Oregon
18	New York
19	California
20	Rhode Island
21	Pennsylvania
22	Idaho
23	Colorado
24	Maryland
25	Wyoming
26	Illinois
27	Michigan
28	Ohio
29	Montana
30	South Dakota
31	Indiana
32	Florida
33	Nevada
34	Missouri
35	Delaware
36	Arizona
37	Texas
38	Alaska
39	North Carolina
40	Kentucky
41	Georgia
42	Oklahoma
43	Tennessee
44	West Virginia
45	Arkansas
46	South Carolina
47	New Mexico
48	Alabama
49	Louisiana
50	Mississippi

Source: Annie E. Casey.

Table A.26 (corresponds to Table 3.12)
Education Week's Quality Counts Chance-for-Success-Index

Rank	State	Score	Grade
1	Massachusetts	94.1	A
2	New Jersey	91.0	A-
3	New Hampshire	90.1	
4	Connecticut	89.8	
5	Vermont	89.3	B+
6	Maryland	88.2	
7	Minnesota	87.2	
8	Virginia	85.9	B
9	North Dakota	84.8	
10	Pennsylvania	83.7	
11	Iowa	83.6	
12	South Dakota	82.9	
13	New York, Delaware, Kansas	82.6	
16	Colorado	82.5	B-
17	Wisconsin	82.4	
18	Utah	82.2	
19	Illinois	81.3	
20	Rhode Island, Nebraska	81.1	
22	Montana	81.0	
23	Maine	80.1	C+
24	Washington, Ohio	79.6	
26	Wyoming	79.0	
27	Michigan	78.6	
--	U.S. ¹	78.4	
28	Missouri	77.5	
29	Indiana, Hawaii	77.4	C
31	North Carolina	77.1	
32	Florida	76.6	
33	District of Columbia	76.4	
34	Idaho	76.2	
35	Oregon	75.6	
36	Georgia	75.2	C-
37	Alaska	74.8	
38	Kentucky	74.7	
39	South Carolina	74.3	
40	California	73.9	
41	Texas	73.3	
42	Alabama	72.1	D+
43	Tennessee, Oklahoma	71.9	
45	Arkansas	71.7	
46	Arizona	71.5	
47	West Virginia	70.8	
48	Nevada	68.5	
49	New Mexico	68.0	D+
50	Louisiana	67.9	
51	Mississippi	67.7	

Source: Editorial Projects in Education. *Education Week's Quality Counts* 2008.

**Table A.27 (corresponds to Table 4.1)
Student-Teacher Ratio, Total and by Grade Level, FY 2006**

Total			Elementary			Middle School			High School				
Rank	State	Ratio	Rank	State	Ratio	Rank	State	Ratio	Rank	State	Ratio		
1	RI	10.7	1	VT	11.4	1	RI	11.0	1	DC	10.5		
2	VT	10.9	2	RI	11.5	2	VT	11.1	2	VT	11.6		
3	ME	11.7	3	ME	11.9	3	ME	12.0	3	RI	11.8		
4	ND	12.3	4	ND	12.4	4	NJ	12.2	4	CT	12.3		
5	NJ	12.4	5	WY	12.9	5	DC	12.7	5	ND	12.7		
6	VA	12.6	6	NH	13.1	6	MA	12.8	6	AR	12.9		
	WY			SD			7		ME	13.0			
8	AL	12.8		VA		8	WY	12.9	8	NJ	13.1		
9	NY	12.9	NJ	13.2	9	ND	13.2	WY					
10	MA	13.2	10	IA	13.4	11		VA	13.4	10	KS	13.8	
	NH		11	NE	13.5	12	IA	13.5					
12	NE	13.4	12	MA	13.6	13	NE	13.6	NH				
	SD		13	MO	13.7	14	NY		13.9				
14	IA	13.7	14	DC	13.8	15	SD	13.7	14	MT	13.9		
	MO			16		KS	14.0	15	NE	14.0			
16	KS	13.9	16	KS	14.0	16	MT	14.0	16	IA	14.2		
17	DC	14.0	17	MT	14.2	17	AR	14.1	17	VA	14.5		
	MT			18		CT	14.2	18	OK	14.6			
19	WV	14.1	18	GA	14.3	18		WI	14.2	19	TX	15.0	
20	AR	14.4		20		AL	14.4	20	WV	14.3	20	NY	15.2
21	CT	14.5	21	NM	14.5	21	MO	14.7	21	WI	15.5		
22	SC	14.6	22	SC	14.6		22		NM	14.7	22	LA	15.6
	WI			23		TX	14.8	23	MO	15.7			
24	GA	14.7	24	NC	14.7	24	NC	14.9	23		WV	15.7	
	LA		25	LA	14.9		24		PA	15.8	25	SC	15.8
26	NC	14.8	26	KY	15.1	27	SC	15.0	26		NC	15.9	
	NM			MD		28	GA		15.2	26	PA		15.9
28	PA	15.0	28	TN	15.3	28	LA	15.2	28	NM	16.0		
	TX		29	DE	15.4	29	MD	15.4	29	IL	16.4		
30	DE	15.1		31		FL	15.5	30	MS	15.5	30	AL	16.5
31	MD	15.2	32	AR	15.6	31	OK		15.5		30	DE	
	OK		33	PA	15.8	32	IL	15.8	32	GA	16.7		
33	OH	15.6	33	PA	15.8	32	OH		15.8	33	MS	16.8	
--	U.S.	15.7	--	U.S.	15.9	--	U.S.	16.0	--	U.S.	17.0		
34	MS	15.7	34	AK	16.1	34	HI	16.0	34	HI	17.0		
35	IL	15.8	35	OK	16.2	35	KY	16.3	35	KY	17.2		
36	KY	16.0	36	HI	16.3	36	AK	16.4		35		MD	17.2
	TN		37	MN	16.7	37	CO	16.5		35		OH	17.2
38	HI	16.3	38	CO	16.8	38	DE	16.7	38	CO	17.9		
39	MN	16.4	39	IL	17.0	39	TN	17.0	39	ID	18.1		
40	AK	16.8	40	MS	17.1	40	MN	17.2		39		MN	18.1
	FL		41	CT	17.2	41	AL	17.4	41	IN	18.8		
42	CO	17.0	42	NV	17.5	42	IN	17.6	42	AK	18.9		
43	IN	17.1		OH		43	FL	17.7	43	TN	19.1		
44	MI	17.4	44	IN	17.6	44	ID	17.8	44	FL	19.8		
45	ID	18.0	45	MI	18.0		44		MI	17.8	45	MI	19.9
46	NV	19.0	46	ID	18.7	46	OR	19.4	46	UT	20.1		
47	WA	19.3	47	WA	18.9	47	WA	19.6	47	OR	20.9		
48	OR	19.5	48	OR	19.7	48	UT	20.9	48	WA	21.3		
49	CA	20.8	49	CA	20.1	49	NV	22.8	49	NV	23.1		
50	AZ	21.3	50	UT	20.6	50	CA	23.3	50	CA	23.7		
51	UT	22.1	n.a.	AZ	n.a.	n.a.	AZ	n.a.	n.a.	AZ	n.a.		

Notes: Student-teacher ratio uses student membership and full-time equivalent counts of teachers.

Sources: U.S. Dept. of Ed. Inst. Natl. *Common Core and Numbers and Types of Public Elem. and Secondary Schools 8-9.*

**Table A.28 (corresponds to Table 4.2)
Teachers as a Percentage of All Staff
Fall 1985, 1995, and 2005**

1985			1995			2005		
Rank	State	%	Rank	State	%	Rank	State	%
1	ID	63.9	1	RI	63.5	1	SC	71.5
2	RI	63.3	2	MN	62.7	2	NV	67.2
3	ME	61.2	3	HI	62.3	3	NY	58.6
4	WI	59.7	4	ID	58.6	4	RI	58.2
5	NH	59.6	5	NV	58.5	5	WI	57.0
6	DC	58.6	6	WI	57.9	6	ID	55.8
7	MN	58.4	7	DC	56.4	7	AL	55.7
8	UT	58.1	8	MA	55.4	8	CA	53.4
9	MA	57.7	9	OH	55.2	9	HI	53.3
10	KS	57.3	10	CT	54.5	10	MT	53.1
	SD			11		ND	52.9	
12	NE	57.2		12		MA	52.7	
13	ND	57.0	13	MD	54.4	13	NC	52.5
14	SC	56.7	14	ND	54.3	14	VA	52.3
15	IL	56.6		16		WV		
16	WA	56.4		16		TN	52.2	
17	PA	55.6	17	MT	54.2	17	MO	52.1
18	DE	55.4	18	TN	54.0	18	NJ	52.0
19	WV	55.0	19	AR	53.8	19	NE	51.9
20	VA	54.3	20	KS	53.7	20	DE	51.7
21	IA	54.0	21	UT	53.6	21	AZ	51.3
	OH		22	NH	53.3			
23	MD	53.9	22	SC	53.2	--	U.S.	51.2
	NJ			23		OK	51.1	
25	OK	53.5	24	NJ	53.0	24	MD	51.0
26	AR	53.4	26	PA	53.0	25	IA	50.9
27	MO	53.3	27	AL	52.9		PA	
28	NM	53.2		27		NE	50.6	
29	NY	53.1	29	CO	52.5	27	FL	50.6
--	U.S.	53.0	30	ME	52.3	29	IL	50.2
30	OR	53.0	31	NC	52.2	29	UT	50.2
31	GA	52.8	32	IA	52.1	30	GA	49.6
32	AL	52.4	32	U.S.	52.0	31	OH	49.4
	NC		--	U.S.	52.0	32	CO	49.2
34	VT	52.3	33	CA	52.0	33	MN	48.9
35	AZ	52.0		34		TX	48.7	
36	FL	51.6	35	OR	51.8	35	NH	48.5
37	CO	51.4	36	WA	51.4	36	MI	48.3
38	KY	51.1	37	WY	51.2	37	LA	48.2
	TN		38	NY	51.0	38	SD	48.0
40	AK	51.0	39	LA	50.5	39	ME	47.3
41	IN	50.8	40	AZ	50.1	40	OR	47.0
	WY		41	AK	49.1		42	
43	TX	50.7	41	VT	48.3	43	CT	46.9
44	MI	48.7		43		FL	46.7	
45	CA	48.6	44	NM	48.2	44	VT	46.5
46	LA	48.2		45		GA	48.2	
47	MS	47.0	46	IN	48.0	46	WY	46.2
48	HI	42.5		47		MO	45.9	
n.a.	CT	n.a.	48	MS	47.6	48	IN	45.5
	MT		49	OK	47.0	49	DC	44.3
	NV		50	MI	46.9	50	AK	44.1
			51	KY	46.3	51	KY	43.3

Notes: For 1985, ranks are out of 48 states; CT, MT, and NV are not shown because they underreported support staff. The U.S. value includes estimates for these three states.

Sources: Staff compilation of data from U.S. Dept. of Ed. Inst. Natl. Digest, various years.

Table A.29 (corresponds to Table 4.3)
Staffing Rates
Full Time Equivalent Staff Members Per 1,000 Students, FY 2006

All Staff			Teachers			Instructional Aides			Instructional Coord./Supervisors			Guidance Counselors		
Rank	State	Rate	Rank	State	Rate	Rank	State	Rate	Rank	State	Rate	Rank	State	Rate
1	VT	196.9	1	RI	93.2	1	VT	44.1	1	VT	3.3	1	RI	16.6
2	ME	180.3	2	VT	91.6	2	NH	32.6	2	HI	3.1	2	WY	4.7
3	WY	172.1	3	ME	85.3	3	ME	30.9		SD		3	LA	4.5
4	DC	160.9	4	ND	81.4	4	SD	28.1	4	LA	2.7		VT	
5	RI	160.1	5	NJ	80.7	5	WY	24.5	5	DE	2.4	5	NH	4.0
6	SD	155.9	6	WY	79.4	6	CT	21.7	6	CO	2.0	6	HI	3.7
7	NH	155.6	7	VA	79.2	7	MA	21.2	7	MI	1.9	7	ME	3.2
8	NJ	155.3	8	AL	77.9	8	KY	20.7		NJ		8	AR	3.0
9	ND	153.9	9	NY	77.8	9	NC	20.3	9	ME	1.8		MT	
10	VA	151.4	10	MA	75.7	10	IA	20.1		MN		10	MO	2.9
11	AR	149.0	11	NH	75.5	11	IN	19.2	11	NE	1.7	11	ND	2.8
12	CT	147.2	12	SD	74.8	12	ND	19.1		IN		12	MD	2.7
13	NM	146.7	13	NE	74.5	13	NJ	18.9	12	MD	1.6		NE	
14	KY	144.1	14	MO	73.1	14	MN	18.0		UT		14	NC	2.6
15	NE	143.6	15	IA	72.8	15	DC	17.9	15	MS	1.5		SD	
16	MA	142.9	16	KS	71.9	16	OR	17.7		AR		16	OK	2.5
17	IA	142.9		DC	71.3	17	MS	17.5	16	DC	1.4		SC	
18	LA	141.5		MT		18	AK	16.8		WI			WV	
19	MO	140.3	19	WV	71.0	19	NM	16.7		VA			AL	
20	KS	139.9	20	AR	69.6		IL		20	AK	1.3	19	CT	2.4
21	AL	137.1	21	CT	69.0	20	NE	16.6		AL			IA	
22	TX	137.0		SC			RI			KY			KS	
23	GA	137.0	22	WI	68.7	23	KS	16.1		RI			NM	
24	MS	136.7	24	LA	68.2	24	GA	16.0		WV			NY	
25	WV	135.8	25	GA	67.9	25	LA	15.8	25	MT	1.2		OR	
26	AK	134.5	26	NC	67.5	26	AR	15.6		ND			PA	
27	MT	134.2	27	NM	67.4	27	VA	15.5	27	OR	1.1	27	DE	2.3
28	NY	132.7	28	PA	66.9	28	PA	14.7	--	U.S.	1.0		ID	
29	PA	131.3	29	TX	66.8	29	MI	14.5		CA			TX	
30	OH	129.9	30	DE	66.1		TN			IA		30	GA	2.2
31	MD	129.3		MD		30	UT	14.3		ID			MA	
32	OK	129.0	31	OK	65.9	--	U.S.	14.2	28	MA	1.0		WI	
33	IN	128.6	33	OH	64.1	32	DE	14.1		MO			VA	
35	DE	127.9	--	U.S.	63.9		CO			NH		--	U.S.	2.1
36	IL	125.3	34	MS	63.5	33	MT	13.5		SC			AK	
--	U.S.	124.7	35	IL	63.4		TX		35	NY	0.8	34	FL	2.1
37	MN	124.5	36	TN	62.5	36	MO	13.4		OK			KY	
38	WI	120.6	37	KY	62.4	37	AZ	13.3		PA			MS	
39	TN	119.7	38	HI	61.4	38	NY	12.9		CT	0.7		OH	
40	CO	119.4	39	MN	60.9	39	OK	12.4	38	NC		40	TN	1.9
41	MI	118.6	40	AK	59.4	40	MD	12.2		NM			WA	
42	FL	117.5		FL		41	WI	11.9	41	IL	0.6		NV	
43	HI	115.2	42	CO	58.8	42	HI	11.8	42	NV	0.5	42	CO	1.8
44	WA	110.3	43	IN	58.5	43	WV	11.7		TN			IN	1.7
45	OR	108.8	44	MI	57.3	44	FL	10.9	44	TX	0.4	43	NJ	
46	ID	99.3	45	ID	55.4	45	ID	10.8		WA		45	MI	1.6
47	SC	96.1	46	NV	52.7	46	CA	10.4		FL		46	IL	1.5
48	AZ	91.5	47	WA	51.8	47	WA	9.9	46	GA	0.3		AZ	1.3
49	UT	90.1	48	OR	51.2	48	OH	9.7		KS		47	DC	
50	CA	89.9	49	CA	48.0	49	NV	9.2		OH			UT	
51	NV	78.4	50	AZ	46.9	50	AL	9.1	50	AZ	0.1	50	MN	1.2
			51	UT	45.2	51	SC	5.2	51	WY	1.8	51	CA	1.1

Continued on next page.

Table A.29 (continued)

Librarians			Student Support/Other Support Staff			School Admin.			School District Admin.			Admin. Support Staff				
Rank	State	Rate	Rank	State	Rate	Rank	State	Rate	Rank	State	Rate	Rank	State	Rate		
1	MT	2.6	1	DC	47.2	1	RI	9.2	1	ND	4.9	1	AK	17.7		
2	VT	2.3	2	AR	45.5	2	TX	7.0	2	OH	4.3	2	OH	16.3		
3	AR	2.1	3	NM	41.7	3	AK	5.8	3	SD	3.7	3	DC	14.3		
	RI		4	WY	40.3	4	DC	5.2		4		WY	12.0			
5	KS	2.0	5	KY	39.3	5	ME	4.9	5	ME	3.4	5	KY	11.9		
	MS		6	ME	39.0	6	SC	4.8	6	AK	3.2	6	FL	11.5		
	ND		7	CT	37.6	7	VT	4.6	7	DE	2.7	7	AL	11.2		
8	AL	1.9	8	TX	37.2	8	IA	4.5		8		KS	2.7	8	NH	11.1
	NE		9	GA	36.9	9	AL	4.0	10		MN	2.5			10	
10	LA	1.8	10	WA	36.6		11		CT	2.4	11	CT	2.4	11	NJ	10.7
	MO		11	NJ	36.4		12		MA	2.0	12	IA	2.0	12	MA	10.6
12	NC	1.7	12	MS	36.2	13		LA	35.9		13	MS		10.5	13	ME
	VA		13	LA	35.9	14	VA	35.7	14	NE	10.4	14	OK	10.4		
14	HI	1.6	14	VA	35.7	15	LA	3.9	16	MI	1.9	15	MO	9.6		
	KY		15	WV	35.1		16			MI		1.9	16	PA	9.2	
	OK		16	IN	35.0	17	MD	3.7	17	IL	1.8	17	CO	8.7		
	SC		17	KS	34.8		18			NM		3.7	18		TX	1.7
	TN		18	MD	34.4	19	TN	3.7	19	DC	1.7		--	U.S.	8.7	
	WY		19	VT	34.1	20	WV		3.6	20		MA	1.5	19		CA
20	NH	1.5	20	MO	33.7	21	MS	3.6		21	WV	1.6		20	IL	8.4
21	AK	1.4	21	ND	33.6		22		MT	3.5	22	MO	1.5		23	
	CT		22	NE	33.3	24	AR	3.5	24			OR		1.4		23
	GA		23	SD	32.8	24	NC			3.5	24	AR	1.4		25	
	MD		24	PA	32.4		--	U.S.	3.4			24		CO		1.4
	WI		25	AL	31.6	26	OK	3.4	24	GA	1.4		25	LA	8.2	
	WV		26	OK	30.9	27	IA			30.7		26		VT		1.3
27	ME	1.3	27	IA	30.7	28	MO	3.4	--	U.S.	1.3		28	NY	8.0	
28	NY	1.2	28	DE	29.8	29	VA		3.3	28	KY	1.3		29		HI
	PA		29	OH	29.7	30	MI	3.3			28		VA		1.3	29
	SD		30	NH	29.6	29	KY		3.3	30		NC	1.2	30		
	WA		31	CO	29.4		31	SD			3.2	30			HI	1.2
--	U.S.	1.1	32	MT	29.4	32	CO	3.2	30	MD			1.1	30	WV	
32	CO	1.1	33	MN	29.1	33	DE			3.1	32	NY			1.1	33
	DE		34	CO	29.0	33	IL	3.1	32			MT	1.1	34		
	IA		--	U.S.	29.0	34	NY			3.1	32	PA			1.1	35
	TX		35	IL	28.9	36	OR	2.9	32			WI	1.0	36		
36	FL	1.0	36	FL	28.8	36	IN			2.9	37	IN			1.0	37
	IL		37	TN	28.3		39	MI	2.8			37	OK	1.0		
	MA		38	AK	26.9	39	NJ	2.8		37	NJ		1.0		39	KS
	MN		39	MA	26.2		40		WI		2.7	40		RI		0.9
NJ	40	NY	25.2	40	FL	2.7	40	WA	0.9	41			DE	6.3		
41	IN	0.9	41		WI			23.8			40	HI	2.7		42	UT
	NM		42	NC	23.7	40	ID	2.7	42	UT		0.8		41		TN
	NV		43	OR	22.4		44			WA	2.6		43		FL	0.7
	AZ		44	HI	21.7	44		NH	2.6	43		NV		0.7	43	
44	MI	0.8	45	AZ	20.8	44	OH	2.6			45	ID	0.5			45
	OH		46	ID	20.7		47		PA	2.4		45		LA	0.5	
	OR		47	UT	18.6	47		NV	2.4		47		AZ	0.4		47
48	ID	0.6	48	CA	18.0	49	MN	2.2		47		CA	0.4		48	
49	DC	0.5	49	RI	14.9		50		CA		2.1	50		SC		0.3
	UT		50	NV	4.4	50	UT	2.1	50	AL			0.3	50	ND	
51	CA	0.2	51	SC	3.4	50	AZ			2.1	50	TN			0.3	51

Source: U.S. Dept. of Ed. Inst. Natl. *Public* 5-6, 15-16.

Table A.30 (corresponds to Table 4.4)
Percentage of Teachers With Advanced Degrees, FY 2004

Rank	State	%
1	NY	78.0
2	CT	74.2
3	KY	70.6
4	IN	61.9
5	WV	61.1
6	AL	60.6
7	MA	60.2
8	OR	58.0
9	MD	56.3
	WA	
11	NV	55.8
12	MI	55.5
	HI	
14	CO	54.0
15	IL	53.5
16	DE	53.4
17	OH	52.7
	GA	
19	TN	52.3
20	RI	51.6
21	DC	51.3
22	SC	51.0
23	MO	50.8
24	PA	50.3
25	MN	50.2
26	AZ	49.2
--	U.S.	48.1
27	VT	45.4
28	WI	45.1
29	KS	44.5
30	CA	43.1
31	NH	42.5
32	NJ	42.2
33	AK	41.3
34	NM	41.0
35	NE	39.5
36	VA	39.4
37	AR	38.4
38	WY	37.2
39	FL	36.6
40	MS	35.5
41	ME	34.3
41	IA	34.3
43	LA	33.9
44	MT	33.6
45	OK	33.4
46	UT	32.6
47	NC	31.7
48	ND	27.4
49	TX	27.2
50	ID	27.0
51	SD	26.2

Source: U.S. Dept. of Ed. Inst. Natl. *Digest*, 2007, Table 64.

**Table A.31 (corresponds to Table 4.5)
Quality Counts Teaching Profession Index, 2008**

Rank	State	Score	Grade
1	SC	91.9	A-
2	AR	88.9	B+
3	NC	84.8	B
4	FL	83.2	
5	GA LA	83.0	
7	VA	82.0	B-
8	AL	81.1	
9	KY	80.9	
10	OK	80.1	
11	IA	79.9	C+
12	NY	79.2	
13	WV	78.9	
14	OH	78.1	
15	PA	78.0	
16	HI	77.8	
17	NM	77.1	
18	WI	77.0	
19	DE	76.8	C
20	MA	75.9	
21	TN	75.1	
22	MO	75.0	
23	TX	73.1	
24	NJ WA	73.0	C
--	U.S.	73.0	C
26	MD NV	72.0	C-
28	IN	71.9	
29	UT	71.8	
30	CA	70.8	
31	CT	70.2	
32	VT	70.1	
33	NE ND	69.1	
35	IL	68.1	
36	CO	68.0	
37	MI	67.1	
38	KS MN	67.0	
40	AZ MT	66.9	D
42	NH	66.1	
43	ME	65.9	
44	MS	65.1	
45	ID	64.2	
46	SD	63.9	
47	RI	62.9	
48	DC	62.0	
49	WY	61.9	
50	AK	61.0	F
51	OR	57.0	

Source: Editorial Projects in Education. *Education Week's Quality Counts 2008*.

Table A.32 (corresponds to Table 4.9)
Title I-Eligible Schools and Schoolwide Programs As a Percentage of All Schools, FY 2006

All Title I-Eligible Schools			Title I Schools with Schoolwide Programs		
Rank	State	%	Rank	State	%
1	OR	99.5	1	DC	80.8
2	IN	90.1	2	MS	59.9
3	DC	84.3	3	TX	58.4
4	MT	81.2	4	HI	57.2
5	AR	73.6	5	KY	55.9
	ME				
	OK		7	LA	55.5
8	ID	71.1	8	AR	53.3
9	HI	70.5	9	NM	52.9
10	OH	68.8	10	AL	46.4
11	NY	68.3	11	TN	45.1
12	PA	67.6	12	SC	42.4
13	NM	67.4	13	GA	39.9
14	ND	64.4	14	NC	39.2
15	WI	63.6	15	VA	37.1
16	MS	63.5	16	FL	36.4
17	KY	62.9	17	CA	35.7
	LA		18	WV	34.8
19	TX	62.7	--	U.S.	31.4
20	CA	57.4	19	DE	30.6
21	WY	56.5	20	NY	30.5
22	VT	56.1	21	AZ	27.4
	MA		22	MI	27.0
24	AK	55.4	23	OR	26.3
--	U.S.	55.3	24	MA	25.6
25	AL	54.8	25	OH	24.6
26	WA	54.2	26	VT	24.2
27	CO	53.8	27	WA	22.9
28	TN	53.4		MD	
29	IL	52.5	29	AK	22.7
30	MO	49.3	30	CO	21.9
31	KS	48.5	31	NV	21.5
32	GA	48.4	32	IL	21.4
33	AZ	48.0	33	SD	20.8
34	NC	47.8	34	UT	20.0
35	NH	47.3	35	KS	19.8
36	SD	47.2	36	MT	19.6
37	WV	45.7	37	WY	19.0
38	DE	45.0	38	RI	18.9
39	SC	44.9	39	PA	18.8
40	IA	44.2	40	MO	18.0
41	CT	44.1	41	NE	16.7
42	RI	43.2	42	WI	15.2
43	NE	37.6	43	ID	13.6
	FL		44	ND	13.0
45	VA	37.1	45	CT	12.6
46	MN	35.9	46	MN	10.4
47	MI	27.0	47	IA	8.9
	MD		48	IN	8.7
49	UT	24.8	49	NH	7.1
50	NV	21.5		ME	
n.a.	NJ	n.a.	n.a.	NJ	n.a.

Notes: Title I-eligible schools are encouraged to create schoolwide programs if 40 percent or more of their students are eligible for free or reduced-price lunch. Otherwise, assistance is targeted to individual students who are eligible for free or reduced-price lunch.

Source: Staff compilation of data from U.S. Dept. of Ed. *Numbers and Types of Public Elem. and Secondary Schools* 4-5.

**Table A.33 (corresponds to Table 4.10)
Education Technology Overall Grade, Access, Use, and Capacity, 2008**

Overall			Access			Use			Capacity				
Rank	State	Grade (Score)	Rank	State	Grade (Score)	Rank	State	Grade (Score)	Rank	State	Grade (Score)		
1	WV	A (95.3)	1	SD	A (100.0)	1	AZ	A (100.0)	1	GA	A (100.0)		
2	SD	A- (92.0)		WI			2		WV	A (100.0)			
3	GA	A- (91.2)	3	WV	A (96.3)		3		KY	A (93.2)			
4	KY	B+ (88.5)	4	WY	A (93.8)		4		AK	B- (79.5)			
5	VA	B+ (88.7)	5	ND	A (92.5)	5	AR						
6	FL	B (85.4)	6	ME	A- (91.3)	5	FL						
7	ND	B (86.1)	7	VA	A- (90.0)	5	ID						
8	LA	B- (82.0)	8	KS	B+ (87.5)	5	KY						
9	PA	B- (81.8)		LA									
10	NC	B- (81.5)	10	PA	B (86.3)	5	MD						
11	OK	B- (80.9)	11	NM	B (85.0)	5	MI						
12	WI	B- (80.6)	12	MT	B (83.5)	5	MO						
13	AR	B- (80.1)	13	IN	B (82.5)	5	OK						
14	KS	B- (79.9)		KY									
15	SC	B- (79.7)	15	CT	B- (81.3)	5	VA						
17	MO		C+ (77.0)	16	FL	B- (80.0)	5	WV					
18	AK	C+ (77.5)	16	SC									
19	MD	C+ (77.9)	19	NC	C+ (78.8)	17	AL	B- (79.5)	16	FL	B (86.3)		
20	AZ	C+ (78.2)	20	ID	C+ (78.5)		17		AK				
22	IN		21	IA	C+ (77.5)		17		CO				
24	CT	C+ (78.9)	21	MN									
26	ME		23	MA	C (75.0)		17		HI				
26	IL	C+ (79.4)	23	NJ									
27	TX		26	OH									
26	NE	C (76.5)	26	AK	C (73.5)		17		IN	25		AL	C (72.7)
27	VT	C (76.3)		26			GA						
28	MI	C (76.0)		26			OK						
29	ID	C (75.8)	29	IL	C (72.5)	17	MS						
30	MA	C (75.7)		29		MI							
32	NJ			29		TX							
32	IA	C (75.4)	32	AR	C- (71.0)	17	ND	38	MA		D (65.8)		
33	NH	C (74.7)	32	LA	C- (70.0)	17	OR						
34	OH	C (74.6)	32	TN									
35	MN	C (74.3)	35	MO	D+ (68.5)	17	PA						
36	TN	C (74.1)		35		NH							
37	UT	C (74.0)	37	WA	D+ (67.0)	36	SC		D+ (69.3)	25		MS	
38	NM	C (73.4)	37	NY	D (66.0)		36			TN			
39	AL	C (72.6)	38	AL	D (65.5)		36			TX			
40	CO	C- (72.4)	38	NY	D (66.0)		36			TX			
41	WA	C- (71.9)	41	MD	D (64.5)		36			WY			
42	NY	C- (71.6)		41			NV						
43	MT	C- (70.6)	43	UT	D (63.0)		36	CA		D+ (69.3)	38	WI	
44	MS	C- (70.4)	44	AZ	D- (62.0)			36			CT		
45	CA	D+ (69.3)		44				DC					
46	HI	D+ (68.1)	46	DE	D- (60.5)			36			DE		
47	DE	D+ (67.5)		46		CO		D (65.0)	36		IA		
48	OR	D (65.8)		46		MD		D (64.5)	36		MT		
49	RI	D (64.7)		46		NV		D (64.5)	36		NE		
50	NV	D (64.3)		46		UT		D (63.0)	36		NV		
51	DC	D- (60.0)		46		AZ		D- (62.0)	36		NM		
			46	DC	D- (60.5)	36		NY	46		NC	F (59.0)	
			46	CA	F (59.0)	36	OH						
			46	HI									
			46	MS									
			46	OR									
			46	RI									
			46	WA									
			46	VT									
			46	WI									
			46	DC	F (59.0)	46	DC						
			46	RI									

Source: Editorial Projects in Education. *Education Week's Technology Counts 2008*.

**Table A.34 (corresponds to Table 4.11)
Access to Technology, 2006 and 2007**

Access to Technology Grade and Score			Percentage of 4 th Grade Students With Access to Computers 2007			Percentage of 8 th Grade Students With Access to Computers 2007			Students Per Instructional Computer 2006			Students Per High-speed Internet-connected Computer 2006										
Rank	State	Grade (Score)	Rank	State	%	Rank	State	%	Rank	State	Ratio	Rank	State	Ratio								
1	SD	A (100.0)	1	WV	100%	1	ME	100%	1	UT	5.4	1	UT	5.3								
	WI		2	SD	99%	2	WV	97%	2	DE	5.2	2	CA	5.0								
3	WV	A (96.3)	3	KY	98%	3	VA	95%	3	CA	5.1	4	MS		4.9							
4	WY	A (93.8)		4		WY	94%	4	MS	5.0	4	DE	4.9									
5	ND	A (92.5)		5		PA	93%	5	RI		5.0	5	AL	4.8								
6	ME	A- (91.3)		6		SD		93%	6	AL	4.8	6	NV	4.6								
7	VA	A- (90.0)	7	AL	97%	7	CT	92%	7	AZ	4.7	8	RI		4.6							
8	KS	B+ (87.5)		8		FL	92%		8	KY		92%	9	NV	4.7	8	HI	4.5				
10	PA			B (86.3)		10	ID		97%	10	ND	92%	9	NH	4.6	9	MD	4.4				
11	NM	B (85.0)		11		MI	97%		11	WI	92%	10	HI	4.6		11	OR		4.4			
12	MT	B (83.5)	12	SC	96%	11	GA	90%	13	MD	4.5	13	AZ	4.3								
13	IN	B (82.5)		12			IN			90%			13		IN	90%	13	OR	4.5	13	LA	4.3
15	CT			B- (81.3)			13		KS	90%	15	NJ	89%	15	DC	4.3	14	DC	4.2			
16	FL	B- (80.0)		14			LA		96%	15	SC	90%	15	NY	4.3			14		CO	4.1	
	SC			15			NJ		96%	17	MN	89%	15	CO	4.1	14	NH	4.1				
	VT			17			NM		96%	17	VT	89%	15	LA		4.1	14		NY	4.1		
19	ID	C+ (78.5)		22			OK		95%	19	IL	87%	19	MA	4.0	19	IL	3.9				
20	NC	C+ (78.8)					19				TN			95%			19		KS	87%	19	IL
21	IA	C+ (77.5)					20				VA		95%	19	LA	87%	20	KY	4.0	19	MI	3.8
23	MN						C+ (77.5)				21		WY	95%	19	NE	87%	20	NJ	3.9	19	
	MA	C (75.0)	22		AR	95%	24	NH			86%		23	NC	3.8	23	GA	3.7				
	NJ		23		CT	95%	24	NC			86%		23	AR		3.8	23		MN	3.7		
26	AK		C (73.5)		24	IL	95%	26			MD		86%	23	CT	3.8	25	NJ	3.6			
GA	26	IA			95%	26	OH	86%			23		GA	3.8	25		SC	3.6				
29	OK	C (72.5)			27	MN	95%	27			MT		85%	28	MA	3.7	28		WA	3.5		
32	IL	C (72.5)	28		NE	95%	28	UT			84%		28	SC	3.7		28	CT	3.5			
	MI		28	NV	95%	28	MI	83%	28	MN	3.7	28	MO	3.5								
	TX		29	NH	95%	28	NY	83%	29	OH	3.5	29	MO		3.5							
35	AR	C- (71.0)	30	PA	94%	31	TN	83%	29	OK		3.5	30	MA		3.4						
	LA		31	CO	94%	31	IA	82%	29	TX	3.5		30	OH	3.4							
	TN		32	ME	94%	31	MD	82%	31	WA	3.5	30	OK	3.4								
37	MO	D+ (68.5)	33	ME	94%	34	TX	81%	34	PA		3.4	34		TX	3.3						
	NH		34	MA	94%	34	AK	81%	34	PA	3.4		34	AK	3.3							
	WA		35	OH	94%	34	DE	81%	35	FL	3.3	35	ID	3.3								
38	NY	D (66.0)	36	VT	94%	37	FL	80%	35	ID		3.3	34		IN	3.3						
	AL		37	CA	93%	37	CO	80%	35	IN	3.3		34	IA	3.2							
	CO		38	GA	93%	38	AZ	79%	38	AK	3.2	38	FL	3.2								
41	MD	D (64.5)	39	MS	93%	38	MO	79%	38	IA		3.2	38		PA	3.2						
	NV		40	MO	93%	41	NM	78%	41	WV	3.1	40	NM	3.1								
	UT		41	MT	93%	41	ID	78%	41	ND		3.1	40		ND	3.1						
44	AZ	D- (62.0)	42	NY	93%	43	MS	76%	44	VT	3.0	40	VT	3.1								
	DC		43	WA	93%	43	AL	76%	44	VA		3.1	40		WI	3.0						
	DE		44	UT	92%	43	OK	76%	44	MT	3.0	44	VA	3.0								
47	CA	F (59.0)	45	DE	91%	46	OR	75%	44	NE		3.0	46		WV	2.9						
	HI		46	OR	91%	46	AR	75%	44	NM	3.0		47	MT	2.8							
	MS		47	AK	89%	47	AK	89%	48	WI	2.6	47	NE	2.8								
OR	48	AZ	89%	48	HI	74%	48	KS	2.6	48		KS	2.6									
RI	49	DC	88%	49	DC	88%	49	WA	2.5	49	WY	2.6										
51	CA	F (59.0)	50	RI	88%	50	CA	72%	50	ME	2.1		50	ME	1.9							
	HI		51	HI	87%	51	DC	61%	51	SD	2.0	50	SD	1.9								

Source: Editorial Projects in Education. *Education Week's Technology Counts 2008*.

**Table A.35 (corresponds to Table 4.12)
Use of Technology, FY 2008**

Use of Technology Grade and Score			Total Implemented	State Standards For Students Include Technology	State Tests Students On Technology	State Has Established a Virtual School	State Offers Computer-based Assessments	
Rank	State	Grade (Score)						
1	AZ	A (100.0)	4	✓	✓	✓	✓	
	GA			✓	✓	✓	✓	
	NC			✓	✓	✓	✓	
	UT			✓	✓	✓	✓	
5	AR	A- (89.8)	3	✓		✓	✓	
	FL			✓		✓	✓	
	ID			✓		✓	✓	
	KY			✓		✓	✓	
	LA			✓		✓	✓	
	MD			✓		✓	✓	
	MI			✓		✓	✓	
	MO			✓		✓	✓	
	OK			✓		✓	✓	
	SD			✓		✓	✓	
	VA			✓		✓	✓	
	WV			✓		✓	✓	
17	AK	B- (79.5)	2	✓		✓		
	AL			✓		✓		
	CO			✓		✓		
	HI			✓		✓		
	IL			✓		✓		
	IN			✓			✓	
	KS			✓			✓	
	MA			✓			✓	
	ME			✓			✓	
	MN			✓			✓	
	MS						✓	✓
	ND			✓			✓	
	NJ			✓				✓
	OR			✓				✓
	PA			✓		✓		
	SC			✓			✓	
	TN			✓				✓
TX	✓				✓			
WY	✓				✓			
36	CA	D+ (69.3)	1	✓				
	CT			✓				
	DE			✓				
	IA						✓	
	MT			✓				
	NE			✓				
	NH			✓				
	NM			✓				
	NV			✓				
	NY			✓				
	OH			✓				
	RI			✓				
	VT			✓				
	WA			✓				
WI	✓							
51	DC	F (59.0)	0					
Total Number With Indicated Policies				48	5	25	27	

Source: Editorial Projects in Education. *Education Week's Technology Counts 2008*.

**Table A.36 (corresponds to Table 4.13)
Capacity To Use Technology, FY 2008**

Capacity To Use Technology Grade and Score			Total # of Policies Implemented	State Standards Include Technology		Requirements for an Initial License Include Technology Coursework or a Test		State Requires Technology PD or Training or Testing for Recertification	
Rank	State	Grade (Score)		Teachers	Admin.	Teachers	Admin.	Teachers	Admin.
1	GA	A (100.0)	6	✓	✓	✓	✓	✓	✓
	WV			✓	✓	✓	✓	✓	✓
3	KY	A (93.2)	5	✓	✓	✓	✓	✓	✓
4	CT	B (86.3)	4	✓	✓	✓	✓	✓	✓
	FL			✓	✓	✓	✓	✓	✓
	IL			✓	✓	✓	✓	✓	✓
	LA			✓	✓	✓	✓	✓	✓
	NH			✓	✓	✓	✓	✓	✓
	ND			✓	✓	✓	✓	✓	✓
	SD			✓	✓	✓	✓	✓	✓
	TX			✓	✓	✓	✓	✓	✓
	VA			✓	✓	✓	✓	✓	✓
13	AK	B- (79.5)	3	✓	✓	✓	✓	✓	✓
	AR			✓	✓	✓	✓	✓	✓
	CA			✓	✓	✓	✓	✓	✓
	IA			✓	✓	✓	✓	✓	✓
	MD			✓	✓	✓	✓	✓	✓
	NY			✓	✓	✓	✓	✓	✓
	OH			✓	✓	✓	✓	✓	✓
	OK			✓	✓	✓	✓	✓	✓
	PA			✓	✓	✓	✓	✓	✓
	SC			✓	✓	✓	✓	✓	✓
	VT			✓	✓	✓	✓	✓	✓
25	WA	C (72.7)	2	✓	✓	✓	✓	✓	✓
	AL			✓	✓	✓	✓	✓	✓
	AZ			✓	✓	✓	✓	✓	✓
	CO			✓	✓	✓	✓	✓	✓
	DE			✓	✓	✓	✓	✓	✓
	IN			✓	✓	✓	✓	✓	✓
	KS			✓	✓	✓	✓	✓	✓
	MA			✓	✓	✓	✓	✓	✓
	MS			✓	✓	✓	✓	✓	✓
	MO			✓	✓	✓	✓	✓	✓
	NE			✓	✓	✓	✓	✓	✓
	NJ			✓	✓	✓	✓	✓	✓
	TN			✓	✓	✓	✓	✓	✓
38	WI	D (65.8)	1	✓	✓	✓	✓	✓	✓
	HI			✓	✓	✓	✓	✓	✓
	ME			✓	✓	✓	✓	✓	✓
	MI			✓	✓	✓	✓	✓	✓
	MN			✓	✓	✓	✓	✓	✓
	NM			✓	✓	✓	✓	✓	✓
	NC			✓	✓	✓	✓	✓	✓
46	RI	F (59.0)	0	✓	✓	✓	✓	✓	✓
	WY			✓	✓	✓	✓	✓	✓
	DC			✓	✓	✓	✓	✓	✓
	ID			✓	✓	✓	✓	✓	✓
	MT			✓	✓	✓	✓	✓	✓
46	NV	F (59.0)	0	✓	✓	✓	✓	✓	✓
	OR			✓	✓	✓	✓	✓	✓
	UT			✓	✓	✓	✓	✓	✓
				✓	✓	✓	✓	✓	✓
Total States With Indicated Policies				44	35	19	9	10	6

Note: PD = professional development.

Source: Editorial Projects in Education. *Education Week's Technology Counts 2008*.

**Table A.37 (corresponds to Table 4.14)
Students in Rural Areas, FY 2006**

Rank	State	%
1	ME	53.4
2	VT	52.1
3	MS	51.3
4	WV	48.6
5	NC	47.0
6	SD	43.6
7	ND	40.3
8	KY	40.1
9	AR	38.4
10	IA	37.6
11	MT	37.1
12	NH	33.5
13	AL	31.5
14	OK	31.1
15	VA	29.6
16	SC	29.2
17	LA	28.1
18	KS	28.0
19	NE	27.6
20	IN	27.2
21	AK	26.8
22	TN	26.7
23	OH	25.3
24	WY	24.3
25	MO	24.2
26	MN	23.6
27	GA	23.0
28	ID	22.7
29	MI	20.8
30	PA	19.6
31	DE	17.7
--	U.S.	17.4
32	NY	12.9
33	TX	12.4
34	CO	12.2
35	NM	11.9
36	CT	11.8
	OR	
38	IL	11.2
39	WA	10.6
40	MD	9.1
41	NJ	8.6
42	AZ	7.7
43	FL	7.4
44	RI	5.3
45	UT	4.8
46	CA	4.3
47	MA	4.1
48	NV	2.4
49	DC	0.0
	HI	
n.a.	WI	n.a.

Source: U.S. Dept. of Ed. Inst. Natl. Numbers and Types of Public Elem. and Secondary Agencies 12.

Table A.38 (corresponds to Table 4.15)
Public School Teachers Threatened With Injury by a Student at School in Past 12 Months
FY 1994 and FY 2004

FY 1994			FY 2004			Percent Change		
Rank	State	%	Rank	State	%	Rank	State	%
1	DC	24.4	1	DC	18.0	1	CO	-71.0
2	FL	20.1	2	MD	13.5	2	WY*	-65.9
3	MD	19.9	3	FL	11.2	3	KS	-65.7
4	DE	18.7	4	NY	10.5		RI*	
5	NC	17.1	5	LA	9.9	5	AR	-65.3
6	LA	17.0	6	PA	9.5	6	VT	-60.5
7	NY	16.2	7	MI	9.3	7	OH	-59.3
8	SC	15.3	8	HI	9.1	8	MS	-58.9
9	OH	15.2	9	AK	8.9	9	DE	-58.8
10	VA	14.9	10	NC	8.7	10	WY	-57.8
11	GA	14.0	11	SC	8.6	11	VA	-56.3
	KY		12	MO	8.3	12	AL	-54.3
13	AR	13.8	13	MN	8.2	13	GA	-54.2
	IN		14	IL	8.0	14	UT	-53.5
	WI		15	KY	7.9	15	OR	-52.0
16	AK	13.7	16	NM	7.8	16	NC	-49.2
17	MS	13.4	17	TX	7.7	17	IA	-47.9
	RI			DE				
19	AL	13.3	--	U.S.	7.5	19	IN	-47.8
20	NV	13.2	19	NE	7.5	20	TN	-47.2
21	CO	13.1	20	NV	7.3	21	AZ	-46.9
22	AZ	13.0	21	IN	7.2	22	WA	-46.7
--	U.S.	12.8		WV		23	NJ	-45.4
23	NM	12.8	23	CT	6.9	24	OK	-44.7
	WA			AZ		25	ID	-44.6
25	TX	12.7	25	WA	6.8	25	NV	
26	MO	12.6	26	TN	6.6	27	FL	-44.4
27	TN	12.5	27	VA	6.5	28	KY	-43.6
28	VT	12.4	28	GA	6.4	29	SC	-43.6
29	CT	11.9		MA		30	ME	-42.0
30	OR	11.5	30	OH	6.2	31	CT	-41.9
31	WV	11.4	31	CA	6.1	32	LA	-41.7
32	UT	11.2		OK		--	U.S.	-41.4
33	NH	11.1		MT		33	MA	-40.9
34	OK	11.0		AL		34	TX	-39.4
	PA		35	NH	5.8	35	NM	-38.9
36	IL	10.8	36	ND	5.6	36	WV	-36.7
	KS		37	MS	5.5	37	AK	-35.2
	MA			OR	38	NY	-35.2	
	MI		39	ID	5.4	39	MO	-33.9
40	NE	10.4	40	SD	5.3	40	MD	-32.0
41	HI	9.9	41	ME	5.2	41	NE	-28.1
42	ID	9.8		UT		42	DC	-26.3
43	MN	9.6	43	IA	4.9	43	IL	-26.2
44	IA	9.4		VT		44	MT	-20.3
45	ME	9.0	45	AR	4.8	45	SD	-18.3
	WY		46	WI	4.7	46	CA	-17.3
47	NJ	7.9	47	RI*	4.6	47	MN	-15.0
48	MT	7.7	48	NJ	4.3	48	MI	-13.9
49	CA	7.4	49	CO	3.8	49	PA	-13.3
50	SD	6.5		WY*		50	HI	-8.2
51	ND	5.5	51	KS	3.7	51	ND	1.0

Notes: *Interpret with caution due to low frequency (an estimated 300 teachers in Wyoming and 600 in Rhode Island). Staff calculated the percent change using unrounded percentages for FY 1994 and FY 2004.

Source: Staff compilation of data from U.S. Dept. of Ed. Inst. Natl. *Indicators* 79.

Table A.39 (corresponds to Table 4.16)
Public School Students Involved in Violence or Substance Abuse in Previous 12 Months
Average of 2003 and 2005 Surveys

On School Property									Anywhere													
Were in a Physical Fight			Were Threatened or Injured With Weapon			Had Drugs Available			Used Alcohol			Used Alcohol										
Rank	State	%	Rank	State	%	Rank	State	%	Rank	State	%	Rank	State	%								
1	DC	15.8	1	DC	12.4	1	NM	33.5	1	HI	8.8	1	ND	51.6								
2	NM	15.7	2	MD	11.7		NV			2	NM	7.6	2	MT	49.1							
3	MD	14.9	3	NM	10.4	3	AZ	33.4	3	NV	7.1	3	AZ	49.0								
4	TX	14.5	4	SC	10.1	4	ME	33.0	4	AZ	7.0	4	SD	48.4								
5	AR	13.9	5	AZ	9.9	5	HI	32.7	5	CT	6.7	5	WI	48.2								
6	AL	13.7	6	AR	9.6	6	NJ	32.6	6	MT	6.5	6	CO	47.4								
7	NY	13.5	7	NE	9.3	7	GA	32.0	7	WY	6.2	7	TX	47.3								
8	NV	13.4		8		CT	31.5	8	SC	6.0	8	WY	6.2	8	WY	47.2						
--	U.S.	13.2	9	MI	9.2	9	OH	31.0	9	CO	5.9	9	MA	46.8								
9	SC	12.7	10	CT	9.1	10	MA	30.9	10	TX	5.7	10	NJ	46.5								
10	WY	12.5	11	ID	8.9	11	TX	30.7	11	WV	5.3	11	NH	45.6								
11	FL	12.4				AL		12	MI	30.1	12	AR	5.2	12	CT	45.3						
12	VT	12.2	13	WY	8.7	13	NC	29.6		DE				13	MO	45.0						
13	CO	12.1	14	UT	8.6	14	AR	29.2	14	VT	5.1	14	NE	44.7								
14	ID	11.9	--	U.S.	8.6	15	SC	29.1				KS		15	DE	44.2						
	WI		15	RI	8.4	16	MD	28.9	16	RI	4.9	--	U.S.		44.1							
16	MI	11.8	16	WV	8.3	17	IN	28.6				MS		17	KS	43.9						
17	OK	11.7				MO		18	AK	28.4	19	AK	4.8	18	IA	43.8						
18	GA	11.6	18	GA	8.2	19	NH	27.5		FL							NY					
19	TN	11.5	19	NH	8.1	20	DE	27.0	--	U.S.	4.7	20	RI	43.6								
20	KY	11.4				AK		--	U.S.	27.0		U.S.			RI							
21	AZ	11.3	22	FL	8.0	21	VT	26.2	21	DC	4.7	21	SC	43.2								
	RI					22	AL	26.1				SD										
24	IA	11.2	24	NJ	7.9	24	MT	25.6	23	NY	4.6	23	AR	43.1								
	NH					25	WV						IA	43.0								
26	WV	11.1	25	IN	7.8	25	TN	25.5	25	NC	4.5	25	VT	42.6								
	IN					26	DC	25.3	26	ND	4.4	26	ND	4.4	26	ME	42.4					
29	NC	10.8	28	IA	7.6	27	KY	25.1	27	AL	4.3	27	NV	42.4								
	UT					28	CO	7.6	28	RI	25.0	28	KY	4.1	28	NM	42.3					
30	OH	10.6	29	NC	7.5	29	FL	24.4		NE			29		OH	41.8						
	MT					30	MT		30	WI	24.0		MI		30	MS	41.4					
32	DE	10.5	31	KS	7.4	31	NY	23.3	32	ID	4.0	31	TN	41.4								
	CT					32	SD	7.3		32		UT	22.7		NH		32	KY	41.3			
33	MS	10.3	32	SD	7.3	33	NE	22.6	34	GA	3.9	33	FL	41.2								
34	MA	10.2	34	NY	7.2	34	MS	22.3				TN		34	MI	41.0						
35	NV	10.1	35	NV	7.0	35	ID	22.2	35	ME	3.8	35	NC	40.9								
	NJ					36	SD	21.5	36	NJ	3.7	36	NJ	3.7	36	AL	39.8					
37	KS	10.0	37	DE	6.9	37	CO	21.2	37	IN	3.6	37	MD	39.8								
	NE					38	VT	6.8		38		WY	20.4		OH		38	GA	38.8			
40	MO	9.6	38	OK	6.7	40	ND	20.3	39	OK	3.5	39	AK	38.7								
	HI						39			MS		6.6	40	OK	20.3	40	MD	3.2	40	ID	37.3	
42	ME	8.7	41	WI	6.5	42	MO	19.9	41	MO	2.9	42	HI	34.8								
	ND						42			ND			6.2		42	KS	16.7		UT		42	DC
43	SD	8.7	43	MA	5.9	43	IA	15.5	n.a.	n.a.	n.a.	43	UT	18.5								
n.a.	CA	n.a.	n.a.	CA	n.a.	n.a.	CA	n.a.					CA		n.a.	CA	n.a.					
	IL						IL						IL			IL			IL			
	LA						LA						LA			LA			LA		LA	
	MN						MN						MN			MN			MN		MN	
	OR						OR						OR			OR			OR		OR	
	PA						PA						PA			PA			PA		PA	
	VA						VA						VA			VA			VA		VA	
	WA						WA						WA			WA			WA		WA	

Note: Because some states reported only in 2003 and some reported only in 2005, staff averaged the 2003 and 2005 data; states that failed to report in both 2003 and 2005 are indicated by n.a.

Source: Staff compilation using data from U.S. Dept. of Ed. Inst. Natl. *Indicators* 76, 91, 101, and 105.

**Table A.40 (corresponds to Table 5.1)
Revenues Per Pupil, FY 2006**

Rank	State	Unadjusted \$	Rank	State	Cost-adjusted \$
1	DC	18,332	1	VT	16,943
2	NY	16,800	2	WY	16,466
3	NJ	16,743	3	HI	15,625
4	CT	14,893	4	NY	15,019
5	HI	14,799	5	DC	14,923
6	MA	14,782	6	NJ	14,824
7	VT	14,329	7	ME	14,026
8	WY	13,329	8	MA	13,586
9	RI	13,279	9	PA	13,582
10	DE	13,143	10	CT	13,543
11	PA	12,942	11	RI	13,144
12	MD	12,430	12	DE	12,924
13	AK	12,229	13	AK	12,885
14	NH	11,753	14	MT	12,706
15	ME	11,709	15	NH	12,630
16	OH	11,606	16	NE	12,466
17	WI	11,160	17	IN	12,418
18	IN	11,028	18	ND	12,243
19	MN	11,010	19	OH	12,120
20	MI	10,900	20	LA	12,060
--	U.S.	10,771	21	WV	11,850
21	VA	10,672	22	KS	11,789
22	NE	10,543	23	WI	11,760
23	IL	10,506	24	SD	11,708
24	LA	10,456	25	IA	11,669
25	CA	10,264	26	MD	11,496
26	GA	10,113	27	MN	11,393
27	WV	10,032	28	MI	11,165
28	KS	9,973	29	AR	10,886
29	ND	9,815	--	U.S.	10,771
30	IA	9,771	30	NM	10,763
31	OR	9,668	31	SC	10,700
32	SC	9,643	32	MO	10,597
33	MO	9,585	33	OR	10,582
34	FL	9,542	34	MS	10,408
35	NM	9,438	35	FL	10,307
36	MT	9,399	36	GA	10,301
37	WA	9,359	37	IL	10,179
38	CO	9,285	38	KY	9,995
39	TX	9,210	39	VA	9,860
40	AR	8,960	40	AL	9,771
41	NV	8,937	41	CO	9,681
42	SD	8,904	42	OK	9,597
43	KY	8,828	43	CA	9,362
44	MS	8,644	44	TX	9,311
45	AL	8,560	45	ID	9,015
46	NC	8,434	46	WA	9,014
47	OK	8,069	47	NV	8,984
48	AZ	8,025	48	NC	8,937
49	TN	7,512	49	AZ	8,762
50	ID	7,257	50	TN	8,174
51	UT	6,802	51	UT	7,425

Source: U.S. Dept. of Commerce. Census. *Public* 2006 11.

**Table A.41 (corresponds to Table 5.2)
Revenues by Source, FY 2006**

Federal			State			Local		
Rank	State	%	Rank	State	%	Rank	State	%
1	MS	20.1	1	HI	89.9	1	DC	88.3
2	LA	18.8	2	VT	87.1	2	IL	59.1
3	AK	17.8	3	AR	73.4	3	NE	58.6
4	SD	16.4	4	NM	71.2	4	CT	57.3
5	ND	15.7	5	MN	70.7	5	PA	57.1
6	NM	14.5	6	DE	64.5	6	TX	55.5
7	MT	13.9	7	WA	61.1	7	NH	55.3
8	OK	12.8	8	MI	59.3	8	MD	54.6
9	WV	12.3	9	WV	58.8	9	NJ	54.5
10	AZ	12.0	10	NC	58.5	10	VA	53.7
11	DC	11.7	11	CA	58.3	11	RI	52.5
12	CA	11.6	12	NV	57.9	12	SD	50.8
	TX		13	KY	57.3	13	MA	50.7
14	AL	11.5	14	KS	56.8	14	OH	50.4
15	AR	11.4	15	AK	56.5	15	CO	50.1
16	KY	11.3	16	ID	55.8		FL	
17	TN	11.1	17	AL	55.6	17	NY	49.8
18	ID	10.7	18	UT	54.1	18	ME	49.7
19	UT	10.2	19	WI	52.2	19	ND	48.1
20	NC	10.1	20	OR	50.9	20	MO	47.9
	WY		21	OK	50.2	21	GA	46.8
22	NE	10.0	22	MS	49.4	22	IN	45.9
23	SC	9.9	23	IN	47.5		IA	
24	FL	9.7	--	U.S.	46.6	24	WY	45.7
25	OR	9.6	24	MT	45.9		TN	
--	U.S.	9.0	25	IA	45.7	26	SC	45.3
26	GA	9.0	26	AZ	45.1	--	U.S.	44.4
27	ME	8.8	27	SC	44.8	27	AZ	42.9
28	IL	8.5	28	WY	44.2	28	WI	41.8
29	MO	8.4		29		GA	40.1	
	IA		30	MA	44.0	30	LA	39.6
31	HI	8.3	31	MO	43.6	31	OR	39.5
	WA		32	TN	43.2	32	OK	37.0
33	MI	8.1	33	NY	43.1	33	KS	35.8
34	PA	7.9	34	CO	42.7		UT	
35	VT	7.8	35	OH	42.3	35	NV	35.0
36	RI	7.5	36	LA	41.5	36	ID	33.5
37	KS	7.3		37		ME	32.9	
	DE		38	NJ	41.3	38	MI	32.6
39	OH	7.2	39	FL	40.2	39	NC	31.4
	CO		40	RI	40.0	40	KY	31.3
41	NY	7.1	41	VA	39.6	41	WA	30.6
42	NV	7.0	42	MD	39.2	42	MS	30.5
43	VA	6.7		43		NH	30.1	
44	IN	6.5	44	CT	38.0	44	WV	28.9
45	MD	6.2	45	ND	36.2	45	DE	28.2
	MN		46	PA	35.0	46	AK	25.6
47	WI	6.0	47	TX	32.9	47	MN	23.1
48	NH	5.5	48	SD	32.8	48	AR	15.2
49	MA	5.3	49	IL	32.3	49	NM	14.3
50	CT	4.7	50	NE	31.4	50	VT	5.1
51	NJ	4.3	n.a.	DC	n.a.	51	HI	1.8

Source: U.S. Dept. of Commerce. Census. *Public*, 2006 5.

Table A.42 (corresponds to Table 5.3)
Current Spending Per Pupil in P-12 Fall Enrollment, FY 2006

Unadjusted			Cost-adjusted		
Rank	State	\$	Rank	State	\$
1	NY	14,884	1	VT	14,915
2	NJ	14,630	2	WY	13,832
3	DC	13,446	3	NY	13,306
4	VT	12,614	4	NJ	12,953
5	CT	12,323	5	ME	12,682
6	MA	11,981	6	AK	12,075
7	RI	11,769	7	RI	11,650
8	DE	11,633	8	MT	11,601
9	AK	11,460	9	PA	11,574
10	WY	11,197	10	DE	11,440
11	PA	11,028	11	CT	11,206
12	MD	10,670	12	WV	11,047
13	ME	10,586	13	MA	11,011
14	NH	10,079	14	DC	10,946
15	WI	9,970	15	NH	10,831
16	HI	9,876	16	ND	10,732
17	OH	9,598	17	WI	10,506
18	MI	9,572	18	HI	10,428
19	VA	9,447	19	NE	10,330
20	WV	9,352	20	SD	10,061
21	IL	9,149	21	OH	10,023
--	U.S.	9,138	22	IA	9,984
22	MN	9,138	23	KS	9,920
23	IN	8,793	24	IN	9,901
24	NE	8,736	25	MD	9,869
25	ND	8,603	26	MI	9,805
26	MT	8,581	27	LA	9,692
27	GA	8,565	28	AR	9,632
28	OR	8,545	29	MN	9,456
29	CA	8,486	30	OR	9,353
30	LA	8,402	31	NM	9,221
31	KS	8,392	--	U.S.	9,138
32	IA	8,360	32	SC	8,978
33	MO	8,107	33	MO	8,964
34	SC	8,091	34	IL	8,864
35	NM	8,086	35	VA	8,728
36	CO	8,057		AL	
37	AR	7,927	37	GA	8,724
38	WA	7,830	38	MS	8,695
39	FL	7,759	39	KY	8,675
40	KY	7,662	40	CO	8,401
41	SD	7,651	41	FL	8,381
42	AL	7,646	42	OK	8,280
43	TX	7,561	43	ID	8,000
44	NC	7,388	44	NC	7,828
45	NV	7,345	45	CA	7,741
46	MS	7,221	46	TX	7,644
47	OK	6,961	47	WA	7,541
48	TN	6,883	48	TN	7,489
49	AZ	6,472	49	NV	7,383
50	ID	6,440	50	AZ	7,066
51	UT	5,437	51	UT	5,935

Sources: Unadjusted numbers are from U.S. Dept. of Commerce. Census. *Public* 8. Staff calculated adjusted numbers using the Comparable Wage Index from U.S. Dept. of Ed. Inst. Natl. "NCES Comparable Wage."

**Table A.43 (corresponds to Table 5.4)
Current Spending Per \$1,000 in Personal Income, FY 2006**

Total Current Spending			Instruction									General Admin.			School Admin.		
Rank	State	\$	Total Instruction			Salaries Only			Benefits Only			Rank	State	\$	Rank	State	\$
			Rank	State	\$	Rank	State	\$	Rank	State	\$						
1	AK	62.68	1	VT	37.57	1	VT	24.19	1	WV	10.34	1	ND	1.90	1	VT	3.98
2	VT	59.44	2	NY	37.44	2	NY	23.98	2	NY	9.43	2	NE	1.62	2	AK	3.72
3	NJ	55.31	3	AK	35.86	3	AK	22.64	3	AK	9.15	3	VT	1.47	3	NM	3.11
4	WV	54.56	4	ME	33.87	4	ME	21.94	4	IN	8.90	4	NH	1.46	4	GA	3.00
5	NY	53.66	5	WV	32.73	5	GA	21.51	5	WI	8.76	5	AR	1.45		MI	
6	ME	52.03	6	NJ	32.65	6	NJ	21.13	6	MI	8.30	6	IL	1.41	6	WV	2.93
7	WY	51.02	7	AR	30.28	7	AR	20.74	7	VT	8.07	7	WV	1.39	7	WY	2.85
8	AR	50.10	8	GA	30.23	8	TX	20.15	8	ME	7.95	8	MS	1.38	8	ME	2.80
9	MI	50.08	9	WY	30.21	9	WY	20.04	9	NJ	7.19		MT		9	MD	2.75
10	NM	48.92	10	RI	29.20	10	WV	20.01	10	DE	7.18	10	PA	1.35	10	HI	2.73
11	LA	48.77	11	WI	29.07	11	MS	19.87	11	RI	7.15	11	SD	1.31	11	SC	2.70
12	RI	48.41	12	MI	28.45	12	NM	19.58	12	MA	7.11	12	OH	1.29	12	AR	2.68
13	GA	48.21	13	LA	28.36	13	SC	19.52	13	WY	7.10	13	NJ	1.26	13	CA	2.67
14	MS	48.18	14	MS	28.31	14	RI	19.22	14	LA	6.94	14	WI	1.25	14	NJ	2.66
15	OH	47.72	15	NM	27.78	15	LA	18.99	15	OR	6.78		KS		15	IN	2.65
16	WI	47.64	16	IN	27.64	16	KY	18.65	16	UT	6.58	16	OK	1.23	16	AL	2.64
17	SC	47.07	17	MT	27.59	17	WI	18.60	17	CT	6.39		MO		17	OR	2.63
18	IN	46.63	18	OH	27.51	18	IA	18.56	18	NH	6.23	18	IA	1.21	MS		
19	MT	45.64	19	SC	27.42	19	OH	18.43	19	GA	6.19	19	NM	1.19	19	OH	2.60
20	PA	45.03	20	NH	27.21	20	MT	18.35	20	PA	6.10	20	MN	1.17	20	KS	2.59
21	TX	44.26		NE		ND	21	NH	18.06	21	KY	5.99	21	LA	1.16	21	IA
22	KY	44.02	MA	27.14	MI	22		OH		5.92	AL						
23	KS	43.57	PA	27.04	23	AL		5.90		23	WY	1.13	23	WY	1.13	22	LA
--	U.S.	43.34	24	TX	26.70	24	PA	18.03	24	NE	5.87	24	ME	1.09	24	NC	2.49
24	IA	43.30	25	KS	26.49	--	U.S.	17.93	25	MD	5.81	25	KY	1.06	25	WI	2.44
	NE		--	U.S.	26.43	25	MO	17.89	26	ID	5.72	26	MI	1.00	26	DE	2.42
26	DE	42.83	26	CT	26.39	26	IN	17.87	27	NM	5.70	27	AK	0.95	26	TX	
27	AL	42.75	27	DE	26.20		MN		--	U.S.	5.68	28	NY	0.91	28	RI	2.40
28	NH	42.69	28	KY	26.05	28	ID	17.81	28	MS	5.63	29	ID	0.89	28	KY	
29	MA	42.63	29	IA	25.99	29	NE	17.78	29	IA	5.62	30	IN	0.86	30	CT	2.39
30	CT	42.00	30	ID	25.44	30	KS	17.76	30	HI	5.51	31	CT	0.84	--	U.S.	2.38
31	OR	41.94	31	MN	25.29	31	NC	17.65	31	AR	5.35	--	U.S.	0.82	31	NH	2.37
32	ND	41.52	32	ND	25.23	32	CT	17.58	32	SC	5.33	32	TN	0.75	32	ID	2.36
33	OK	41.47	33	AL	25.00	33	IL	17.57	33	MN	5.25	33	TX	0.67	33	CO	2.35
34	IL	41.45	34	OR	24.72	34	VA	17.49	34	VA	5.21	34	NC	0.64	34	NE	2.34
35	ID	41.17	35	MO	24.64	35	MA	16.74	35	MT	5.17	35	GA	0.63	35	MO	2.33
36	MO	40.81	36	VA	24.45	36	DE	16.65	36	CA	5.03	36	DC	0.62		UT	
37	HI	40.73	37	IL	24.40	37	MD	16.55	37	ND	4.99	37	VA	0.60	37	VA	2.32
38	VA	39.93	38	UT	24.36	38	AL	16.33	38	IL	4.62	38	NV	0.58	38	NV	2.28
39	CA	39.62	39	HI	24.30	39	CA	16.15	39	NV	4.41	39	OR	0.57	39	OK	2.24
40	MD	39.48	40	CA	24.03	40	UT	16.07	40	OK	4.35		SC		40	WA	2.18
41	MN	39.23	41	MD	23.81	41	TN	15.91	41	MO	4.33	41	RI	0.56	41	IL	2.11
42	UT	38.47	42	NC	23.76	42	OK	15.85	42	TN	4.30	42	MA	0.55	42	NY	2.08
43	NC	38.42	43	TN	23.01	43	SD	15.66	43	WA	4.19	43	CO	0.54	43	TN	1.97
44	SD	37.79	44	OK	22.89	44	HI	15.61	44	KS	4.12	44	AZ	0.50		ND	
45	AZ	35.94	45	SD	22.40	45	WA	15.24	45	NC	4.08	45	WA	0.47	45	FL	1.90
46	WA	35.93	46	WA	21.47	46	AZ	14.99	46	SD	4.06		DE		46	PA	1.87
47	CO	35.76	47	AZ	20.64		OR		47	AZ	3.74	47	UT	0.43	47	MA	1.83
48	TN	35.55	48	NV	20.39	48	CO	14.48	48	FL	3.56	48	MD	0.42		AZ	
49	NV	33.58	49	CO	20.27	49	FL	12.87	49	CO	3.24	49	CA	0.35	49	SD	1.81
50	FL	33.51	50	FL	19.80	50	NV	12.86	50	TX	3.22	50	FL	0.34	50	MN	1.65
51	DC	30.09	51	DC	15.35	51	DC	9.00	51	DC	0.83	51	HI	0.31		DC	

Source: U.S. Dept. of Commerce. Census. *Public* 2006.

Table A.44 (corresponds to Table 5.5)
Spending on Instruction, Support Services, and Other Functions
As Percentages of Current Spending, FY 2006

Instruction			Support Services			All Other			
Rank	State	%	Rank	State	%	Rank	State	%	
1	NY	69.2	1	DC	45.6	1	OK	10.7	
2	ME	64.3	2	CO	39.5	2	UT	9.2	
3	TN	64.0	3	AK	39.3	3	MN	8.9	
4	NH	63.5	4	MI	39.2	4	AL	8.4	
5	MA	63.4	5	OH	38.4	5	ND	8.1	
6	VT	63.0	6	NM	38.1	6	HI	7.7	
7	NE	62.7	7	NJ	37.5	7	WV	7.0	
8	GA	62.5	8	OR	37.4	8	FL	6.8	
	CT			IL					
10	ID	61.6	10	AZ	37.1				KY
11	NC	61.5	11	RI	36.5	11	SC	6.4	
	MN			IN		12	LA	6.2	
13	UT	61.4	13	OK	36.4		MO		
14	VA	60.9	14	SC	36.0	14	NC	6.0	
15	KS	60.7	15	LA	35.9		AZ		
16	DE	60.6	16	SD	35.8		TN		
17	WI	60.4	17	PA	35.7		CA		
	NV			NV		18	TX	5.8	
19	ND	60.3	19	FL	35.4	19	NM	5.7	
--	U.S.	60.2	20	MT	35.3	20	AR	5.6	
20	MD	60.2	21	WA	35.1	21	WA	5.4	
	MT			IA		22	IA	5.3	
22	AR	60.0	23	WI	35.0	--	U.S.	5.2	
23	TX	59.8		MD			23	SD	5.2
24	IA	59.6	25	CA	34.9		MI		
25	WA	59.4	26	KY	34.7		GA		
	PA		27	MS	34.7	26	NE	5.1	
27	RI	59.3	28	DE	34.6	27	ID	5.0	
28	MO	59.2	29	MO	34.6	28	PA	4.9	
	WV		--	U.S.	34.6		KS		
	CA		30	HI	34.5		MD		
31	SD	59.0	31	VA	34.4	31	OH	4.8	
	WY			TX					
33	IN	58.9				AR		DE	
34	OR	58.7				KS		ME	
35	NJ	58.5	35	AL	34.2	34	CO	4.7	
	MS		36	VT	33.9		IN		
	KY			WV		37	VA	4.6	
38	IL	58.4	38	ID	33.4	38	WI	4.5	
39	LA	57.9		CT		39	RI	4.2	
40	HI	57.8	40	MA	33.2		IL		
	FL			NH		41	DC	4.1	
42	SC	57.6	42	NC	32.5	41	CT	4.1	
43	AL	57.4	43	GA	32.3	43	NJ	4.0	
44	AK	56.9	44	NE	32.2	44	OR	3.9	
	AZ		45	ND	31.6		NV		
46	OH	56.8	46	ME	30.9	46	AK	3.8	
47	NM	56.2	47	TN	30.1	47	WY	3.5	
48	CO	55.8	48	MN	29.6	48	MA	3.4	
49	MI	55.6	49	UT	29.5	49	NH	3.3	
50	OK	52.9	50	NY	27.8	50	VT	3.1	
51	DC	50.3	51	WY	37.5	51	NY	3.0	

Source: U.S. Dept. of Commerce. Census. *Public* 2006.

Table A.45 (corresponds to Table 5.6)
Spending on Instruction and Instruction-related, Student Support Services, Administration, and Operations Functions, As Percentages of Current Spending, FY 2006

Instruction & Instruction-related			Student Support Services			Administration			Operations				
Rank	State	%	Rank	State	%	Rank	State	%	Rank	State	%		
1	NY	72.0	1	HI	12.0	1	CO	17.7	1	WV	23.1		
2	MA	69.9	2	RI	11.9	2	NV	15.1	2	LA	22.4		
	TN		3	NM	9.6	3	OR	13.8	3	DC	22.1		
4	ME	69.2	4	NJ	9.0	4	DE	13.2	4	OK	21.6		
5	MN	69.0	5	VT	7.4	5	OH	13.1	5	MS	21.2		
6	GA	68.0	6	MI	7.3	6	MI	12.7	6	KY	20.9		
7	UT	67.9	7	OR	7.1	7	WI	12.6		ND			
8	VA	67.7	8	NH	6.9	8	DC	12.4	8	IN	20.7		
9	NH	67.6		9		SD	12.3	9	AL	20.6			
10	VT	67.3	10	OK	6.5	10	CA	12.0	10	DE	20.4		
11	CA	67.1	11	WA	6.4	11	IL	11.9	11	FL	20.1		
12	NE	66.7	12	AK	6.3		12		IA	20.0			
13	AR	66.6		13		DC	6.0	13	IN	11.7	13	AK	19.9
	CT		14	IL	11.6	14		KS	11.6	14	MO	19.6	
16	MD	66.1	15	CT	5.9	15	WA	11.5	15	AZ	19.5		
	WI			16		OH	11.4	16		ND		11.4	TX
--	U.S.	65.9	17	IA	5.6	17	VT	11.3	17	MT	19.2		
17	FL	65.9		17		WY	5.6		17	WY	11.2	18	PA
	ID		19	AZ	11.1	19		OK	11.1	19		UT	
NC	65.2	19		ID		5.5	20	AK		11.0	20	NJ	18.9
MO		65.1	22	KS	5.4		20	NC	10.9		21	ID	18.7
PA	22			MA		22		MT		22		NM	
22	KY	65.0	24	SD	5.4	22	PA	11.0	24	MI	18.4		
23	RI	64.9	24	NC	5.2	25	AL	10.9	24	NM	18.4		
	TX			--			U.S.			10.8		26	KS
25	SC	64.7	26	U.S.	5.1	26	AR	10.8	27	IL	18.2		
26	WY	64.5	26	AL	4.9		26			NE		NE	
27	IA	64.4	27	PA	4.8	28	AZ	10.6		SC			
	KS			27			TX			28		TX	WA
29	MT	64.3	29	DE	4.7	30	GA	10.5	--	U.S.	18.1		
30	AZ	63.9		29			GA		4.7	30	MD	31	AR
31	MS	63.8	32	VA	4.6		30		MN	17.9	31	WY	17.8
	NV			32			FL		32		MO	33	
34	WA	63.7	34	MO	4.5	34	MS	10.4	34	MN	17.7		
34	WV	63.5		34		AR	4.4	35	HI	10.3	35	IA	17.7
	ND		37	34	CA	4.3		36	LA	10.2	36	CT	17.6
OH	37	WI		37	MS		4.5	37	KY	10.0		NC	
37	IL	63.4	37	MS	4.2	37	SC	9.9	38	TN	17.2		
38	AL	63.3		37		CO	4.1	38	CT	9.8		39	NV
39	HI	63.2	38	IN	4.0	39		ID	9.7	39	OH	16.6	
	LA			38			MD	41		NH	41		GA
41	IN	62.7	40	NE	3.8	41	NJ	9.5	41	WI	16.4		
42	OR	62.6		40			KY			4.1		43	WV
43	AK	62.4	42	LA	3.7	43	UT	9.4	44	NY	16.3		
44	NJ	62.3		42		ND	4.0	44		FL		9.3	OR
45	SD	61.7	44	NV	3.6	45	ME	9.2	46	CA	16.3		
46	DE	61.6		44		ME	3.8	46	TN	9.1	47	MA	16.0
47	MI	61.4	46	UT	3.4	47	VA	8.9	48	NH	15.8		
48	CO	60.9		46		WV	3.6	48	MA	8.6	49	RI	14.6
49	NM	60.7	48	TN	3.4	49	RI	8.5	50	HI	14.4		
50	OK	59.2	49	NY	3.2	50	NY	8.4	51	VT	14.0		
51	DC	59.2	50	MN	2.7	51	NY	8.4	51	VT	14.0		

Source: U.S. Dept. of Ed. Inst. Natl. Revenues and Expenditures 15.

**Table A.46 (corresponds to Table 5.7)
Average Public School Teacher Salaries, Unadjusted and Adjusted for Geographic Cost
Differences, FY 2006**

Rank	State	Unadjusted \$	Rank	State	Adjusted \$
1	California	59,825	1	Illinois	56,861
2	Connecticut	59,304	2	Pennsylvania	56,698
3	District of Columbia	59,000	3	Alaska	56,426
4	Illinois	58,686	4	Michigan	56,073
5	New Jersey	58,156	5	Vermont	55,129
6	New York	57,354	6	Oregon	54,772
7	Massachusetts	56,369	7	California	54,571
8	Michigan	54,739	8	Rhode Island	54,173
9	Rhode Island	54,730	9	Connecticut	53,928
10	Maryland	54,333	10	Montana	53,850
11	Delaware	54,264	11	Wyoming	53,435
12	Pennsylvania	54,027	12	Delaware	53,361
13	Alaska	53,553	13	Indiana	53,211
14	Ohio	50,314	14	Ohio	52,540
15	Oregon	50,044	15	Hawaii	52,044
16	Hawaii	49,292	16	Arkansas	51,966
--	United States	49,026	17	Massachusetts	51,807
17	Minnesota	48,489	18	New Jersey	51,489
18	Georgia	48,300	19	New York	51,274
19	Indiana	47,255	20	Idaho	51,114
20	Vermont	46,622	21	Maryland	50,253
21	Wisconsin	46,390	22	Minnesota	50,175
22	Washington	46,326	23	Georgia	49,198
23	New Hampshire	45,263	24	Iowa	49,065
24	Arizona	44,672	--	United States	49,026
25	Colorado	44,439	25	Kansas	49,015
26	Nevada	44,426	26	Wisconsin	48,886
27	North Carolina	43,922	27	Mississippi	48,857
28	Virginia	43,823	28	Maine	48,800
29	Florida	43,302	29	Arizona	48,770
30	Wyoming	43,255	30	New Hampshire	48,639
31	South Carolina	43,011	31	Kentucky	48,222
32	Arkansas	42,768	32	District of Columbia	48,031
33	Kentucky	42,592	33	Nebraska	47,750
34	Tennessee	42,537	34	South Carolina	47,723
35	Texas	41,744	35	New Mexico	47,481
36	New Mexico	41,637	36	North Dakota	47,107
37	Kansas	41,467	37	Florida	46,774
38	Idaho	41,150	38	North Carolina	46,538
39	Iowa	41,083	39	Colorado	46,336
40	Maine	40,737	40	Tennessee	46,284
41	Mississippi	40,576	41	Louisiana	46,172
42	Missouri	40,462	42	Oklahoma	46,118
43	Nebraska	40,382	43	Alabama	46,056
44	Alabama	40,347	44	South Dakota	45,641
45	Louisiana	40,029	45	West Virginia	45,223
46	Utah	40,007	46	Missouri	44,738
47	Montana	39,832	47	Nevada	44,659
48	Oklahoma	38,772	48	Washington	44,615
49	West Virginia	38,284	49	Utah	43,674
50	North Dakota	37,764	50	Texas	42,198
51	South Dakota	34,709	51	Virginia	40,488

Note: Staff calculated adjusted salaries using NCES Comparable Wage Index.

Source: Natl. Ed. Assoc. *Rankings & Estimates 2006-2007*, Rankings, Table C-11. Data used with permission of the National Education Association © 2007. All rights reserved.

Table A.47 (corresponds to Table 5.8)
Education Week's Equity/Disparity Measures, FY 2005

Wealth-neutrality Score			McLoone Index			Coefficient of Variation			Restricted Range			
Relationship Between District Funding and Local Property Wealth (Lower Value is Better)			Actual Spending as Percentage of Amount Needed To Bring All Districts to Median Level (Higher Value is Better)			Amount of Disparity in Spending Across Districts (Lower Value = Greater Equity)			Difference in Per-pupil Spending Levels at the 95 th and 5 th Percentiles (Lower Value is Better)			
Rank	State	Score	Rank	State	Index	Rank	State	CV	Rank	State	\$ Range	
1	AK	-0.185	1	NV	100.0	1	WV	0.058	1	WV	\$1,626	
2	NV	-0.123	2	UT	98.1	2	FL	0.074	2	KY	1,920	
3	NE	-0.108	3	NM	97.7	3	KY	0.091	3	AL	1,980	
4	SD	-0.030	4	NE	95.7	4	DE	0.092	4	TN	2,092	
5	UT	-0.029	5	SD	95.6	5	AL		5	AR	2,355	
6	NM	-0.011	7	NC		95.3	6	LA	0.094	6	MS	2,396
7	WY	-0.008	7	KS	95.3		7	WI	0.095	7	IA	2,414
8	IA	-0.007	9	LA		9	TN	0.098		8	OH	2,644
9	KS	-0.004	9	MD	95.2	9	IA	0.098	9	FL	2,837	
10	NJ	0.014	10	IA	95.1	10	NC		10	MI	2,996	
11	MN	0.015	11	WI	94.7	11	GA	0.099	11	SC	3,060	
12	OK	0.016	12	FL	94.4	12	AR	0.103	12	NC	3,090	
13	IN	0.017	13	WV	94.3	13	MD	0.105	13	LA	3,335	
14	AR	0.033	14	WY	94.1	14	SC	0.112	14	PA	3,435	
15	CA	0.036	16	GA		16	MS		15	DE	3,521	
16	LA	0.045	16	AL	94.0	16	NV	0.115	16	GA	3,530	
17	WI	0.053	18	AK		17	RI	0.119	17	WI	3,588	
18	MA	0.058	18	AR	93.9	18	CT	0.120	18	MO	3,659	
19	KY	0.070	20	TX		19	CO	0.128	19	MD	3,696	
20	WV	0.075	20	SC	93.7	20	NY	0.133	20	IN	3,785	
21	MO	0.077	21	MN	93.6	21	PA		21	MN	3,899	
22	AZ	0.078	22	OR	93.4	22	CA		22	OR	3,957	
23	WA	0.079	24	CO		23	IL	0.135	23	OK	4,062	
24	NY	0.080	24	TN	93.3	24	MI	0.136	24	NE	4,117	
--	U.S.	0.085	25	AZ	93.2	25	MN		25	ID	4,121	
25	ND	0.086	26	PA	92.8	26	VA	0.137	26	VA	4,163	
26	CT	0.089	26	VA		27	WA	0.139	27	KS	4,176	
27	MT	0.091	28	CA	92.7	28	OR	0.141	28	ND	4,418	
28	TN	0.093	--	U.S.	92.6	29	TX	0.143	29	SD	4,510	
29	OH	0.094	29	MS	92.5	30	OH	0.144	30	CA	4,633	
30	ME	0.113	30	MT	92.5	31	IN	0.145	--	U.S.	4,725	
31	GA	0.127	31	CT	92.3	32	ME	0.146	31	IL	4,743	
	MS		32	WA	92.2	--	U.S.	0.147	32	TX	4,756	
33	VT	0.136	33	DE	92.1	33	KS	0.159	33	CO	4,865	
34	OR	0.142		34		KY	34	MO	0.162	34	RI	5,148
35	MI	0.146		35		OH	35	UT	0.168	35	NM	5,233
36	FL	0.148	36	MI	91.8	36	NJ	0.177	36	CT	5,391	
37	CO	0.149	37	ND	91.1	37	NE	0.178	37	ME	5,605	
38	TX	0.156	38	NJ	91.0	38	OK	0.180	38	AZ	5,775	
39	DE	0.159	39	OK	90.9	39	WY	0.181	39	WA	5,839	
40	RI	0.160	40	IL	90.7	40	NM	0.187	40	NH	6,138	
	PA		41	MA	89.9	41	MA	0.191	41	NJ	6,173	
42	NH	0.169	42	RI	89.7	42	NH		42	UT	6,343	
43	IL	0.170		43		MO	43	ID	0.198	43	MA	6,399
44	AL	0.171	44	IN	89.5	44	SD	0.205	44	MT	6,505	
45	NC	0.201	45	ID	89.2	45	AZ	0.206	45	VT	7,092	
46	SC	0.212	46	ME	87.6	46	VT	0.225	46	NY	7,313	
47	ID	0.276	47	NY	85.5	47	ND	0.259	47	WY	9,910	
48	MD	0.283	48	NH	83.6	48	MT	0.299	48	NV	13,541	
49	VA	0.288	49	VT	83.2	49	AK	0.334	49	AK	14,764	
n.a.	DC	n.a.	n.a.	DC	n.a.	n.a.	DC	n.a.	n.a.	DC	n.a.	
	HI			HI			HI					

Source: Editorial Projects in Education. *Education Week's Quality Counts*.

**Table A.48 (corresponds to Table 5.9)
Education Trust Poverty and Minority Funding Gaps, 2005**

Gap, Low-poverty Minus High-poverty Districts			Gap, Low-minority Minus High-minority Districts		
Rank	State	Gap (\$)	Rank	State	Gap (\$)
1	AK	5,720	1	AK	3,952
2	NJ	1,918	2	NJ	1,840
3	MN	1,134	3	MA	1,116
4	UT	523	4	OH	1,032
5	MA	513	5	MN	833
6	NM	491	6	AR	547
7	KY	462	7	MO	535
8	OR	381	8	IN	428
9	AR	230	9	OR	277
10	WY	174	10	WV	238
11	TN	155	11	LA	229
12	OH	73	12	KY	152
13	SC	-19	13	GA	134
14	MD	-23	14	SC	81
15	ND	-40	15	TN	-81
16	OK	-72	16	UT	-122
17	IA	-157	17	NM	-126
18	CT	-162	18	FL	-133
19	FL	-199	19	VT	-135
20	SD	-228	20	MS	-166
21	NE	-237	21	WA	-167
22	IN	-238	22	VA	-250
23	MS	-267	23	OK	-294
24	WA	-292	24	MI	-358
25	ID	-371	25	AL	-500
26	WV	-383	26	AZ	-539
27	CA	-436	27	CT	-563
	GA		28	IA	-574
29	CO	-518	29	CA	-661
30	VA	-526	30	RI	-716
31	LA	-560	31	NC	-738
32	KS	-632	32	MD	-803
33	AZ	-653	33	ID	-824
	RI		34	ME	-864
35	AL	-692	35	DE	-933
36	ME	-718	36	SD	-939
37	NV	-737	37	ND	-951
38	TX	-796	38	PA	-1,030
39	VT	-798	39	NV	-1,094
40	MO	-803	40	CO	-1,206
41	MT	-810	41	WI	-1,221
42	NC	-825	--	U.S.	-1,275
43	WI	-990	42	TX	-1,385
44	DE	-1,126	43	MT	-1,540
45	MI	-1,388	44	KS	-1,594
--	U.S.	-1,532	45	NE	-1,763
46	NH	-1,662	46	IL	-2,021
47	PA	-1,708	47	WY	-2,034
48	IL	-2,827	48	NH	-2,332
49	NY	-3,972	49	NY	-3,544
n.a.	DC	n.a.	n.a.	DC	n.a.
	HI			HI	

Notes: Rank out of 49; DC and HI have only one district. A negative dollar amount indicates that fewer dollars were provided to high-poverty or high-minority districts. A positive amount indicates more dollars for high-poverty or high-minority districts. Education Trust made a 40 percent adjustment for low-income students.

Source: Education Trust. *The Funding Gap 9*.

**Table A.49 (corresponds to Table 5.10)
Poverty Funding Gap Trends, 1999 to 2005**

1999 Gap, Low-poverty Minus High-poverty Districts			2005 Gap, Low-poverty Minus High-poverty Districts			1999-2005 Poverty Gap, Change in Dollars		
Rank	State	Gap (\$)	Rank	State	Gap (\$)	Rank	State	Change (\$)
1	VT	2,193	1	AK	6,523	1	AK	5,839
2	MA	1,435	2	NJ	2,712	2	NJ	2,145
3	MN	1,368	3	MN	1,629	3	MD	1,376
4	KY	801	4	MA	1,396	4	OH	910
5	UT	799	5	NM	923	5	WY	527
6	TN	729	6	KY	878	6	AR	523
7	AK	684	7	OH	833	7	NM	427
8	OR	659	8	CT	825	8	NY	358
9	CT	615	9	UT	739	9	MN	261
10	NJ	568	10	OR	647	10	CT	210
11	NM	495	11	AR	541	11	IN	197
12	MO	480	12	WY	468	12	LA	180
13	ID	457	13	TN	454	13	PA	163
14	KS	388	14	MD	395	14	CA	143
15	NE	384	15	IN	322	15	SC	136
16	FL	350	16	SC	302	16	IA	112
17	NC	337	17	OK	271	17	DE	98
18	OK	312	18	RI	266	18	KY	77
19	TX	280	19	ND	159	19	RI	68
20	GA	245	20	CA	154	20	AZ	55
21	SD	240	21	MS	151	21	WA	23
22	VA	234	22	IA	108	22	CO	7
23	RI	197	23	WA	87	23	MT	-5
24	MS	192	24	GA	82	24	OR	-13
25	ND	183	25	NE	66	25	AL	-19
26	SC	166	26	FL	-18	26	ND	-23
27	IN	126	27	WV	-19	27	MA	-39
28	WA	64	28	MO	-104	28	WV	-40
29	WV	22	29	VA	-122	29	MS	-41
30	AR	18	30	CO	-126	30	OK	-42
31	CA	11	31	AZ	-143	31	UT	-60
32	IA	-4	32	TX	-165	32	MI	-78
33	ME	-9	33	ID	-185	--	U.S.	-90
34	WI	-28	34	SD	-228	33	GA	-162
35	WY	-59	35	LA	-241	34	TN	-275
36	OH	-77	36	VT	-264	35	NE	-318
37	CO	-133	37	KS	-284	36	ME	-321
38	NV	-189	38	AL	-328	37	VA	-356
39	AZ	-198	39	ME	-331	38	FL	-368
40	AL	-309	40	WI	-468	39	WI	-439
41	LA	-421	41	MT	-505	40	TX	-445
42	MT	-500	42	NC	-603	41	SD	-468
43	MI	-682	43	NV	-680	42	NV	-491
44	NH	-723	44	MI	-759	43	MO	-584
--	U.S.	-848	--	U.S.	-938	44	NH	-617
45	MD	-981	45	DE	-954	45	ID	-642
46	DE	-1,052	46	PA	-1,055	46	IL	-668
47	PA	-1,218	47	NH	-1,340	47	KS	-672
48	IL	-1,568	48	IL	-2,235	48	NC	-939
49	NY	-3,426	49	NY	-3,068	49	VT	-2,457
n.a.	DC	n.a.	n.a.	DC	n.a.	n.a.	DC	n.a.
	HI			HI			HI	

Notes: DC and HI each has only one district. A negative dollar amount indicates that fewer dollars were provided to high-poverty districts. A positive amount indicates more dollars for high-poverty districts. Education Trust made no adjustment to these numbers for low-income students.

Source: Education Trust. *The Funding Gap* 6.

Table A.50 (corresponds to Table 5.11)
Minority Funding Gap Trends, 1999 to 2005

1999 Gap, Low-minority Minus High-minority Districts			2005 Gap, Low-minority Minus High-minority Districts			1999-2005 Minority Gap, Change in Dollars		
Rank	State	Gap (\$)	Rank	State	Gap (\$)	Rank	State	Change (\$)
1	AK	2,746	1	AK	4,442	1	NJ	2,215
2	MA	1,865	2	NJ	2,633	2	AK	1,696
3	MO	1,446	3	MA	1,891	3	OH	800
4	MN	1,027	4	OH	1,520	4	LA	578
5	GA	957	5	MN	1,113	5	NY	549
6	VT	823	6	MO	788	6	OR	515
7	IN	766	7	IN	721	7	SC	445
8	OH	720	8	AR	707	8	CT	440
9	VA	521	9	GA	496	9	AR	400
10	ID	484	10	OR	377	10	RI	227
11	NJ	418	11	CT	367	11	PA	207
12	AR	308	12	SC	297	12	KY	206
13	MS	215	13	LA	293	13	CA	201
14	WA	91	14	WV	200	14	MI	119
	WV		15	MS	163	15	WV	109
16	NM	50	16	RI	129	16	MN	86
	UT		17	NM	103	--	U.S.	73
18	FL	31	18	WA	81	17	AL	67
19	ME	17	19	MI	55	18	NM	53
	OK		20	KY	44	19	TN	51
21	AZ	-34	21	TN	10	20	IA	38
22	TN	-41	22	UT	-12	21	MA	26
23	MI	-64	23	FL	-15	22	WA	-10
24	CT	-74	24	OK	-56	23	IN	-45
25	NC	-75	25	VA	-57	24	FL	-46
26	RI	-99	26	VT	-63	25	MS	-52
27	OR	-138	27	AZ	-100	26	UT	-62
28	SC	-148	28	CA	-216	27	AZ	-65
29	KY	-162	29	AL	-280	28	OK	-73
30	LA	-285	30	IA	-474	29	MD	-157
31	AL	-347	31	MD	-578	30	KS	-168
32	DE	-385	32	PA	-662	31	ND	-176
33	CA	-417	33	NC	-663	32	CO	-276
34	MD	-421	34	ME	-757	33	TX	-327
35	WI	-430	35	ID	-814	34	SD	-341
36	NV	-496	--	U.S.	-877	35	WI	-450
37	IA	-512	36	WI	-880	36	GA	-461
38	SD	-542	37	SD	-883	37	DE	-507
39	TX	-586	38	ND	-890	38	MT	-509
40	CO	-652	39	DE	-892	39	NV	-574
41	ND	-713	40	TX	-912	40	VA	-579
42	IL	-864	41	CO	-928	41	NC	-587
43	PA	-869	42	NV	-1,070	42	MO	-658
44	WY	-921	43	KS	-1,417	43	NE	-674
--	U.S.	-950	44	MT	-1,467	44	NH	-710
45	MT	-958	45	IL	-1,623	45	IL	-758
46	NE	-982	46	NE	-1,656	46	ME	-774
47	KS	-1,249	47	WY	-2,015	47	VT	-887
48	NH	-1,557	48	NH	-2,267	48	WY	-1,094
49	NY	-3,450	49	NY	-2,902	49	ID	-1,298
n.a.	DC	n.a.	n.a.	DC	n.a.	n.a.	DC	n.a.
	HI			HI				

Notes: DC and HI each has only one district. A negative dollar amount indicates that fewer dollars were provided to high-minority districts. A positive amount indicates more dollars for high-minority districts. Education Trust made no adjustment to these numbers for low-income students.

Source: Education Trust. *The Funding Gap 7*.

Table A.51 (corresponds to Table 5.13)
Education Week's Overall School Finance Index, 2008

Rank	State	Total Score	Overall Grade
1	WV	92.5	A
2	NJ	91.0	A-
3	WI	89.5	B+
4	NY	88.7	
5	CT	87.9	
6	VT	86.9	
7	ME	86.6	
8	WY	85.9	
9	RI	85.0	
10	MD	84.9	
11	IN	84.3	
12	DE	83.5	
13	OH	82.0	B-
14	MA	81.9	
15	PA	81.5	
16	AR	81.1	
17	MI	80.9	
18	NE	80.2	
19	IA	80.1	C+
20	KS	78.9	
21	GA	78.7	
	MN		
23	NH	78.2	
24	VA	77.6	
--	U.S.	77.6	
25	LA	77.2	
26	SC	76.1	C
27	ND	75.1	
28	SD	74.4	
29	KY	74.0	
	NM		
31	AL	73.8	
32	IL	73.2	
33	MO	72.9	
34	MS	72.3	
	MT		
36	OR	72.1	
37	CO	72.0	
38	FL	70.6	
39	NC	70.3	
40	TX	69.9	
41	TN	69.7	
42	OK	69.5	D+
43	CA	69.2	
44	WA	68.5	
45	AK	68.2	
46	NV	67.6	
47	ID	65.3	D
48	UT	64.9	
49	AZ	64.8	
n.a.	DC	n.a.	n.a.
	HI		

Source: Editorial Projects in Education. *Education Week's Quality Counts 2008*.

Table A.52 (corresponds to Table 6.1)
Education Week's Quality Counts Overall Grade

Rank	State	Overall State Grade	Total score	Chance for Success	K-12 Achievement	Standards, Assessment, and Accountability	Transitions and Alignment	Teaching Profession	School Finance	
1	NY	B	84.9	B	C-	A	A	C+	B+	
2	MA		84.0	A	B	A-	C	C	B-	
3	MD		83.5	B+	B	B	B+	C-	B	
4	NJ	B-	82.4	A-	B-	B-	C+	C	A-	
5	VA		82.3	B	C	A	C+	B-	C+	
6	WV		80.8	C-	F	A	B+	C+	A	
7	OH		80.6	B-	C-	A	C+	C+	B-	
8	AR		80.5	C-	D	B+	B	B+	B-	
9	SC		80.4	C	D	A	B-	A-	C	
10	PA		80.3	B	C+	C+	B-	C+	B-	
11	GA		80.2	C	D+	A-	B	B	C+	
12	IN		79.7	C+	C-	A	C+	C-	B	
13	VT		79.5	B+	C+	B-	C-	C-	B+	
14	FL		C+	79.2	C+	C	A-	C+	B	C-
15	WI	78.3		B-	C-	C+	C-	C+	B+	
16	TN	78.0		78.0	C-	D+	A-	A	C	C-
	DE				B	C-	B+	D	C+	B
18	MI	77.8		C+	D	A-	B	D+	B-	
19	CT	77.6		A-	D	C	C	C-	B+	
20	ME	77.5		B-	C	C+	B-	D	B+	
21	LA	C		76.5	D+	D-	A	C	B	C+
22	KY			76.4	C	D+	B+	C	B-	C
23	TX			75.9	C	C	B+	C+	C	C-
--	U.S.		75.9	C+	D+	B	C	C	C+	
24	NC		75.8	75.8	C+	D+	B+	D+	B	C-
	MN				B+	C	C	C-	D+	C+
26	AL		75.7	C-	F	A-	C+	B-	C	
27	NH		75.6	A-	C	C	C-	D	C+	
28	OK		75.5	C-	D	A-	C	B-	D+	
29	IA		75.3	B	C-	D+	D+	B-	B-	
30	NM		75.2	75.2	D+	D-	A-	B-	C+	C
	RI				B-	D	B+	C-	D	B
32	HI		74.8	C+	D	B-	C-	C+	NA	
33	ND		74.2	B	C	C	D+	D+	C	
34	WA		73.9	B-	C-	B-	C-	C	D+	
35	IL		73.4	73.4	B-	D+	C+	C-	D+	C
	CA				C	D	A-	C-	C-	D+
37	KS	73.3	B	C	C+	D-	D+	C+		
38	CO	73.1	B	C-	B-	D	D+	C-		
39	WY	72.8	C+	C-	C+	D-	D-	B		
40	MO	C-	72.1	C+	D	C	D+	C	C	
41	SD		71.8	B	C-	C+	D-	D	C	
42	AZ		71.6	C-	D	A-	C-	D+	D	
43	AK		70.9	C	D+	B	C-	D-	D+	
44	UT		70.7	70.7	B-	C-	C+	F	C-	D
	MT				B-	C-	C-	D-	D+	C-
46	NV	D+	69.4	D+	D-	C+	D+	C-	D+	
47	NE		69.3	B-	D+	D	F	D+	B-	
48	MS		68.9	D+	F	B	D+	D	C-	
49	OR		68.6	C	D	C+	D	F	C-	
50	ID		68.4	C	C-	C	F	D	D	
51	DC		68.1	68.1	C	F	C+	D+	D-	NA
					C	F	C+	D+	D-	NA

Note: Because DC and HI are single-district jurisdictions, there is no measure of financial equity among districts. Therefore, neither DC nor HI has a grade for school finance.

Source: Editorial Projects in Education. *Education Week's Quality Counts* 2008.

Table A.53 (corresponds to Table 6.3)
Index of NAEP Proficiency Purchasing Power Relative to Obstacles, 2008

Per Pupil Spending, Adjusted for Cost-of-Living Differences FY 2005			NAEP Proficiency in Grades 4 & 8 Reading & Math 2005 & 2007			NAEP Proficiency Purchasing Power (% proficient per \$1,000 spending)			Obstacles to Cost-effective Educational Spending Index			NAEP Proficiency Purchasing Power Relative to Obstacles		
Rank	State	\$	Rank	State	%	Rank	State	#	Rank	State	Index	Rank	State	%
1	NJ	12,252	1	MA	47.5	1	UT	6.07	1	WV	0.81392	1	UT	137.5
2	NY	12,218	2	MN	41.6	2	ID	5.03	2	NM	0.77485	2	ID	129.2
3	VT	12,105	3	VT	41.3	3	WA	5.01	3	MS	0.75334	3	WA	128.5
4	WY	11,126		NJ		4	MA	4.79	4	KY	0.71686	4	TX	125.3
5	DE	10,661	5	NH	40.7	5	MN	4.67	5	AR	0.70718	5	NC	121.5
6	CT	10,652	6	KS	38.9	6	CO	4.54	6	AL	0.68972	6	MA	120.0
7	RI	10,581	7	CT	38.3	7	KS	4.38	7	OK	0.68328	7	AZ	119.6
8	ME	10,539		PA		8	NH	4.37	8	LA	0.67382	8	KY	118.2
9	WI	10,199	9	MT	38.2	9	NC	4.33	9	TN	0.66423	9	KS	117.7
10	WV	10,073	10	ND	37.6	10	MT	4.27	10	SC	0.66394	10	FL	116.1
11	PA	9,985	11	OH	37.4	11	SD	4.23	11	AK	0.62483	11	OK	112.3
12	MA	9,930	12	WA	37.2	12	TX	4.19	12	TX	0.60727	12	SC	110.2
	NE		13	WI	37.1	13	AZ	4.13	13	NV	0.59638	13	MT	109.6
14	MD	9,829	14	VA	37.0	14	ND	4.10	14	IN	0.59493	14	CO	108.2
15	IN	9,542	15	SD	36.9		FL		15	AZ	0.57045	15	MN	107.8
16	OH	9,441	16	WY	36.5	16	VA	4.04	16	ME	0.56630	16	OR	107.7
17	NH	9,323	17	ME	36.3	17	IA	3.99	17	FL	0.54216	17	TN	107.3
18	MI	9,197	18	CO	36.1	18	OR	3.96	18	CA	0.53230	18	AK	107.0
19	ND	9,181	19	IA	36.0		OH		19	NC	0.53064	19	IN	105.7
20	VA	9,169	20	NE	35.1	20	PA	3.83	20	IL	0.52025	20	SD	105.6
21	IA	9,026	21	ID	34.5	21	MO	3.80	21	GA	0.50806	21	AR	105.1
22	HI	9,022	22	MD	34.4	--	U.S.	3.78	22	NY	0.50277	22	NH	104.4
23	MT	8,951		NY		22	WI	3.64	--	U.S.	0.50000	--	U.S.	103.6
24	MN	8,891	24	IN	34.1	23	IL	3.62	23	OR	0.48878	23	OH	103.2
25	KS	8,862	25	DE	33.2	24	CT	3.60	24	MO	0.48487	24	MO	103.1
26	AR	8,790		UT		25	KY	3.59	25	KS	0.47175	25	IL	100.8
27	SD	8,736	27	OR	33.1	26	IN	3.57	26	MI	0.46959	26	VA	99.7
--	U.S.	8,701	--	U.S.	32.9	27	NE	3.54	27	DE	0.46491	27	ME	99.6
28	GA	8,658	28	NC	32.6	28	AK	3.53	28	WY	0.43536	28	PA	99.2
29	IL	8,621	29	TX	32.2	29	OK	3.52	29	OH	0.43336	29	NV	98.3
30	LA	8,582	30	MI	31.7	30	SC	3.51	30	NJ	0.42932	30	IA	97.7
31	AK	8,562	31	MO	31.5	31	MD	3.50	31	PA	0.42231	31	ND	96.3
32	NM	8,431	32	IL	31.2	32	MI	3.45	32	RI	0.41974	32	CA	94.2
33	OR	8,353	33	FL	30.9		ME		33	NE	0.41868	33	MI	92.4
34	SC	8,339	34	AK	30.2	34	TN	3.42	34	ID	0.41323	34	NE	91.3
35	MO	8,276	35	SC	29.3	35	VT	3.41	35	WA	0.41125	35	WI	89.2
36	KY	7,978	36	RI	29.1	36	NJ	3.37	36	MT	0.41117	36	AL	88.3
37	CO	7,939	37	KY	28.7	37	CA	3.35	37	MA	0.37839	37	NJ	87.7
38	AL	7,924	38	AR	28.3	38	NV	3.32	38	SD	0.37416	38	WV	86.3
39	TX	7,687	39	GA	26.8	39	WY	3.28	39	VA	0.35750	39	WY	85.6
40	FL	7,539	40	OK	25.8	40	AR	3.22	40	WI	0.34695	40	GA	85.3
41	NC	7,525	41	AZ	25.7	41	DE	3.12	41	IA	0.34516	41	CT	84.8
42	MS	7,513		TN		42	GA	3.09	42	HI	0.32310	42	DE	83.2
43	TN	7,506	43	WV	24.0	43	NY	2.82	43	NH	0.30878	43	VT	81.1
44	WA	7,432	44	CA	23.7	44	RI	2.75	44	CO	0.30286	44	NM	80.3
45	OK	7,331		NV		45	VT		0.30004	45	MD	80.1		
46	NV	7,141	46	HI	23.4	46	HI	2.59	46	CT	0.28778	46	MS	79.6
47	CA	7,081	47	AL	21.8	47	WV	2.39	47	ND	0.28235	47	NY	77.4
48	ID	6,867	48	LA	20.4	48	LA	2.38	48	MN	0.25457	48	LA	75.4
49	AZ	6,232	49	NM	19.5	49	MS	2.34	49	MD	0.24172	49	RI	71.0
50	UT	5,463	50	MS	17.6	50	NM	2.31	50	UT	0.22601	50	HI	62.6

Notes: Kentucky Long-Term Policy Research Center assigned an index value of 0.50000 to the average of all states.

OEA used spending and proficiency data from NCES to calculate purchasing power for the U.S.

Source: Staff compilation using data from Commonwealth. Legislative. Kentucky Long-Term. *Reducing*; U.S. Dept. of Ed. Inst. Natl. *NAEP Data and Common*.

**Table A.54 (corresponds to Table 6.5)
Measuring Up Grades and Scores, 2006**

Preparation			Participation			Affordability			Completion			Benefits		
Rank	State	Grade (Score)	Rank	State	Grade (Score)	Rank	State	Grade (Score)	Rank	State	Grade (Score)	Rank	State	Grade (Score)
1	MA	A (100)	1	NM	A (100)	1	CA	C- (71)	1	NH	A (100)	1	MA	A (100)
2	NJ	A (94)	3	RI	A (98)	3	UT	D (65)	2	WA	A (99)	2	MD	A (99)
4	CT	A- (92)	4	ND	A (97)	4	HI	D (65)	3	PA	A (98)	3	NJ	A (97)
5	MD	A- (91)	5	MN	A (97)	4	ID	D (64)	3	RI	A (98)	3	VA	A (97)
7	NY	A- (91)	5	IL	A (96)	6	MN	D (64)	5	WY	A (97)	5	CT	A (96)
8	VA	A- (90)	7	KS	A (96)	6	NJ	D (63)	6	MA	A (96)	6	CA	A (95)
8	CO	B+ (88)	7	MD	A (95)	7	WA	D- (60)	7	GA	A (95)	6	MO	A (95)
8	WI	B+ (88)	8	CA	A (94)	8	IL	F (59)	7	IA	A (95)	6	NH	A (95)
10	IA	B+ (87)	8	NE	A (94)	9	WI	F (58)	7	WI	A (95)	9	IL	A (93)
10	MT	B+ (87)	10	MA	A (93)	10	IN	F (57)	10	FL	A (94)	9	OR	A (93)
10	NC	B+ (87)	10	SD	A (93)	10	NC	F (57)	10	MN	A (94)	11	CO	A (92)
14	NH	B+ (87)	12	CT	A- (92)	10	NM	F (57)	13	VT	A- (92)	11	UT	A (92)
14	PA	B (86)	12	MI	A- (92)	10	TX	F (57)	14	NY	A- (92)	11	VT	A (92)
15	IL	B (85)	15	NJ	A- (91)	15	VA	F (55)	15	DE	A- (90)	14	MI	A- (91)
16	MN	B (84)	15	CO	A- (91)	15	CO	F (55)	15	MO	B+ (89)	14	PA	A- (91)
16	NE	B (84)	17	IA	A- (90)	15	OK	F (55)	16	CT	B+ (88)	17	WA	A- (90)
16	SD	B (84)	17	WI	A- (90)	17	AR	F (54)	16	IL	B+ (88)	17	HI	A- (90)
19	ME	B (83)	19	WY	B+ (89)	17	DE	F (54)	16	IN	B+ (88)	18	AZ	B+ (89)
19	WA	B (83)	19	AZ	B+ (88)	17	KS	F (54)	16	NC	B+ (88)	18	MN	B+ (89)
21	AK	B- (81)	20	DE	B (86)	17	NY	F (54)	16	SC	B+ (88)	18	NY	B+ (89)
21	KS	B- (81)	21	VA	B (84)	22	PA	F (53)	22	VA	B+ (87)	21	KS	B+ (87)
21	OH	B- (81)	21	MO	B (84)	22	MD	F (53)	22	KS	B+ (87)	21	OH	B+ (87)
21	VT	B- (81)	23	VA	B (84)	22	NE	F (53)	22	NE	B+ (87)	23	RI	B (86)
25	ND	B- (80)	23	U.S.	B (83)	--	U.S.	F (52)	25	SD	B+ (87)	23	FL	B (84)
25	TX	B- (80)	23	PA	B (83)	24	VT	F (52)	25	MD	B (86)	24	U.S.	B (84)
--	U.S.	C+ (79)	25	UT	B (83)	24	WY	F (52)	26	CO	B (86)	--	U.S.	B (84)
27	RI	C+ (78)	26	ME	B- (82)	26	GA	F (51)	26	ME	B (85)	25	AL	B (83)
28	GA	C+ (77)	26	KY	B- (81)	26	KY	F (51)	26	OH	B (85)	25	NC	B (83)
28	SC	C+ (77)	28	NY	B- (81)	26	MI	F (51)	26	UT	B (85)	25	NE	B (83)
30	DE	C (75)	28	NC	B- (80)	29	AK	F (50)	--	U.S.	B (85)	28	DE	B- (82)
30	FL	C (75)	30	OH	B- (80)	29	CT	F (50)	30	MS	B (84)	28	GA	B- (82)
30	IN	C (75)	30	AK	C+ (79)	29	IA	F (50)	30	NJ	B (84)	30	OK	B- (81)
30	MO	C (75)	30	NH	C+ (79)	29	LA	F (50)	30	AZ	B (83)	30	WI	B- (81)
34	CA	C (74)	33	OK	C+ (78)	34	MS	F (49)	32	CA	B (83)	32	AK	B- (80)
35	ID	C (73)	33	IN	C+ (78)	34	FL	F (49)	32	MI	B (83)	32	ME	B- (80)
36	HI	C- (72)	36	OR	C+ (78)	36	NV	F (47)	32	ND	B (83)	35	TX	C+ (79)
36	OR	C- (72)	36	TX	C+ (78)	36	AZ	F (47)	37	TN	B- (82)	36	ND	C+ (79)
38	KY	C- (71)	36	AL	C (76)	36	MA	F (47)	37	OR	B- (82)	36	KY	C+ (78)
38	WY	C- (71)	36	AR	C (76)	36	MO	F (47)	38	AL	B- (81)	36	MT	C+ (78)
40	MI	C- (70)	39	HI	C (75)	36	ND	F (47)	38	MT	B- (81)	36	SD	C+ (78)
40	NV	C- (70)	39	FL	C (75)	36	TN	F (47)	40	HI	B- (80)	40	TN	C+ (78)
40	TN	C- (70)	42	NV	C (75)	41	WV	F (46)	40	OR	B- (80)	40	MS	C (76)
44	WV	C- (70)	42	VT	C- (71)	41	AL	F (46)	41	OR	B- (80)	40	AR	C (76)
44	AR	D+ (69)	43	MT	C- (71)	42	SC	F (43)	43	AL	B- (81)	41	IA	C (75)
45	OK	D+ (67)	43	LA	C- (70)	42	SD	F (43)	43	MT	B- (81)	41	NM	C (75)
46	AZ	D (66)	43	TN	C- (70)	45	ME	F (42)	45	TX	C+ (77)	45	SC	C (75)
47	MS	D- (62)	47	WA	C- (70)	45	OH	F (42)	45	AR	C (76)	45	IN	C (74)
48	AL	D- (61)	47	WV	C- (70)	48	OR	F (42)	47	OK	C (76)	46	NV	C- (72)
49	NM	F (57)	49	ID	D+ (69)	48	RI	F (40)	47	LA	C- (72)	47	ID	C- (71)
50	LA	F (56)	50	SC	D+ (69)	48	MT	F (39)	48	NM	D (66)	48	WY	C- (70)
50	LA	F (56)	50	GA	D+ (67)	49	NH	F (39)	49	NV	F (59)	49	LA	D+ (68)
50	LA	F (56)	50	MS	D (66)	49	AK	F (49)	50	AK	F (49)	49	WV	D+ (68)

Note: Staff calculated U.S. average scores and grades.
Source: Natl. Ctr. for Public Policy. "Compare."

**Table A.55 (corresponds to Table 6.7)
Camelot Index, 2008**

State	Overall Rank	Economy	Health	Crime	Education	Society	Government
NH	1	7	6	2	8	4	9
ND	2	21	8	1	9	9	1
SD	3	23	18	2	3	9	4
IA	4	26	3	16	1	8	13
MN	5	8	1	22	6	3	33
NE	6	17	10	21	4	12	11
WY	7	3	26	11	6	2	30
UT	8	11	12	17	15	5	21
VT	9	22	14	4	12	14	17
ID	10	30	20	6	16	1	12
CO	11	5	19	26	25	6	7
CT	12	2	4	9	18	14	42
MA	13	6	2	19	14	24	32
VA	14	18	29	11	26	13	2
NJ	15	9	15	14	22	19	27
WI	16	32	13	18	1	7	41
MT	17	27	36	10	10	11	22
ME	18	40	17	5	10	16	39
WA	19	1	7	38	19	26	38
KS	20	33	24	30	5	22	17
OR	21	16	23	24	23	17	34
MD	22	14	26	37	34	20	7
AK	23	4	21	40	29	26	30
MO	24	28	31	39	13	28	16
NY		13	9	15	19	50	49
PA	26	35	22	20	28	22	35
KY	27	45	33	8	37	28	13
HI	28	14	4	30	40	31	46
DE	29	12	39	36	45	33	2
RI	30	36	10	7	30	46	48
IL	31	24	28	27	38	20	44
MI	32	47	25	32	33	18	36
AZ	33	37	37	45	27	44	6
CA		19	16	29	43	42	47
IN	35	42	38	25	31	36	25
FL	36	20	34	46	49	35	15
OK	37	39	48	32	21	33	28
WV	38	50	43	11	32	25	43
NC	39	28	42	41	46	38	10
GA	40	31	47	35	47	42	5
OH		46	31	27	35	32	36
TX	42	25	40	42	44	40	19
AR	43	49	44	43	17	38	23
NV	44	10	34	48	47	41	39
AL	45	44	46	34	39	30	29
TN	46	43	41	49	24	49	20
NM	47	41	30	44	42	48	23
SC	48	38	45	50	50	37	25
MS	49	48	49	23	41	44	45
LA	50	34	49	46	36	47	50

Source: Federal. "The 2008" 18.

**Table A.56 (corresponds to Table 6.8)
Smartest State Index, 2003-2007**

FY 2007			Rankings in Previous Years			
Rank	State	Score	FY 2003	FY 2004	FY 2005	FY 2006
1	VT	18.57	2	2	3	1
2	MA	16.09	7	1	1	3
3	CT	14.46	1	3	2	2
4	NJ	14.35	4	5	4	4
5	ME	10.79	5	6	11	5
6	VA	10.07	37	17	12	7
7	MT	9.55	3	4	10	9
8	WI	9.04	6	8	5	8
9	IA	8.82	11	8	8	14
10	PA	8.69	15	7	9	11
11	NE	6.40	13	11	13	12
12	NH	5.90	19	26	14	15
13	MN	5.33	12	12	7	6
14	RI	4.31	10	16	23	16
15	KS	4.27	14	15	15	13
16	NY	3.66	26	10	6	10
17	SD	3.25	34	31	22	18
18	MD	2.27	30	18	18	19
19	WY	1.35	8	14	16	17
20	ID	1.29	22	30	29	28
21	ND	0.95	21	24	19	20
22	MO	0.94	31	28	26	21
23	NC	0.84	24	21	25	22
24	IN	0.06	9	13	17	26
25	TX	-0.11	16	34	33	24
26	SC	-1.19	36	41	32	29
27	CO	-1.32	27	35	21	23
28	DE	-2.47	43	19	27	25
29	FL	-2.90	47	40	39	36
30	TN	-3.01	39	42	41	41
31	KY	-3.24	28	37	37	35
32	AR	-3.44	38	38	36	37
33	WA	-3.85	35	33	30	30
34	OH	-4.00	41	22	20	31
35	IL	-4.32	33	27	24	32
36	OK	-5.81	32	39	40	39
37	WV	-5.82	18	29	33	34
38	UT	-6.30	17	25	28	33
39	MI	-6.43	20	20	31	27
40	OR	-6.87	23	32	35	38
41	GA	-6.92	40	36	38	40
42	HI	-9.31	45	43	42	42
43	NM	-10.60	50	50	50	48
44	LA	-10.95	49	47	46	45
45	AL	-11.00	41	46	44	43
46	AK	-11.91	25	23	45	44
47	CA	-13.10	29	44	43	46
48	MS	-14.78	48	48	47	49
49	NV	-15.81	46	49	49	47
50	AZ	-17.61	44	45	48	50

Source: Congressional. *Smartest*.

Appendix B

Information Regarding Data Sources

ACT, Inc.

Established in 1959 as the American College Testing Program, Inc., and later officially shortened to ACT, Inc., this independent, not-for-profit organization initially offered one high school achievement and college readiness test. This test, called the ACT, is still used today. In the past 50 years, ACT, Inc. has added a variety of other assessment, research, information, and program management services in education and workforce development (ACT. *ACT Newsroom*).

College Board

The College Board creates and scores the SAT Reasoning Test and Advanced Placement tests. Founded by a group of colleges in 1900, the College Board simplified the application process by developing a common set of entrance examinations so that students could apply to several colleges without having to sit for an entrance exam at each one. Many also hailed the “democratizing benefit” of these exams, which allowed individuals to demonstrate their ability to handle college work without regard to family background and inconsistent grading system and curriculum standards throughout the nation. The College Board later developed additional tests, such as the Advanced Placement exam and the College Scholarship Service that provides financial aid information and assistance (College Board. *College Board History*).

Congressional Quarterly

Established in 1945, Congressional Quarterly Inc. (CQ) provides political journalism in weekly, daily, and real-time reports in print and online. CQ seeks to “advance the quality of reporting about government, helping elected officials and citizens alike understand and improve democracy in the United States.” A private, for-profit organization, CQ is a wholly owned affiliate of the Times Publishing Co., which publishes the *St. Petersburg Times* of Florida. The stock of the publishing company is owned by the Poynter Institute, a nonprofit school for journalists in St. Petersburg (Congressional. “Mission”). In 2007, CQ acquired Morgan Quitno Press, the publisher of annual state rankings and indices (Congressional. *CQ Press Acquires*).

Editorial Projects in Education and *Education Week*

Editorial Projects in Education Inc. (EPE) publishes materials that cover local, state, and national news and issues pertaining to education from preschool through grade 12. A nonprofit, tax-exempt organization based in Washington, D.C., EPE describes its primary mission as helping to “raise the level of awareness and understanding among professionals and the public of important issues in American education” (Editorial. *About*).

EPE publishes *Education Week* as well as *Teacher Magazine*, edweek.org, Agent K-12 Jobs, periodic special reports on a wide range of issues, and books of special interest to educators. The

EPE Research Center provides research support. It compiles and analyzes data for annual issues of *Diplomas Count*, *Quality Counts*, and *Technology Counts*. The center also integrates measures from those and other EPE publications over time into an online database called *Education Counts*. The database is supported by a 4-year, \$2.5 million grant from the Bill & Melinda Gates Foundation (Editorial. *About*).

Education Trust

The American Association for Higher Education established Education Trust in 1990 to encourage colleges and universities to support K-12 reform. Today, Education Trust is an independent, nonprofit organization working for “the high achievement of all students at all levels, prekindergarten through college, and forever closing the achievement gaps that separate low-income students and students of color from other youth” (Education Trust. *What is*). Education Trust advances this mission through advocacy in policy debates; policy analysis and expert testimony; research and dissemination of data; and assistance to school districts, colleges, and community-based organizations trying to raise student achievement, especially among minority and poor students.

Major funding for Education Trust comes from

- Annie E. Casey Foundation
- Carnegie Corporation of New York
- Bill & Melinda Gates Foundation
- William and Flora Hewlett Foundation
- Ewing Marion Kauffman Foundation
- Walters Johnson Foundation
- The Joyce Foundation
- Lumina Foundation for Education
- MetLife Foundation
- State Farm Companies Foundation
- Washington Mutual Foundation

Federal Funds Information for States

Federal Funds Information for States (FFIS) is a joint subscription service of the National Governors Association and the National Conference of State Legislatures. FFIS tracks and reports on the fiscal impact of federal funding and policies on state budgets and programs. The organization maintains a database of federal grant-in-aid programs (Federal. *FFIS Services*).

Kentucky Long-Term Policy Research Center

In 1992, the Kentucky General Assembly established the Kentucky Long-Term Policy Research Center under the aegis of the Legislative Research Commission to serve as a catalyst to change the way decisions are made in government by providing decision makers a broader context in which to make decisions, taking into consideration the long-term implications of policy, critical trends, and emerging issues which may have a significant impact on the state (KRS 007B).

National Center for Higher Education Management Systems

The National Center for Higher Education Management Systems (NCHEMS), established in 1969, is a private, nonprofit organization whose mission is “to improve strategic decision making in higher education for states and institutions in the United States and abroad.” With project support from multiple organizations, such as the Ford Foundation, NCHEMS offers research, consulting, development projects, a higher education database, publications, a membership program, and training. Together with the State Higher Education Executive Officers Association and the Western Interstate Commission for Higher Education, NCHEMS formed the State Higher Education Policy Center (Natl. Ctr. for Higher. *About*).

National Center for Public Policy and Higher Education

Established in 1998, the National Center for Public Policy and Higher Education is a nonprofit organization whose mission is to promote policies that enhance postsecondary education and training opportunities. The center conducts research and policy analyses on opportunities and achievements in higher education.

The center receives continuing support from a consortium of national foundations that includes the Pew Charitable Trusts, the Atlantic Philanthropies, and the Ford Foundation. The board of directors comprises decision makers across the political spectrum from government, business, and education. In 2000, the center began publishing *Measuring Up*, a biennial report card for each state and the nation, whose purpose is “to provide the public and policy makers with information to assess and improve postsecondary education in each state” (Natl. Ctr. for Public Policy. *About*.)

National Education Association

The National Education Association (NEA) was founded in 1857 to “elevate the character and advance the interests of the profession of teaching and to promote the cause of education in the United States.” With 3.2 million members, NEA calls itself the nation’s largest professional employee organization. Anyone who works for a public school district, a college or university, or any other public institution devoted primarily to education may join. NEA describes its affiliates in more than 14,000 communities as working to advance public education at every level of education, from preschool to university graduate programs, through such activities as raising funds for scholarships and conducting professional workshops. Activities of the national office and state affiliates include lobbying legislators for education resources, campaigning for professional standards, and filing legal actions to protect academic freedom and rights of school employees (Natl. Ed. Assoc. *About*).

National Institute for Early Education Research

The National Institute for Early Education Research (NIEER) supports early childhood education initiatives by providing information based on research. Its goal is “to produce and communicate the knowledge base required to ensure that every American child can receive a good education at ages three and four.” The institute offers independent research-based advice and technical

assistance to policy makers, journalists, researchers, and educators. NIEER was established in 2002 at Rutgers University with a grant from the Pew Charitable Trusts. Past and current supporters include the Carnegie Corporation, the Fund for New Jersey, Geraldine R. Dodge Foundation, the David and Lucile Packard Foundation, the Prudential Foundation, the Schumann Fund for New Jersey, Smith Richardson Foundation, Tulsa Community Foundation, and the U.S. Department of Education's Office of Educational Research and Improvement (Nat'l. Institute. *About*).

U.S. Department of Commerce, Census Bureau

Throughout the past two centuries since the first national census in 1790, an increasing demand for information has driven steady expansion of the Census Bureau. Today, in addition to conducting the decennial census, the Census Bureau is engaged in a wide variety of data collection and analysis activities, including the annual American Community Survey of almost 1.5 million randomly selected residents and the Economic Census of businesses every 5 years (U.S. Dept. of Commerce. Census. *Economic* and "American Community").

The U.S. Census Bureau operates as a data collection agent for National Center for Education Statistics, using standardized forms, definitions, and instructions designed by NCES for comparability among states. For example, NCES commissions the U.S. Census Bureau to administer the School District Finance Survey at the time of its Annual Survey of Local Governments (U.S. Dept. of Ed. Inst. Natl. *Common*).

U.S. Department of Education, National Center for Education Statistics

The National Center for Education Statistics (NCES) is the primary federal entity for collecting, analyzing, and reporting data on education in the United States as well as monitoring and reporting on education in other nations (PL 103-382, 20 U.S.C 9003; U.S. Dept. of Ed. Inst. Natl. *Overview of Public*). NCES is a branch of the Institute of Education Sciences within the U.S. Department of Education.

NCES often collaborates with other federal agencies, such as the Census Bureau and the Bureau of Justice Statistics. The U.S. Census Bureau operates as a data collection agent for NCES, using standardized forms, definitions, and instructions designed by NCES to enhance the comparability of information among states. For example, NCES commissions the U.S. Census Bureau to administer the School District Finance Survey at the time of its Annual Survey of Local Governments.

The Common Core of Data (CCD) is the Department of Education's primary database on all public elementary and secondary schools, districts, students, and staff. Fiscal and nonfiscal data are comparable across all states and updated with five annual surveys.¹² The database includes such measures as pupil-teacher ratios, expenditures per pupil, student ethnicity, graduation rates,

¹² Nonfiscal data are collected by the State Nonfiscal Survey of Public Elementary/Secondary Education, the Local Education Agency Universe Survey, and the Public Elementary/Secondary School Universe Survey. Fiscal data are collected by the School District Finance Survey and the National Public Education Financial Survey (U.S. Dept. of Ed. National Center. *Overview* 31).

and counts of students receiving special education or free lunch. Data collection for the CCD began with the 1981-1982 school year and was most recently reauthorized by the Education Sciences Reform Act of 2002 (PL 107-279, 20 U.S.C 9543; U.S. Dept. of Ed. Inst. Natl. *Common*).

Because of their authoritative positions and rigorous follow-up processes, NCES and the Census Bureau attain higher response rates than most surveys. Nevertheless, not all states collect and report all the data required. If information is missing for a relatively small number of schools or districts, NCES estimates those data. NCES also adjusts some values to improve comparability across states (U.S. Dept. of Ed. Inst. Natl. *Overview of Public*). For this reason, data reported in NCES publications will not always match states' reports.

Appendix C

State Abbreviations and Names

In Order of Abbreviations

AK	Alaska	KY	Kentucky	NY	New York
AL	Alabama	LA	Louisiana	OH	Ohio
AR	Arkansas	MA	Massachusetts	OK	Oklahoma
AZ	Arizona	MD	Maryland	OR	Oregon
CA	California	ME	Maine	PA	Pennsylvania
CO	Colorado	MI	Michigan	RI	Rhode Island
CT	Connecticut	MN	Minnesota	SC	South Carolina
DC	District of Columbia	MO	Missouri	SD	South Dakota
DE	Delaware	MS	Mississippi	TN	Tennessee
FL	Florida	MT	Montana	TX	Texas
GA	Georgia	NC	North Carolina	UT	Utah
HI	Hawaii	ND	North Dakota	VA	Virginia
IA	Iowa	NE	Nebraska	VT	Vermont
ID	Idaho	NH	New Hampshire	WA	Washington
IL	Illinois	NJ	New Jersey	WI	Wisconsin
IN	Indiana	NM	New Mexico	WV	West Virginia
KS	Kansas	NV	Nevada	WY	Wyoming

In Order of State Names

AL	Alabama	KY	Kentucky	ND	North Dakota
AK	Alaska	LA	Louisiana	OH	Ohio
AZ	Arizona	ME	Maine	OK	Oklahoma
AR	Arkansas	MD	Maryland	OR	Oregon
CA	California	MA	Massachusetts	PA	Pennsylvania
CO	Colorado	MI	Michigan	RI	Rhode Island
CT	Connecticut	MN	Minnesota	SC	South Carolina
DE	Delaware	MS	Mississippi	SD	South Dakota
DC	District of Columbia	MO	Missouri	TN	Tennessee
FL	Florida	MT	Montana	TX	Texas
GA	Georgia	NE	Nebraska	UT	Utah
HI	Hawaii	NV	Nevada	VT	Vermont
ID	Idaho	NH	New Hampshire	VA	Virginia
IL	Illinois	NJ	New Jersey	WA	Washington
IN	Indiana	NM	New Mexico	WV	West Virginia
IA	Iowa	NY	New York	WI	Wisconsin
KS	Kansas	NC	North Carolina	WY	Wyoming

Appendix D

National Assessment Of Educational Progress (NAEP) Achievement Level Definitions

Table D.1
NAEP Achievement Level Definitions for Grades 4 and 8 Reading, 2007

Achievement Level	Grade 4	Grade 8
Advanced	Generalize about topics in the reading selection and demonstrate awareness of how authors compose and use literary devices; judge texts critically and, in general, give thorough answers that indicate careful thought	Describe the more abstract themes and ideas of the overall text; analyze both meaning and form, supporting analyses explicitly with examples from the text, and extend text information by relating it to their experiences and to world events; respond thoroughly, thoughtfully, and extensively
Proficient	Demonstrate an overall understanding of the text, providing inferential as well as literal information; extend the ideas in the text by making inferences, drawing conclusions, and making connections to their own experiences; make clear the connections between the text and what the student infers	Show an overall understanding of the text, including inferential as well as literal information; extend the ideas in the text by making clear inferences from it, by drawing conclusions, and by making connections to their own experiences—including other reading experiences; identify some of the devices authors use in composing text
Basic	Demonstrate an understanding of the overall meaning; make relatively obvious connections between the text and their own experiences; extend the ideas in the text by making simple inferences	Demonstrate a literal understanding of what they read and make some interpretations; identify specific aspects of the text that reflect the overall meaning; extend the ideas in the text by making simple inferences; recognize and relate interpretations and connections among ideas in the text to personal experience; draw conclusions based on the text

Note: “Below Basic” is not defined.

Source: Staff compilation based on U.S. Dept. of Ed. Natl. Assessment. *Reading* 24-26.

Table D.2
NAEP Achievement Level Definitions for Grades 4 and 8 Writing, 2007

Achievement Level	Grade 4	Grade 8
Advanced	Produce an effective, well-developed, clearly organized response that shows a clear understanding of the assigned task; use such techniques as consistency in topic or theme, sequencing, and a clearly marked beginning and ending; address the intended audience with precise and varied language, including details and elaboration that support and develop the main idea of the piece; show signs of analytical, evaluative, or creative thinking; use grammar, spelling, and capitalization accurately enough to communicate clearly, with mistakes made so few and so minor that a reader can easily skim over them	Produce an effective and fully developed response that shows a clear understanding of the assigned task and intended audience; show some analytical, evaluative, or creative thinking; demonstrate precise word choice and varied sentence structure; include details and elaboration that support and develop the main idea; use such strategies as analogies, illustrations, examples, anecdotes, or figurative language to clarify a point; organize clearly and consistently, with few errors in grammar, spelling, punctuation, capitalization, and sentence structure; demonstrate good control of these elements and possibly use them for stylistic effect
Proficient	Produce an organized response that shows an understanding of the assigned task; include details that support and develop the main idea of the piece; show awareness of the intended audience through form, content, and language; use grammar, spelling, and capitalization accurately enough to communicate to a reader without mistakes getting in the way of meaning	Produce an effective response that shows an understanding of the assigned task and intended audience; make organized use of such techniques as sequencing or a clearly marked beginning and ending; make use of details and some elaboration to support and develop the main idea of the piece; include precise language and some variety in sentence structure and show analytical, evaluative, or creative thinking; use grammar, spelling, punctuation, and capitalization accurately enough to communicate to a reader without errors obscuring the meaning
Basic	Produce a somewhat organized response that shows a general grasp of the assigned task; include some supporting details; use grammar, spelling, and capitalization accurately enough to communicate to a reader, although there may be mistakes that get in the way of meaning	Produce an effective response that shows a general understanding of the assigned task and intended audience; include supporting details in an organized way; use grammar, spelling, punctuation, and capitalization accurately enough to communicate to a reader, although there may be mistakes that get in the way of meaning

Notes: These achievements levels are for first drafts, not final or polished student writing, that are generated within limited time constraints in large-scale assessment environment. "Below Basic" is not defined.

Source: Staff compilation based on U.S. Dept. of Ed. Natl. Assessment. *Writing Framework* 59-61.

Table D.3
NAEP Achievement Level Definitions for Grades 4 and 8 Mathematics, 2007

Achievement Level	Grade 4	Grade 8
Advanced	Solve complex nonroutine real-world problems in all areas; display mastery in the use of four-function calculators, rulers, and geometric shapes; draw logical conclusions and justify answers and solution processes by explaining why, as well as how, they were achieved; go beyond the obvious in interpretations and be able to communicate clearly and concisely	Probe examples and counterexamples in order to shape generalizations, and develop models from these; use number sense and geometric awareness to consider the reasonableness of an answer; use abstract thinking to create unique problem-solving techniques and explain the reasoning processes underlying conclusions
Proficient	Use whole numbers to estimate, compute, and determine whether results are reasonable; have a conceptual understanding of fractions and decimals; solve real-world problems in all areas; use four-function calculators, rulers, and geometric shapes appropriately; employ such problem-solving strategies as identifying and using appropriate information; organize and present written solutions with supporting information and explanations of how they were achieved	Conjecture, defend ideas, and give supporting examples; understand connections among fractions, percents, decimals, and other mathematical topics such as algebra and functions; thoroughly understand basic-level arithmetic operations for problem solving in practical situations; be familiar with quantity and spatial relationships in problem solving and reasoning; convey underlying reasoning skills beyond the level of arithmetic; compare and contrast mathematical ideas and generate examples; make inferences from data and graphs, apply properties of informal geometry, and accurately use the tools of technology; understand the process of gathering and organizing data; calculate, evaluate, and communicate results within the domain of statistics and probability
Basic	Estimate and use basic facts to perform simple computations with whole numbers; show some understanding of fractions and decimals; solve some simple real-world problems in all areas; use—though not always accurately—four-function calculators, rulers, and geometric shapes; have minimal written responses presented without supporting information	Complete problems correctly with the help of structural prompts such as diagrams, charts, and graphs; solve problems in all areas through the appropriate selection and use of strategies and technological tools, including calculators, computers, and geometric shapes; use fundamental algebraic and informal geometric concepts in problem solving; determine which of the available data are necessary and sufficient for correct solutions, and use them in problem solving; have some limited skills in communicating mathematically

Note: “Below Basic” is not defined.

Source: Staff compilation based on U.S. Dept. of Ed. Natl. Assessment. *Mathematics* 53-55.

Table D.4
NAEP Achievement Level Definitions for Grade 4 Science, 2005

Achievement Level	Grade 4
Advanced	Demonstrate solid understanding of the Earth, physical, and life sciences and apply this understanding to practical situations at grade-appropriate levels; perform and critique simple investigations and apply fundamental concepts to practical applications; combine information, data, and knowledge from one or more sciences to reach a conclusion or make a valid prediction; recognize, design, and explain simple experimental procedures; recognize nonrenewable sources of energy; know that light and sound travel at different speeds; understand some principles of ecology; compare and contrast life cycles of various common organisms; show a developmental awareness of technology's benefits and challenges
Proficient	Demonstrate grade-level knowledge and reasoning required for understanding the Earth, physical, and life sciences; formulate solutions to familiar problems; provide an explanation of day and night when given a diagram; recognize major features of the Earth's surface and the impact of natural forces; recognize water in its various forms in the water cycle and suggest ways to conserve it; recognize that various materials possess different properties that make them useful; explain how structure and function help living things survive; show a beginning awareness of technology's benefits and challenges and recognize some human effects on the environment; make straightforward predictions and justify these positions
Basic	Demonstrate some grade-level knowledge and reasoning required for understanding the Earth, physical, and life sciences; show a beginning understanding of classification, simple relationships, and energy; follow simple procedures, manipulate simple materials, make observations, and record data; read simple graphs and diagrams and draw reasonable but limited conclusions based on the data provided; recognize appropriate experimental designs, although unable to justify decisions; identify seasons through diagrams; distinguish between day and night through diagrams; place the position of the Earth, Sun, and planets through diagrams; recognize major energy sources and simple energy change; understand the relationship between sound and vibrations; identify organisms by physical characteristics and group organisms with similar physical features; describe simple relationships among structure, function, habitat, life cycles, and different organisms

Notes: "Below Basic" is not defined.

Source: Staff compilation based on U.S. Dept. of Ed. Natl. Assessment. *Science* 47-48.

Table D.5
NAEP Achievement Level Definitions for Grade 8 Science, 2005

Achievement Level	Grade 8
Advanced	Demonstrate solid grade-level understanding of the Earth, physical, and life sciences, and apply this understanding in practical situations; perform and critique the design of investigations, relate scientific concepts to each other, explain their reasoning, and discuss the impact of human activities on the environment; explain scientific results; show a modest understanding of scale, and design a controlled experiment; understand models as representations of natural systems, and describe energy transfer in living and nonliving systems; understand that such physical clues as fossils and geological formations are indications that the Earth has not always been the same and that the present is a key to understanding the past; show solid knowledge of forces and motions within the solar system and an emerging understanding of atmospheric pressure; recognize a wide range of physical and chemical properties of matter and some of their interactions, and understand some of the properties of light and sound; infer relationships between structure and function; know the differences between plant and animal cells and apply knowledge of food as a source of energy to a practical situation; explain the impact of human activities on the environment and the economy
Proficient	Demonstrate much of the grade-level knowledge and reasoning essential for understanding the Earth, physical, and life sciences; show awareness of environmental issues, especially energy and pollution; create, interpret, and make predictions from charts, diagrams, and graphs based on information provided or from own investigations; design an experiment and show an emerging understanding of variables and controls; read and interpret geographic and topographic maps; shown an emerging ability to use and understand models, partially formulate explanations of scientific phenomena, and design plans to solve problems; begin to identify forms of energy and describe the role of energy transformations in living and nonliving systems; show knowledge of organization, gravity, and motion within the solar system and identify some factors that shape the Earth’s surface; show some understanding of properties of materials and of the particulate nature of matter, especially the effect of temperature on states of matter; know that light and sound travel at different speeds, and apply knowledge of force, speed, and motion; demonstrate a developmental understanding of the flow of energy from the Sun through living systems, especially plants; know that organisms reproduce and inherit characteristics from previous generations, that organisms are made up of cells, and that cells have subcomponents with different functions; develop own classification system based on physical characteristics; list some effects of air and water pollution; know the environmental and economic advantages and disadvantages of different energy sources
Basic	Demonstrate some of the grade-level knowledge and reasoning required for understanding the Earth, physical, and life sciences; show a beginning understanding of cause-and-effect relationships; observe, measure, collect, record, and compute data from investigations; read simple graphs and tables and make simple data comparisons; follow directions and use basic science equipment to perform simple experiments; show an emerging ability to design experiments; show some awareness of causal relationships; recognize the position of planets and their movement around the Sun and know basic weather-related phenomena, explain changes in position and motion such as the movement of a truck in relation to that of a car; show an emerging understanding of the interrelationships among plants, animals, and the environment

Notes: “Below Basic” is not defined.

Source: Staff compilation based on U.S. Dept. of Ed. Natl. Assessment. *Science* 49-51.