

KANSAS ASSOCIATION OF SCHOOL BOARDS

# What We Know About Student Achievement and School Improvement in Kansas

Kansas public schools prepare students to meet the opportunities of an exciting future. Our schools educate the students of today for a world that in many ways does not even exist...yet! The doers and dreamers who will make the future a reality are in our classrooms today. Providing the foundation to build that future on is the responsibility of a strong, ever-improving educational system.

Educational improvement can be measured over time and against benchmarks in four key areas: (1) mastery of basic reading and math skills; (2) high school completion; (3) preparation for postsecondary education; and (4) adult educational attainment. The first three reflect how the school system prepares students for postsecondary education. The fourth key area measures the results of that preparation and the impact on economic indicators such as employment, income and poverty.

None of these measures are entirely the result of the school system. Schools have only limited control over the circumstances, motivation and abilities of their students. Students are frequently mobile and therefore the exact same students cannot be measured as they move through and exit the system, especially as adults. In addition, there are many important aspects of education that cannot be easily or consistently measured. However, this is enough data to draw the following important conclusions.

1. Kansas students have improved mastery of basic reading and math on both state and national tests over the past decade.

First in

- 2. Kansas students rank in the top for all students and for low income students, who traditionally have lower academic performance.
- 3. Comparing similar systems and students, Kansas public schools do as well or better than private schools in Kansas and nationally.
- Kansas has made progress closing the achievement gap among student groups. Programs targeted for at-risk students are working effectively.
- 5. High school completion has been rising for decades, and Kansas has improved its high school graduation rate in the past decade.
- 6. Schools are preparing more students for college than in the past. Kansas scores for college-bound students rank in the top 10 of all states and have improved over the past 15 years.
- 7. Kansas adult educational attainment has been rising since the 1940s and consistently tops the national average.
- 8. The economic value of increasing educational attainment is significant for both individuals and states.
- Kansas school districts have produced top 10
  educational results with per pupil spending near
  the national average. The state's educational
  outcomes have increased without spending a
  larger share of state personal income.
- 10. Kansas has fewer at-risk students than many states, but has more at-risk students than other high achieving states, and the number of at-risk students is increasing.

### Mastery of Basic Reading and Math - Kansas State Assessments

Kansas State math and reading assessments are the most important measures of student achievement for several reasons.

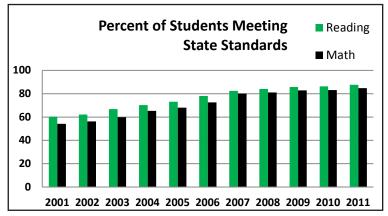
- (A) State law requires state assessments based on state curriculum standards.
- (B) The federal No Child Left Behind Act (NCLB) requires states to give annual assessments in reading and math based on state standards with state-defined definitions of "proficiency" for determining Adequate Yearly Progress (AYP). NCLB imposes sanctions for failure to meet AYP.
- C) The Kansas State Board of Education uses state assessments to measure student improvement for school accreditation as required by state law.
  - (D) State assessments are the only common statewide measure of school performance at multiple grade levels. *This is why districts place the most emphasis on teaching the standards measured by these tests.*

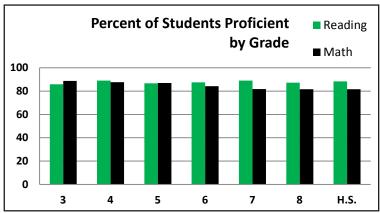
### Kansas student proficiencies in reading and math have increased 40 percent over the past decade and exceed 80 percent at every level.

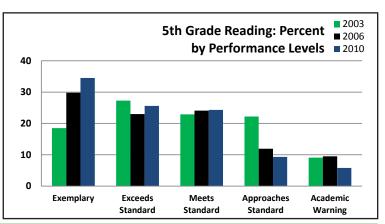
- Almost 85 percent of students are considered "proficient" based on state reading and math tests.
- In the early 2000s, proficiency increased several percentage points a year, slowing to about 1 percent annually since 2007.
- Each 1 percent increase moves about 4,500 students' proficiency.
- Proficiency levels are generally consistent across grades tested (three through eight, once in high school). Math scores decline slightly in upper grades.

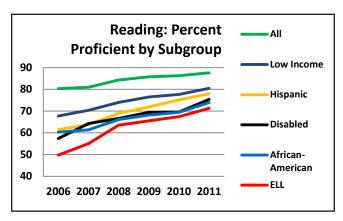
### Students are attaining higher levels of performance, not just a minimum threshold.

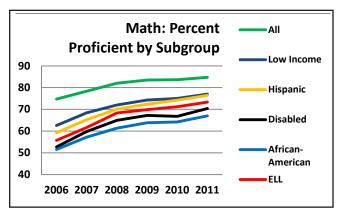
- The percentage of students reaching higher performance levels has also increased.
- For example: fifth grade reading is the earliest grade tested back to 2003-04 reported on the KSDE website. In 2003, only 45 percent of the students were in the top two performance levels; in 2010, 60 percent were in the top two levels.











#### Kansas "at-risk" students with historically lower educational outcomes made larger gains.

- Reading: In 2006 every major subgroup was below 70 percent proficient. By 2011 every group was above 70 percent and had increased at least 10 percentage points.
- Math: In 2006 every major subgroup was below 65 percent proficient. By 2011 every group was above 65 percent and had an average increase of 15 percentage points.

### How do we compare?

#### Kansas public schools achievement exceeds private school systems with similar students.

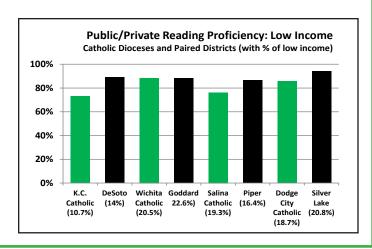
To measure comparable performance by similar public and private systems, each of the four dioceses in Kansas (Kansas City, Wichita, Salina and Dodge City) were paired with a public school system with similar percentages of low income students and total enrollment. These dioceses are the only statewide comprehensive K-12 private school systems that are state accredited and participate in state assessments.

Public schools usually exceed private school systems with similar students. For example, three of the four public districts had higher reading proficiency rates than the paired Catholic system. And for low income students, three of the four public systems

**Public/Private Reading Proficiency: All Students** Catholic Dioceses and Paired Districts (with enrollment) 100% 80% 60% 40% 20% 0% Salina K.C. Wichita Goddard Dodge Silver (5,149) Catholic Catholic Catholic (1,706) (6,501)(14.739)(9.700)(1.058)Catholic (783)(888)

were nearly 10 points higher than the paired private system. In the fourth case, results were nearly the same.

There are many differences between public and Catholic systems: (1) Only about 15 percent of Catholic school students are low income, compared to over 45 percent in the public system. (2) Over 80 percent of Catholic school students are white, compared to less than 70 percent of public schools (Hispanic enrollment is similar). (3) Only about 4 percent of Catholic school students have a disability, compared to 13.6 percent of public school students. (4) A much smaller percentage of students attend Catholic high schools.



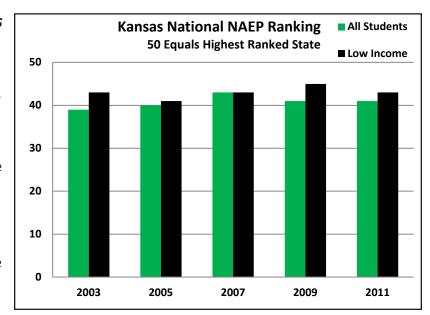
### Mastery of Basic Reading and Math - National NAEP Assessments

Since 2003 all states are required to participate in the National Assessment of Education Progress (NAEP) reading and math assessment for fourth and eighth grade. These are given every other year.

Unlike state assessments, these tests are only given to a small sample of students and are not based on state academic standards used in Kansas schools.

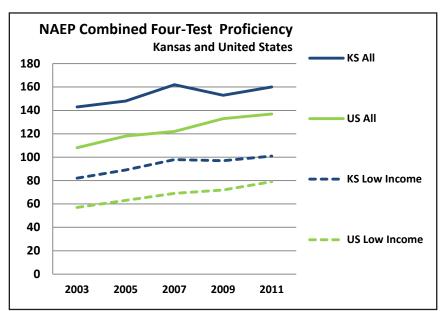
### Kansas ranks in the top 10 states in reading and math on NAEP assessments, and both the U.S. and Kansas continue to improve.

- Kansas has ranked around 10th in the nation since all students began participating in NAEP. (This is based on the percentage of students scoring basic or above.)
- For free lunch students, Kansas ranks even higher – an average of seventh in the nation since 2003.



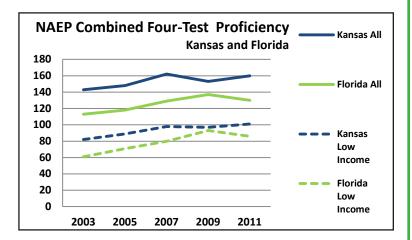
### How do we compare? Kansas public schools consistently outperform national proficiency scores.

- The U.S. average for all students increased more than Kansas but remains lower.
- Kansas and the United States have both improved performance on the NAEP.
- The combined total percentage of students scoring proficient or higher increased for all students and low income students.
- The U.S. average for low income students remains about the same compared to Kansas.
- As with state assessments, Kansas made more progress through 2007-08, but has slowed since 2009.



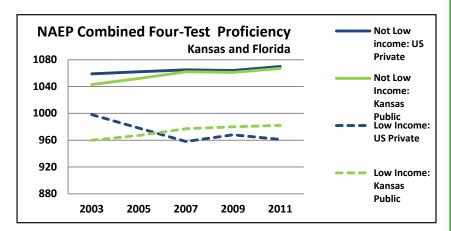
#### How do we compare? Kansas public schools outperform 'reform state' Florida.

• Florida has been lauded for making significant progress on NAEP tests, and the state did make progress compared to Kansas through 2009. But by 2011, Kansas proficiency had recovered and Florida's performance had fallen back, erasing much of the gain.



### Kansas public schools surpass private schools nation-wide on low income student achievement, and typically match student achievement levels for all students.

- Kansas public school NAEP scores for all students have equaled national private schools since 2007.
- Kansas public school scores for low income students have exceeded national private schools since 2007.
- Nationally, NAEP scores for low income students have declined since 2003, while Kansas scores have increased.



### Kansas ranks high both nationally and in a 10 state region for all students and low income students.

- On the 2011 NAEP reading and math tests, Kansas ranked ninth in the nation for the combined percent of students at basic or higher, and seventh for low income (free and reduced lunch eligible) students. The overall rank was eighth.
- In a 10 state region, only North Dakota and Minnesota ranked higher than Kansas for all students, and only North Dakota ranked higher for low income.
- Texas and Colorado ranked in the top
   states. Other regional states (including
   Florida, often cited for high NAEP scores)
   ranked around the national average.

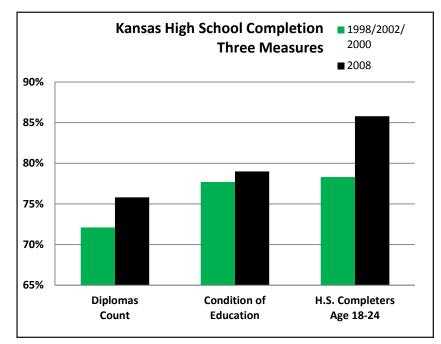
NAEP-Pre-High School: Fourth & Eighth Grade Reading and Math							
		2011	NAEP				
Overall	State	Combine	d Scores All	2011 NAEP Free and			
U.S.		Stu	dents	Reduced Lunch			
Rank		Rank	Score	Rank	Score		
4	North Dakota	4	331	4	284		
8	Kansas	9	319	7	278		
9	South Dakota	9	319	12	270		
10	Minnesota	7	323	16	264		
14	Texas	25	305	8	274		
14	Colorado	11	316	22	254		
22	Iowa	21	308	21	258		
24	Nebraska	21	308	25	251		
26	Florida	31	296	19	262		
29	Oklahoma	34	291	20	260		
31	Missouri	30	301	25	251		

### **High School Completion**

There are multiple ways to measure high school completion. The most comprehensive measure is the percentage of young adults who have completed high school by age 24. This includes not only those who graduate in four years, but also those who may take longer due to illness, disability or other hardships and those who return to school to complete a "drop-out recovery" program.

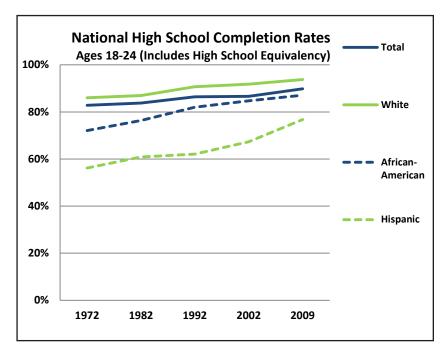
### Kansas high school completion rates have improved over the last decade

- Over the past 10 years, Kansas improved high school completion on three different measures. The Diplomas Count and Condition of Education measures are based on the percentage of students graduating in four years. The third measure is the completion rate of 18-24-year-olds.
- Each different national measure of high school completion shows Kansas improved during the past decade.



### Nationally, high school graduation rates are at an all-time high.

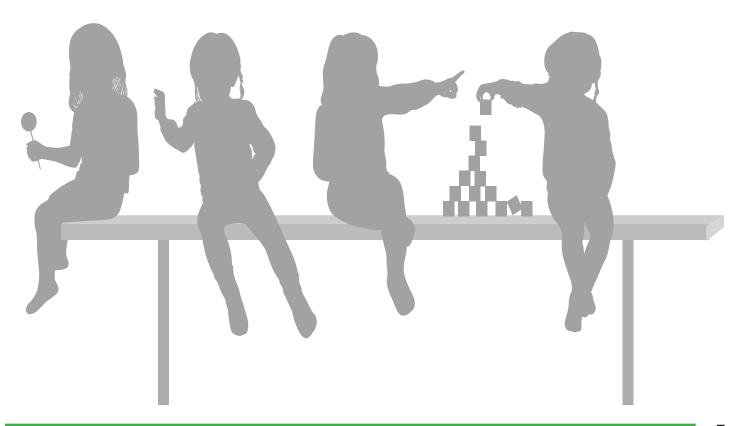
- Despite rising concerns over high school drop-outs, high school completion by young adults has been increasing for the last 40 years.
- The largest gains have come from minority students.
- Despite the increase in graduation rates, the decline in low skill jobs and wages has made high school completion more important.



## How do we compare? Kansas ranks well nationally on high school completion, but only average regionally.

- Based on an average of the three measures noted, Kansas ranks 15th in the nation in high school completion outside the top third. Five regional or neighboring states to the north rank higher.
- Florida, often cited for improving test scores, ranks in the bottom 10.

Regional Comparison - High School Completion Rank							
Overall U.S.	State	Diplomas Count Graduation Rate 2008		Condition of Ed. Graduation Rate 2008		High School Completers Age 18-24, 2006-08	
Rank		Rank	Rank Percent Rank Percent		Rank	Percent	
2	North Dakota	4	80.2	7	83.8	1	90.9
3	Iowa	5	79.6	3	86.4	5	87.9
6	Minnesota	10	78.0	3	86.4	12	86.7
9	Nebraska	13	77.3	7	83.8	10	86.8
12	South Dakota	8	78.7	6	84.4	24	83.7
15	Kansas	18	75.8	19	79.0	17	85.8
17	Missouri	14	76.9	11	82.4	32	82.4
29	Colorado	23	73.3	30	75.4	28	82.9
33	Oklahoma	34	70.0	21	78.0	38	81.3
40	Texas	39	66.6	35	73.1	44	79.7
43	Florida	44	63.9	44	66.9	41	80.6



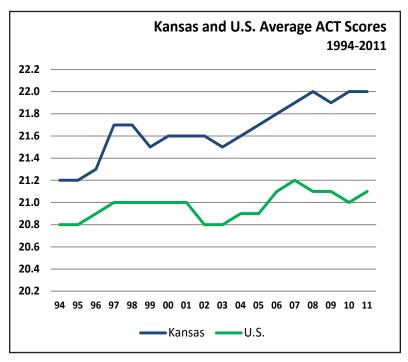
### **Preparation for College**

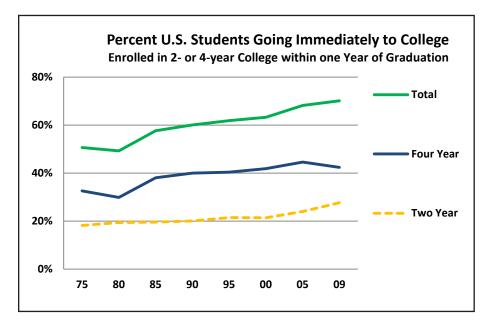
Measuring College Readiness: The ACT and SAT tests are the only uniform national measures of college preparation. In Kansas and 27 other states, the ACT is the predominate test. However, test results are strongly influenced by how many

students take the test in each state. As the higher the percentage of high school graduates tested increases, more students with lower ability, motivation or other factors will be included.

### Kansas college preparation has shown long-term improvement.

- Over 16 years with available data, Kansas average composite ACT scores have increased and more than doubled the state's lead compared to the national ACT average.
- The percentage of Kansas high school graduates tested increased from the 71 percent in 1994 to 79 percent in 2011.
- The high school graduation rate also increased over this period.
- As with state assessments and NAEP scores, ACT scores showed the greatest growth from 2003 through 2009, and have leveled off since.



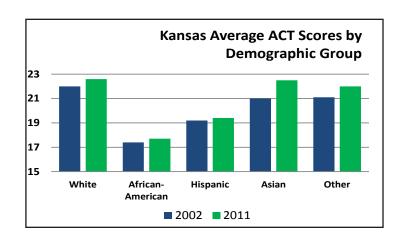


### Far more students now attend college than in the past.

- Thirty years ago, only 30 percent of each high school class went to a four-year college, and only 20 percent went to two-year colleges.
- By 2009, over 40 percent of students were attending four-year college and almost 30 percent were attending two-year colleges.
- High schools are now expected to prepare students for college that in the past would never have attended.

### Kansas college preparation has improved for all ethnic groups, but major differences remain.

- Since 2002, (the earliest year comparable data is available) average scores of each major racial or ethnic group in Kansas have increased.
- However, African-Americans and Hispanics score significantly below the other groups, and have had smaller increases.



#### How do we compare?

State comparison for college readiness is difficult for two very important reasons: (1) The ACT and SAT tests are each predominant in about half of the states, and are not directly comparable to each other; and (2) Significant differences in the percentage of students take these tests in each state.

KASB staff has developed a statistical index, based on 2010 data, to create a comparison. Each state was ranked by its average score on the test that is taken by the majority of students in each state. The states with the highest average ACT and highest average SAT were tied for "first," the states with the second highest scores tied for "second," etc.

To recognize the impact of testing higher percentages of graduates, states were also ranked on that factor on each test, using the same process. Finally, states were ranked based on the number of high scoring ACT or SAT scores per 1,000 high school graduates. The three rankings were then averaged. Kansas had an overall ranking of seventh.

#### Kansas ranks in the top ten states on college readiness.

- Kansas ranked fifth in 2010 in states where the majority of graduates take the ACT. (Kansas ranked sixth in 2011.)
- Kansas ranked 13th in the percentage of graduates taking the ACT. Seven states require all or most graduates take that test. (Kansas ranked 12th in 2011.)
- Kansas ranked sixth out of
   states for the number of
   ACT or SAT scores in the 80th
   percentile per 1,000 graduates.
   (2011 data available.)

Preparation for College (2010)									
Combined U.S. Rank	State	ACT/SAT Score (Test Taken by Most Graduates)			Percent Graduates Taking Majority Test			High ACT/SAT Scores per 1,000 Graduates	
U.S. Kalik		Rank	ACT	SAT	Rank	ACT	SAT	Rank	Number
4	Colorado	16	20.6		1	100		1	304.6
5	Minnesota	1	22.9		17	70		3	264.9
7	Kansas	5	22.0		13	75		6	244.0
8	Nebraska	3	22.1		14	73		8	242.2
9	South Dakota	9	21.8		11	79		9	240.2
16	North Dakota	12	21.5		10	81		17	216.4
23	lowa	2	22.2		24	60		21	197
24	Missouri	11	21.6		18	69		19	212.2
33	Oklahoma	14	20.7		15	73		34	166
46	Florida	25	19.5		22	65		32	170.4
47	Texas	18		1462	20		53	45	143.3

• Combining these three rankings, Kansas has an overall ranking of seventh in the nation. Two states in the region were higher. Florida, often cited a model of educational improvement, ranked 46th.

### **Adult Educational Attainment**

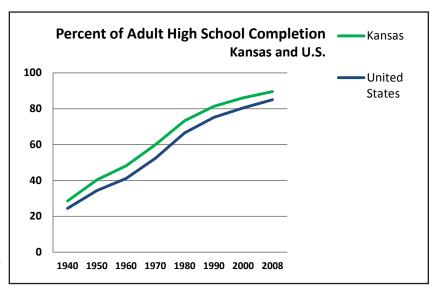
Adult educational attainment is the highest "outcome" of the K-12 system. This measures both high school completion and postsecondary attainment.

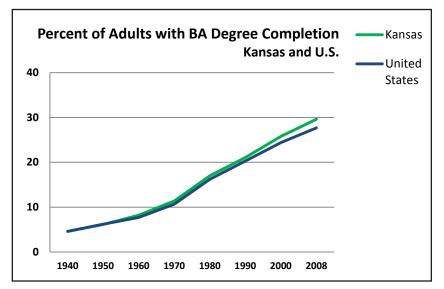
National reports provide state-by-state data on persons 25 and older who have completed a four-year college degree (and for more recent years, an advanced degree).

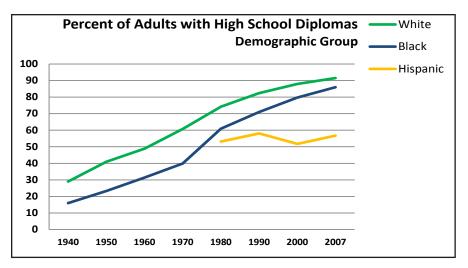
There is no perfect correlation between a state's elementary and secondary school outcomes and adult education levels because many adults living in a state did not receive all or even most of their K-12 schooling in that same state. However, adult education levels are indicators of the ability of the K-12 system to either produce high education levels from within the state, and/or attract well educated individuals to the state.

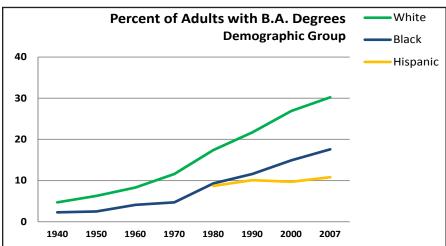
## Kansas high school and college completion are both far higher than earlier generations and both exceed the national average.

- Kansas high school completion tripled from 1940 through 2008, and increased 50 percent since 1970.
- The percent of Kansas adults with at least a four-year college degree is six times higher than 1940, and tripled since 1970.
- Kansas consistently exceeded the national average high school rate by
   percent and has moved ahead of the national average for college degree attainment.









### Major racial/ethnic groups have improved education levels; major differences remain.

- The gap between whites and blacks has nearly closed for high school graduation, but college completion for whites is nearly double.
- Progress for Hispanic students has been much slower, though one contributing fact is that a much higher percentage of Hispanic adults are recent immigrants from other states or countries.

#### How do we compare?

#### Kansas ranks high nationally and regionally for adult education attainment.

- Kansas ranks 13th in the U.S. on a combined ranking of adult high school, four-year and advanced college degree completion.
- Five of 10 regional states do better than Kansas on high school completion.

Regional Comparisons - Adult (25 and Older) Education Attainment							
Combined	State	High School Graduate or More		Four-Year Degree or More		Advanced Degree or More	
U.S. Rank		Rank	Percent	Rank	Percent	Rank	Percent
5	Colorado	17	88.9	2	35.6	7	12.7
7	Minnesota	3	91.6	10	31.5	18	10.0
13	Kansas	16	89.5	14	29.6	16	10.1
21	Nebraska	11	90.1	23	27.1	30	8.6
29	South Dakota	10	90.3	31	25.1	42	7.3
30	North Dakota	13	89.6	24	26.9	48	6.6
31	Missouri	28	86.5	33	25.0	26	9.1
32	Florida	33	85.2	27	25.8	27	9.0
33	Iowa	9	90.3	36	24.3	43	7.3
41	Texas	50	79.6	30	25.3	35	8.3
42	Oklahoma	32	85.5	43	22.2	44	7.2

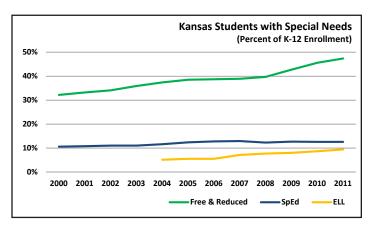
• Only Colorado and Minnesota do better for four-year degrees and only Colorado for advanced degrees.

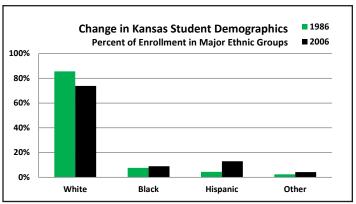
### **Student Characteristics**

Student achievement is affected by challenges that students bring to school. Historically, achievement has been more difficult for students from economically disadvantaged families, students with disabilities, students learning English or students from the major minority groups in Kansas.

### Kansas has a rising percentage of special needs students and racial diversity is increasing.

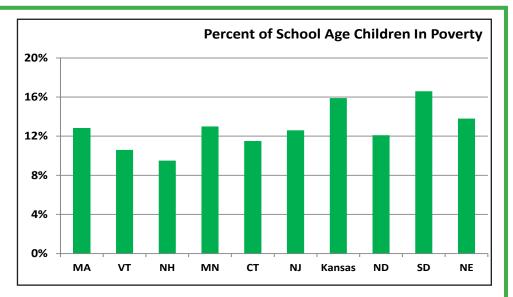
- In the past decade, the percentage of low income students has increased from one-third to nearly half of all students.
- Students with disabilities have increased by almost 20 percent, from 10.6 percent of total enrollment to 12.6 percent.
- English Language Learners have nearly doubled from 2004 to 2011.
- Over the past two decades, the white majority of Kansas students dropped more than 10 percent.
- The Hispanic population has tripled. This group has more English Language Learners, mobility, issues in family involvement and the highest dropout rates.
- All minority groups have also increased.





#### How do we compare? Kansas has more "at risk" students than most other high-achieving states.

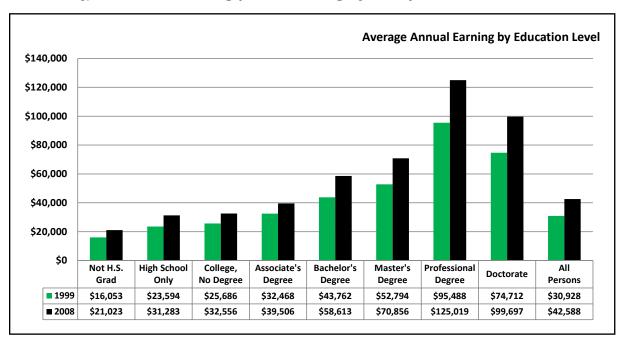
- Kansas ranks in the bottom half of states for students living in poverty (33rd) and non-white students (31st).
- Among the top 10 states in overall achievement, only South Dakota, ranked ninth, has more children in poverty than Kansas, ranked seventh.



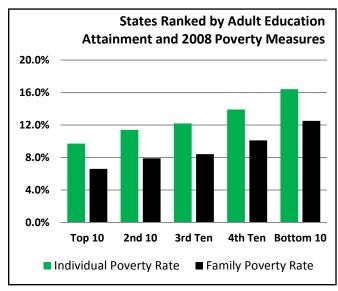
Kansas students are below the national average for "at-risk" factors, but
 Kansas gets top 10 results spending below average.

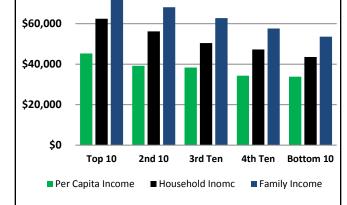
### Vital to Economic Prosperity

Every additional level of education increases average income, and over the past decade differences in earning power has significantly increased.



\$80,000





**States Ranked by Adult Education** 

Attainment with 2008 Avg. Income

- States with the highest adult educational attainment have the highest average income, based on three measures.
- States with the lowest educational attainment have the highest poverty rates, based on two measures.

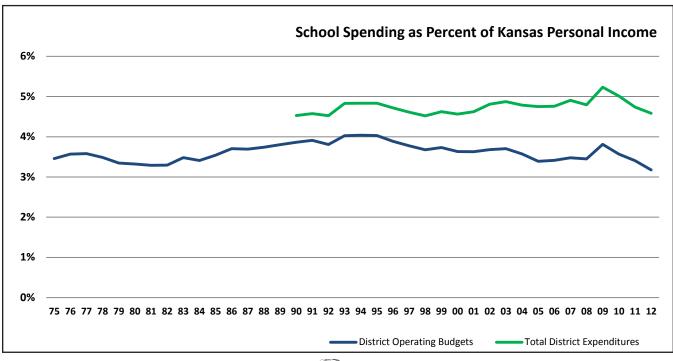
### **Funding**

K-12 education funding in Kansas compared to personal income has been flat for decades. School district operating budgets have averaged about 3.5 percent of total Kansas personal income since 1975.

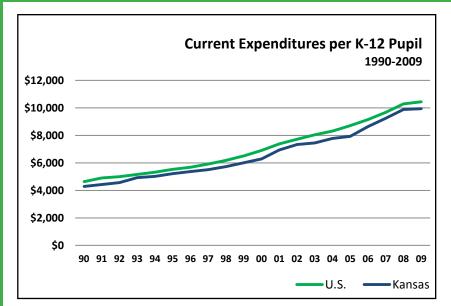
Total spending by school districts has averaged 4.7 percent of Kansas personal income since 1990 - the earliest data available.

Educational improvements by Kansas pubic schools have been achieved without spending a larger share of personal income.

Education spending in Kansas compared to Kansas personal income will be at an historic low next year.







Overall Rank and Resources							
Eleven Score Rank	State	Current Spending Per Pupil 2009	Rank in Spending Per Pupil				
1	Massachusetts	\$14,118	7				
2	Vermont	\$15,175	4				
3	New Hampshire	\$11,932	14				
4	Minnesota	\$11,098	15				
5	Connecticut	\$14,531	6				
6	New Jersey	\$16,271	2				
7	Kansas	\$9,951	26				
8	North Dakota	\$10,151	23				
9	South Dakota	\$8,507	43				
10	Nebraska	\$10,045	25				
11	Colorado	\$8,718	39				
15	Iowa	\$9,707	28				
24	Missouri	\$9,529	32				
37	Florida	\$8,760	37				
38	Oklahoma	\$7,885	45				
41	Texas	\$8,540	42				

#### How do we compare? Kansas per pupil spending is below the national average.

- Since 1990, current spending per pupil in Kansas has been several hundred dollars below the national average.
- Kansans educational results are in the top 10 to 15 states, but spending per pupil is below average.
- The data used is based on current spending per pupil. This avoids distortions due to bond issues, construction and debt.

### The highest performing states spend more per pupil than Kansas.

- The six states with higher overall educational outcomes all spend more than Kansas.
- Every state in the top 10 except South Dakota spend more than Kansas.
- In the region, Kansas ranks fourth behind Minnesota, North Dakota and Nebraska in spending per pupil.
- Kansas spending per pupil has been *reduced* since 2009.

**Focus on...** is a series of publications by the Kansas Association of School Boards. The publications provide expanded analysis of information relating to Kansas public education.

For additional information, please contact KASB at 785.273.3600, 800.432.2471 or email cpitts@kasb.org

The report was prepared by Mark Tallman, KASB associate executive director/advocacy.

#### ABOUT THE KANSAS ASSOCIATION OF SCHOOL BOARDS

KASB, headquartered in Topeka, is the state organization that provides services, training and resources for local boards of education. KASB members are governing boards for unified school districts, community colleges, area vocational-technical schools, special education cooperatives and interlocals, and regional service centers. KASB assists local boards of education with professional development and goal setting, policy development, research, legislative advocacy, superintendent searches, insurance services and legal issues.

www.kasb.org

Kansas Association of School Boards 1420 SW Arrowhead Road Topeka, Kansas 66604-4024

785.273.3600 Fax: 785.273.7580 Toll Free: 800.432.2471

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## Effective Advocacy for School Leaders

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**Our Future** 



Advocacy Guide and Toolkit

Find the Toolkit and more online at www.kasb.org/page.php?id=42