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## Comparing Arkansas Students to Their National Peers

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In an attempt to gauge the educational progress of the nation and each state, *Education Week* has published state report cards since 1997 in its annual *Quality Counts* series. The 12<sup>th</sup> annual report, *Tapping into Teaching: Unlocking the Key to Student Success*, was released in early 2008 and merges the indicators from the shortened 2007 report, which focused on the “cradle-to-career” framework, with previous indicators such as efforts to improve teacher quality and school finance.

To compare states across the nation, the *Quality Counts* series grades and ranks states based on six broad measures: efforts to improve the teacher quality; transitions and alignments; school finance; standards, assessments, and accountability; achievement in K-12 education; and chances for success.

While these grades and rankings provide one method of examining education, the *Quality Counts* evaluation system proves problematic in several key ways<sup>1</sup>. A more appropriate way to understand the *Quality Counts* report is to examine how well Arkansas compares to other states with regard to distinct categories of education. Accordingly, this policy brief separates the categories provided within the report into education inputs, education policies, and education outputs. Then, the brief compares Arkansas to its border states and illustrates Arkansas’ changes over time.

### EDUCATION INPUTS

#### **School Finance:**

*Arkansas rank: #16*

Indicators within this category include four equity measures (wealth neutrality score; coefficient of variation; McLoone Index; restricted range); however, we focus on the wealth neutrality score. To interpret this measure, a lower score is considered favorable since it indicates that poorer

districts actually have more funding per weighted pupil than do wealthy districts. A higher score is unfavorable because it means that wealthy districts have more funding per weighted pupil than do poor districts. On this indicator, Arkansas ranks #14 with a score of 0.03 compared to the national average of 0.09. Among the four spending measures, Arkansas ranks #20 overall. On three of the four measures, Arkansas ranks near the national average. For example, on the measure per-pupil expenditures adjusted for regional cost-of-living differences, Arkansas ranks #25 nationally. However, Arkansas performs well on spending compared to other states on expenditures for K-12 schooling as a percent of the state taxable resources, where Arkansas ranks #9 in the nation. Previous reports did not include a state ranking for school finance, but Arkansas received a B- in both 2006 (school finance was not included in the 2007 report) and 2008.

### EDUCATION POLICIES

#### **Efforts to Improve Teacher Quality:**

*Arkansas rank: #2*

Indicators within this category include accountability measures for quality control within the classroom, incentives and allocation of resources for current teachers, and efforts at building and supporting capacity (e.g. professional development and work environment). Based on the 50 indicators included in this category, Arkansas received 39 “yes” responses, which means that a policy was enacted before the 2007-08 school year. Arkansas has consistently scored well in this category, previously ranking #4 among the 50 states in 2006 (this measure was not included in the 2007 report). Arkansas did particularly well in 2008 because it is:

- One of six states to test subject-specific pedagogy for initial licensure

- One of five states to discourage out-of-field teaching by notifying parents when their children are in classes taught by such teachers
- One of seven states to have a system of pay for performance to reward teachers for raising student performance

**Transition and Alignment:**

*Arkansas rank: #5*

Indicators within this category include programs targeting early-childhood education, college readiness, and workforce readiness. Arkansas’ policies scored well in this category because the state received all “yes” responses in both the early childhood education and workforce readiness sections. Where Arkansas can improve is in college readiness, especially with regard to aligning high school courses and assessments with the postsecondary system. In 2007, the first year this category was included, Arkansas ranked #6.

**Standards, Assessments, and Accountability**

*Arkansas rank: #18*

Indicators within this category include eight academic standards measures, twelve assessment measures, and five accountability measures. According to the report, Arkansas has relatively strong accountability efforts in place. The state has adopted clear, academic standards in English/language arts, math, science, and social studies/history. The state also has vertically equated scores on assessments in grades 3-8 in reading and math, which is a method that places students’ scores on two tests of different levels (e.g. test of mathematics for Grades 3 and 5) on the same scale so that the scores of students in both tests can be compared. The areas where Arkansas policymakers can improve, according to the report, are allowing extended-response items in subjects other than English, assessing by using student portfolios, using formative assessments, and providing rewards to high-performing or improving schools. Even with the broader evaluation for this category, which included ten new indicators, Arkansas’ ranking remained the same as in 2007 at #18.

**EDUCATION OUTPUTS**

**Student Achievement:**

*Arkansas achievement rank: #35*

*Arkansas improvement rank: #16*

*Arkansas equity rank: #36*

Indicators within this category include comparisons between current status, change, and equity. The current status comparisons are based on the 2007 National Assessment of Educational Progress (NAEP) scores administered to grade 4 and grade 8 students in math and reading, as well as high school graduation rates and advanced placement test scores. Based on the most recent performance on these measures, Arkansas’ students ranked in the bottom third of all states with regard to achievement levels and excellence. These current year scores are consistent with previous findings regarding Arkansas’ student performance on NAEP, where grade 4 students performed similar to their peers across the nation, while grade 8 students performed lower than their peers.

However, Arkansas’ students rank very high with regard to improvement. For example, in scale score gains from the 2003 to 2007 NAEP exams, Arkansas’ students rank #4 for gains in grade 4 math and #3 for gains in grade 8 math. Arkansas’ students also ranked #12 in change in AP scores from 2000 to 2006.

The equity comparisons were based on the difference in performance on the 2007 NAEP grade 4 and grade 8 reading and math scores between students who were eligible for the National School Lunch Program and those not eligible. Based on these comparisons, Arkansas ranks in the bottom half of all states. Furthermore, the gap between Arkansas’ rich and poor students has grown from the 2003 to the 2007 NAEP exams.

**ARKANSAS ’ POSITION COMPARED TO SURROUNDING STATES**

Compared to surrounding states, Arkansas has high rankings (see Table 1). In 2008, Arkansas had the top grade in two of the five categories – efforts to improve teacher quality and school finance. Arkansas also ranked second among neighboring states in terms of transitions and alignment. The state’s grades given for standards, assessments, and accountability, as well as student achievement were roughly in the middle among the border states.

Additionally, this comparison of surrounding states highlights how poorly all states, as noted by the national average, perform with regard to student achievement.

### **QUALITY COUNTS TRENDS**

Since *Quality Counts* is an annual report, we can view changes over time. Table 2 presents Arkansas' scores in 1997, 1999, 2001, 2003, 2005, 2006, and

2008. Table 2 includes the four categories that have been tracked across most of the reports over the past ten years. According to this historical perspective, Arkansas has improved its rating in three of four graded categories – efforts to improve teacher quality, school climate, and standards, assessment, and accountability. With regard to school finance equity, the grades indicate that Arkansas has consistently scored in the B- / C+ range.

**Table 1: Summary Grades for Arkansas and Border States, 2008**

<b>State</b>	<b>Efforts to Improve Teacher Quality</b>	<b>Transitions and Alignments</b>	<b>School Finance Equity</b>	<b>Standards, Assessments, and Accountability</b>	<b>Student Achievement</b>
Arkansas	B+	B	B-	B+	D
Louisiana	B	C	C+	A	D-
Mississippi	D	D+	C-	B	F
Missouri	C	D+	C	C	D
Oklahoma	B-	C	D+	A-	D
Tennessee	C	A	C-	A-	D+
Texas	C	C+	C-	B+	C
Nation	C	C	C+	B	D+

**Table 2: Summary Grades for Arkansas, 1997-2008**

<b>Category</b>	<b>1997</b>	<b>1999</b>	<b>2001</b>	<b>2003</b>	<b>2005</b>	<b>2006</b>	<b>2008</b>
Efforts to Improve Teacher Quality	C+	C-	C-	B	B+	A-	B+
School Climate	C-	D+	D+	C	C+	C+	NA
School Finance Equity	B	B-	B-	B-	C+	B-	B-
Standards and Accountability	B	D	D	B-	C	C+	B+

### **CONCLUSION**

Based on the 2008 report, Arkansas scored at or above the national average on four of the five measures and continues to improve over its performance in prior years. With regard to education inputs, Arkansas ranks among the top third of states. However, the equity and spending information collected for the report was based on the 2005 figures. Arkansas policymakers made steady improvements in its spending efforts over the last three years; therefore, we would expect Arkansas to increase in future rankings.

With regard to education policies, Arkansas continues to rank high among other states. In the 2008 report, Arkansas ranks #2 for its efforts to improve teacher quality, #5 in transitions and alignment, and #18 in standards, assessments, and accountability. These comparisons indicate that Arkansas policymakers are moving toward improving education more quickly than their peers in other states.

Finally, with regard to education outputs, we find that Arkansas' students perform below their peers

across the nation. However, when comparing Arkansas to other states based on changes in scores from 2003-2007, we find that Arkansas students are improving faster than their peers.

*Education Week's Quality Counts 2008* report continues to provide information comparing Arkansas students to their peers across the nation. The most recent report highlights areas where Arkansas policymakers and students need to improve; however, the overall story from this report should be viewed as positive. Arkansas has made dramatic improvements in achievement. Additionally, according to the report, Arkansas' education policies are among the best in the nation.

## REFERENCES

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other indicators equal, states with a high grade on the student performance measure and a low grade on education equity would receive the same grade as a state with low education performance but high education equity. Therefore, rather than reporting and discussing the overall grades, we focus on the components of the overall score and describe education inputs, policies, and outputs.

Second, factors outside of the control of educators are used as indicators in the report. For example, the newly created "chance for success" index includes the demographics of students as a measure of education quality. This approach is problematic since states have limited control over which students attend their schools. Therefore, we do not focus on this particular index since it describes the population of a state rather than the quality of the education received within the state.

Third, within the school finance grading and ranking system, some indicators may signify a problem that, in actuality, is a positive. For example, the McLoone Index, coefficient of variation and the restricted range show the difference between the highest and lowest spending districts in the state. However, what these statistics do not show is which types of districts are the highest and lowest spending. For example, these statistics would not indicate whether the highest poverty and highest minority districts also had the highest expenditures, rather it only shows that district spending varies across the state. Therefore, for the school finance comparison, we focus only on the wealth neutrality score, which describes the relationship between district funding and local property wealth.

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<sup>i</sup> First, the system equates efforts to improve education inputs (e.g. spending) and efforts to improve outputs (e.g. achievement) to create an overall grade on education quality. Equating these two categories seems problematic because,