



University of Arkansas | Office for Education Policy

2016 ARKANSAS EDUCATION REPORT CARD



{ LETTER FROM THE DIRECTOR }

TABLE OF CONTENTS

Letter from the Director 2

State Profile 3

Executive Summary 4

ACT Aspire Exams 5-6

ITBS Exam 7

NAEP Performance 8

Grade 11 ACT 9

Graduation Rates 10-11

Student Growth 12

School Discipline 13

National Board Certified
Teachers 14

K-12 School Finance 15

Sources & Staff 16

Dear Readers,

The Office for Education Policy is pleased to share the 2016 Arkansas Report Card highlighting the characteristics and educational performance of Arkansas students through the 2015-16 academic year.

State student assessment changed again for the 2015-16 school year, making it difficult to determine if our students are performing better than in prior years, but we look forward to a consistent assessment moving forward, which will allow us to more easily monitor student performance over time. There are several benefits to the new assessment system, including a measure of science performance at every grade level from 3-10, and a nationally comparable assessment for Arkansas' 11th grade students.

In addition to performance on annual assessments, we present information on the state's student growth on these assessments, as well as high school graduation rates, school discipline, National Board Certified Teachers, and school finance. The data are intended to provide a snapshot of K-12 education in our state. As we continue to seek to ensure a quality educational experience for all of Arkansas' students, it is important that policymakers, administration, and educators deepen our understanding of the learning experiences of our students and monitor and adjust based upon current trends and student performance measures.

Thank you,
Sarah McKenzie, PhD
Executive Director



Sarah McKenzie, PhD
Executive Director
Office for Education Policy



Gary Ritter, PhD
Faculty Director
Office for Education Policy

{ STATE PROFILE }



29

High schools ranked top 10% in nation by U.S. News (2017/US News)

9

% of students identified as Limited English

2,901

Arkansas Teachers that have achieved National Board Certification

13:1

Student to Teacher ratio (2015-16)

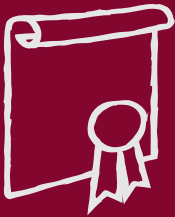


32,884

Certified teachers employed by public schools in the state (2015-16)

\$9,679

K-12 Per Pupil Spending (2015-16)



20.8

ACT Average score (Class of 2016)

Average enrollment of school district

1,838

(2015-16)

11,052

The number of students in Arkansas schools identified as homeless (2016-17)



143

National Merit Semi-Finalists

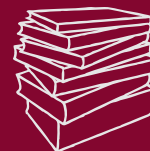
9

% of students identified as Gifted and Talented



237

Traditional districts (2015-16)



{ EXECUTIVE SUMMARY }

Arkansas uses a variety of assessments to measure student's performance, and most indicate that our **students score better in English Language Arts than in math and science.** Arkansas students in grades 3-10 completed ACT Aspire assessments in English Language Arts, Mathematics, and Science in Spring 2015, and performed the highest in ELA, with 48% meeting readiness benchmarks. In math, 43% of students statewide met the benchmarks, but in science only 38% of students met the readiness benchmark.

All 11th graders in the state completed the ACT for the first time in Spring 2015, and the results, similar to the results for the Class of 2016, show that Arkansas students are more likely to meet college-readiness benchmarks in English and reading than in math and science.

These assessments are not nationally comparable, however, so it is difficult to know if Arkansas student are performing better or worse than their peers in other states. In addition, these assessments are not directly comparable to prior assessments, so we have to wait for the 2016-17 results to determine if students' performance is improving.

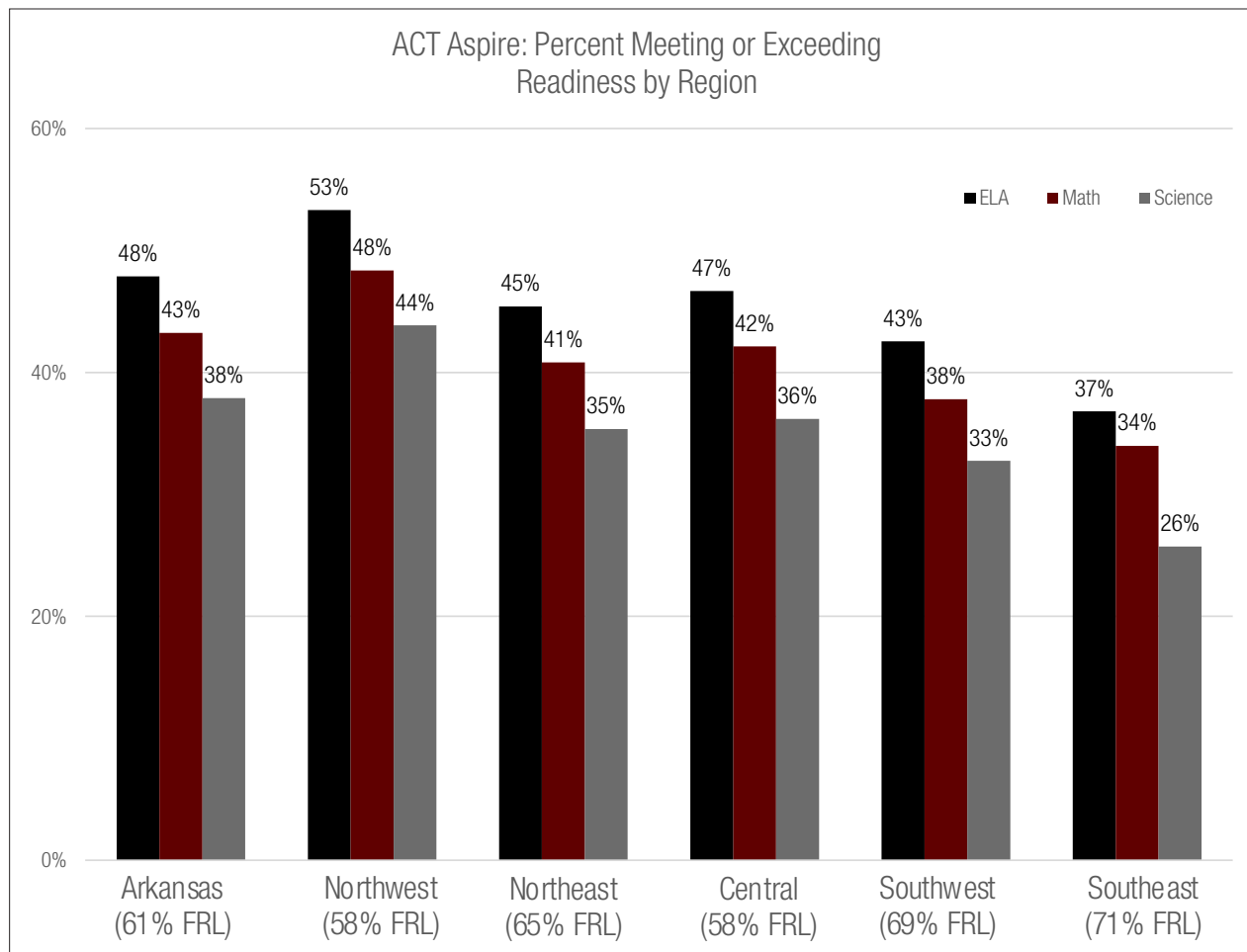
There are some areas where we can compare to national performance, however, and there is good news when examining the assessment scores for students in younger grades. Students in 1st and 2nd grades completed the nationally comparable ITBS, and both reading and math scores were above the national average.

Arkansas' high school graduation rate is also above the national average, even though there was a slight decrease in 2015. Arkansas is also a leader in the percentage of teachers that have received National Board Certification and receives high marks for equitable education funding.

A persistent and concerning finding in our report is the **regional differences across assessment metrics,** with students in some regions consistently being more likely to meet readiness benchmarks than those in other locations. Academic performance generally reflects the socio-economic status of students in the regions, and can be of limited use to educators and policy makers trying to ensure that all students are attending quality schools.

Arkansas has developed a new metric, however, which should be less related to student demographic characteristics. **The student growth model** examines how students are growing academically. Measuring individual student growth over time provides a different perspective than the percentage of students meeting readiness benchmarks. The current two years of growth information are based on a variety of assessments but we are optimistic that future years based on consistent assessments may inform educators and policy makers about which schools are providing students high-quality learning experiences.

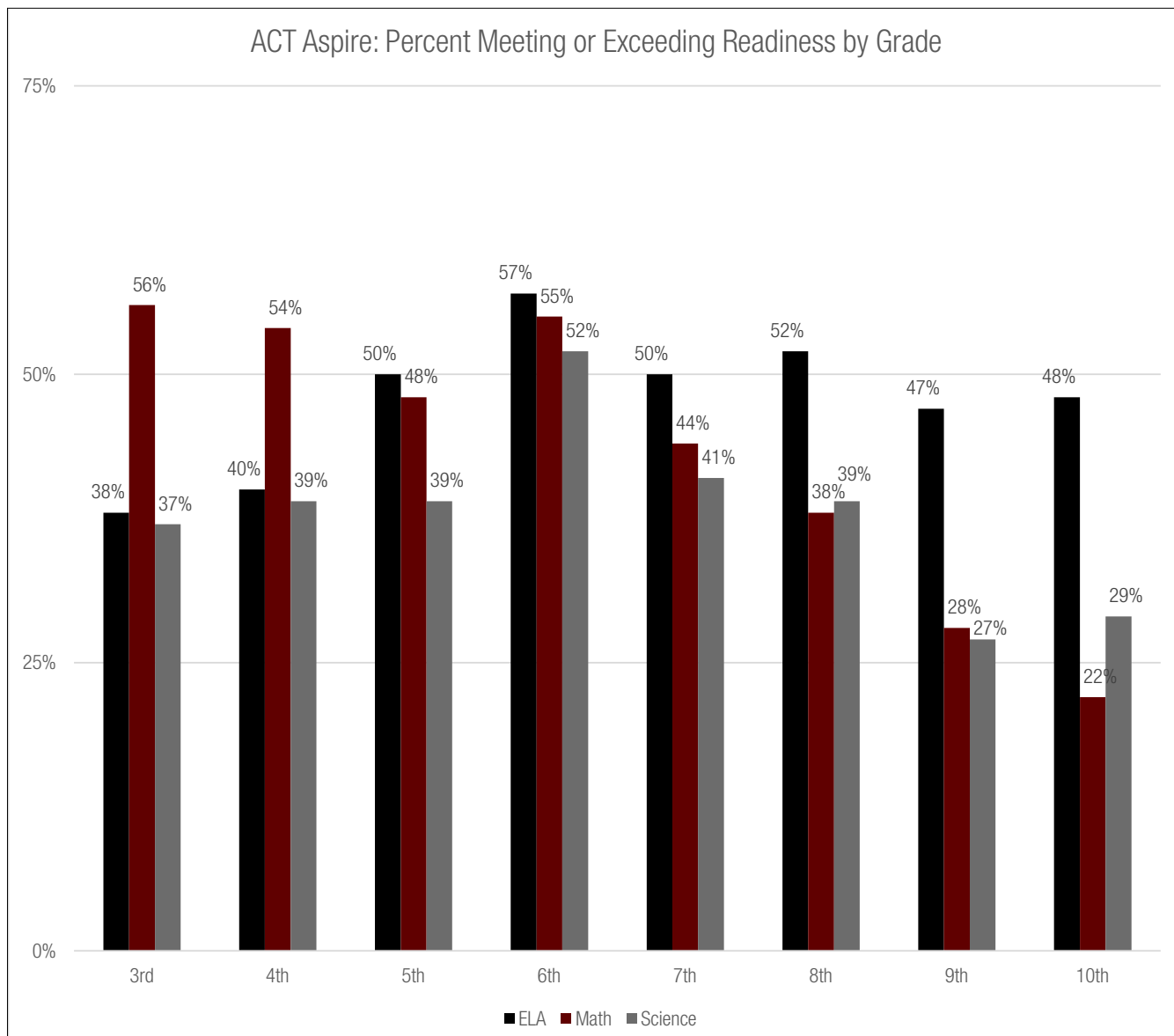
{ ACT ASPIRE EXAMS }



Arkansas students in grades 3-10 completed a **new assessment** in English Language Arts, Mathematics, and Science at the end of the 2015-16 school year. The ACT Aspire replaces prior state assessments, and results cannot be directly compared with the earlier assessment results, both because this is a new test and a different test.

Arkansas' ACT Aspire results cannot be compared to national performance because the ACT Aspire is not administered nationally.

{ ACT ASPIRE EXAMS }



ELA:

While nearly half of Arkansas' students met readiness benchmarks in English Language Arts (ELA) there is variation across grades and regions. Students in 3rd and 4th grades are less likely to meet readiness benchmarks than students in higher grades. The highest performance is in 6th grade.

MATH:

In contrast to the results in ELA, Arkansas students in the lower graders are more likely to meet math readiness benchmarks than students in the higher grades. Over half of the state's 3rd graders met readiness benchmarks in math, but less than one in four met the benchmarks in 10th grade. Similar to ELA, the highest performance was in 6th grade.

SCIENCE:

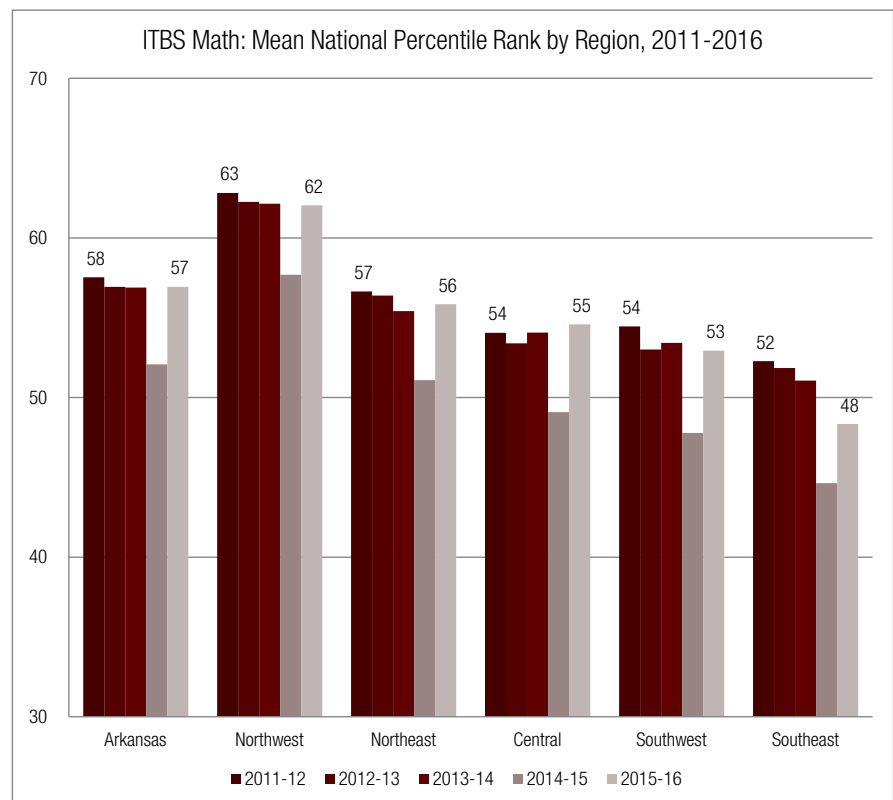
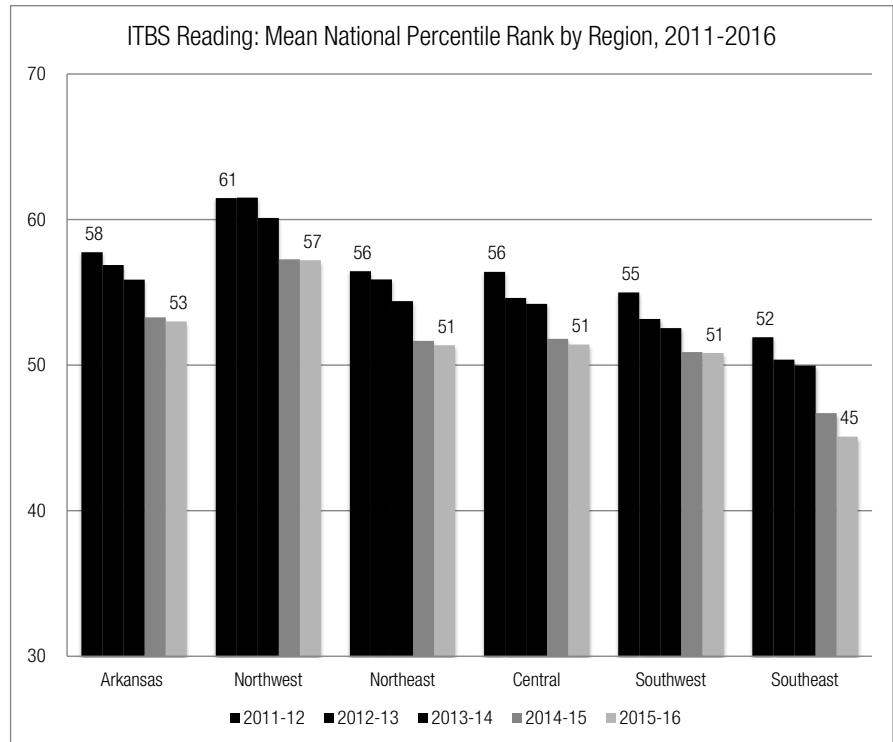
This is the first time that Arkansas students have tested in science at every grade. Arkansas students were less likely to meet benchmark performance in Science than in ELA and math. Performance is fairly consistent across grades and regions, with the exception being high performance in 6th grade.

{ ITBS EXAM }

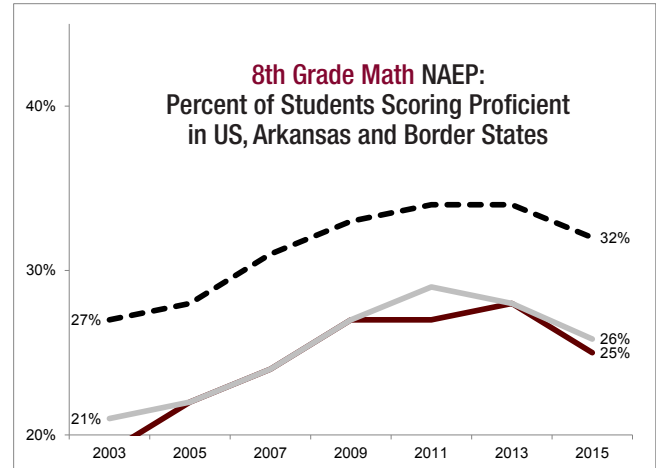
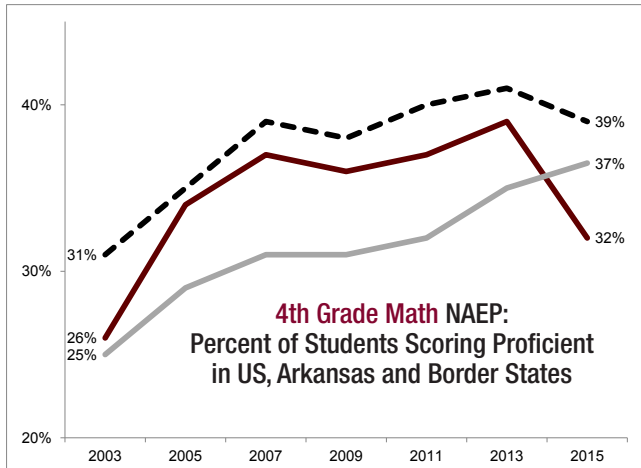
The ITBS is administered to students in 1st and 2nd grades. **These norm-referenced tests allow for comparisons across state borders using National Percentile Ranks (NPR).**

In 2015-16, reading scores held steady, and math scores rebounded to previous levels after a sharp decline in 2014-15.

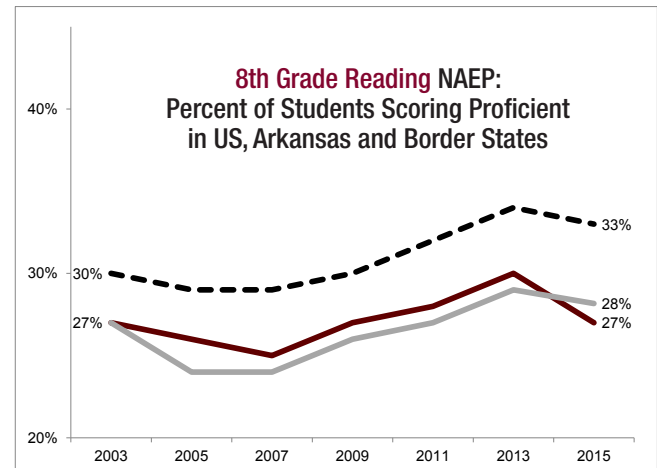
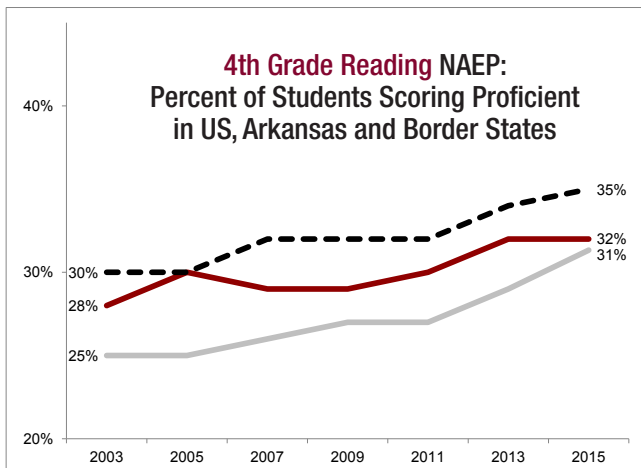
New, more aligned assessments are being identified for 1st and 2nd grades. It is important that Arkansas continue assessing students in these early grades so interventions can help them get back on track before they fall too far behind their peers.



{ NAEP PERFORMANCE }



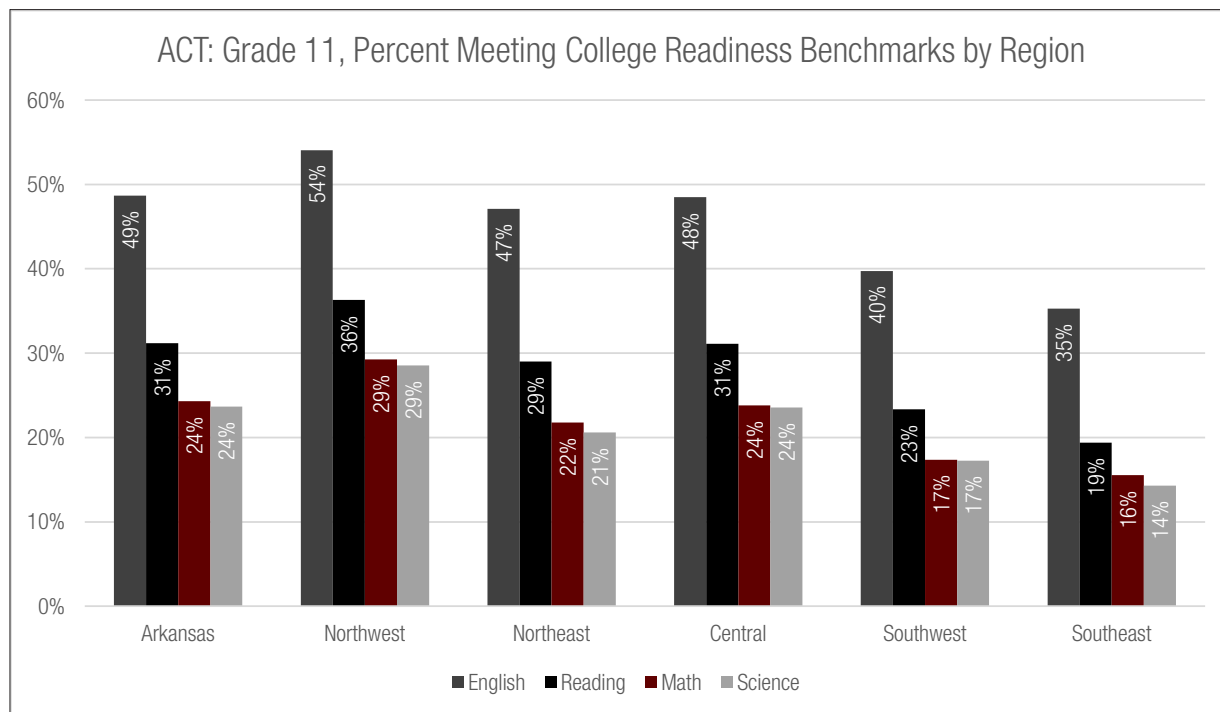
— AR — Border States — US



Every two years, the National Assessment of Educational Progress (NAEP) test is administered to a representative sample of students in each of the 50 states plus Washington, D.C. For this reason, this test is known as the “Nation’s Report Card.” Administered at the 4th and 8th grade levels, these results can help us track how Arkansas performs against the nation as a whole.

Since first administered, Arkansas’ NAEP scores in reading and mathematics have grown at a rate similar to the national trend. The new scores show that Arkansas’ fourth grade students score similarly to the national average in reading, although eighth grade students are still below average performance. In mathematics, Arkansas students still score well below national performance.

{ ACT / GRADE 11 }



For the first time, all Arkansas students in 11th grade took the ACT. Typically taken by students on a college-going path, nationally 64% of students complete the ACT. The ACT tests four subject areas: English, Reading, Math, and Science.

The ACT College Readiness Benchmarks were developed to provide students and their parents with information about the likelihood that students are ready to be successful in college. Statewide, almost half of 11th graders met the benchmark for English (49%), 31% met the benchmark for reading, and 24% met the benchmarks for math and science.

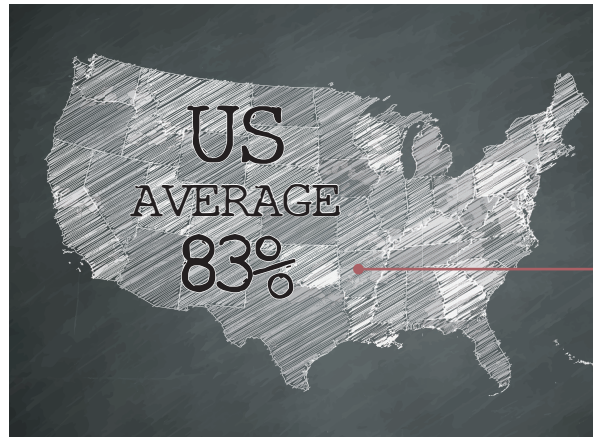
The scores for the students who graduated in 2016 can be compared with other graduates from across the country. Sixty percent of Arkansas students met the benchmark for English, and 40% met the benchmark for Reading. While these percentages were near the national average, Arkansas' students showed larger gaps in college readiness in mathematics and science, where only 30% and 32% of students met the benchmarks. While the majority of Arkansas graduates seem prepared in English, our graduates are half as likely to be prepared for success in mathematics and science.

High School Graduates: ACT 2016

| | AR | US |
|--------------------|------|------|
| Composite Score | 20.2 | 20.8 |
| Participation Rate | 96% | 64% |
| Met benchmark: | | |
| English | 60% | 61% |
| Reading | 40% | 44% |
| Math | 32% | 41% |
| Science | 30% | 36% |

{ GRADUATION RATES }

High school graduation is a key milestone in students' transition to college and careers, and **Arkansas' high school graduation rate is above the national average.** Although there was a slight decline in 2015, Arkansas is graduating students at rates similar to states that have fewer students at risk.



**AR
AVERAGE
85%**

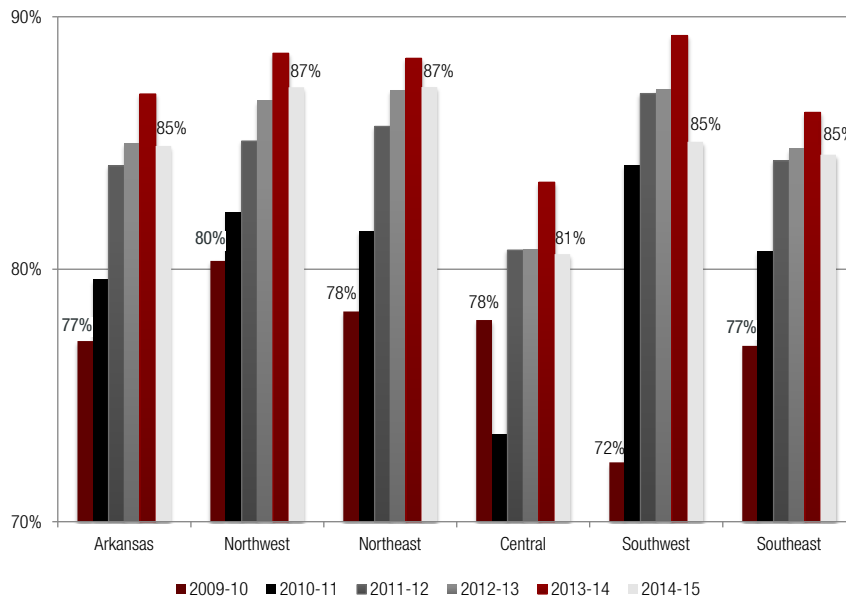
Four-Year cohort high school graduation rates for the nation, Arkansas & bordering states

| | 2010-11 | 2011-12 | 2012-13 | 2013-14 | 2014-15 |
|-----------|------------|------------|------------|------------|------------|
| US | 79% | 80% | 81% | 82% | 83% |
| AR | 81% | 84% | 85% | 87% | 85% |
| LA | 71% | 72% | 74% | 75% | 78% |
| MS | 75% | 75% | 76% | 78% | 75% |
| OK | * | * | 85% | 83% | 83% |
| MO | 81% | 84% | 86% | 87% | 88% |
| TN | 86% | 87% | 86% | 87% | 88% |
| TX | 86% | 88% | 88% | 88% | 89% |

** Note: Oklahoma did not calculate cohort graduation rates until 2012-13*

{ GRADUATION RATES BY REGION }

High School Graduation Rates by Region, 2009-2015



When we examine graduation rates by region, a different pattern emerges than when we examine academic performance.

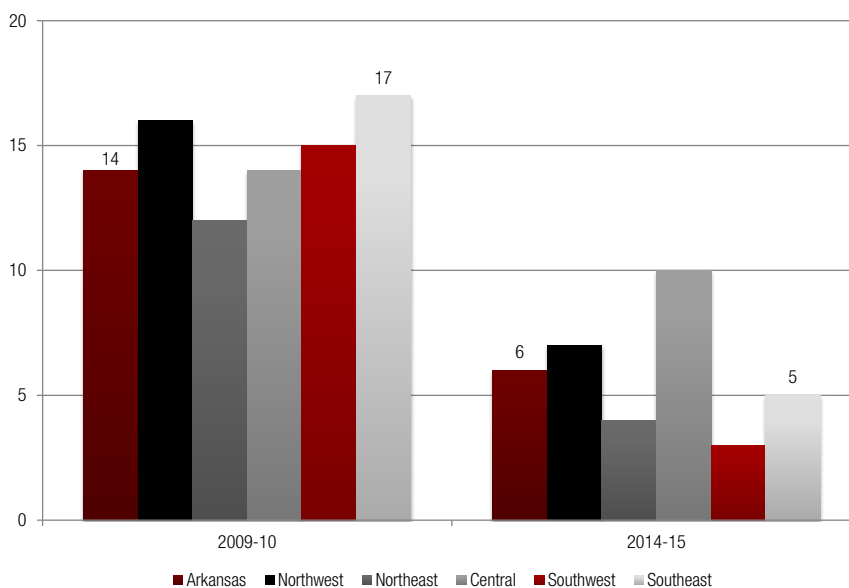
In 2015, **graduation rates were highest in Northwest and Northeast regions, and lowest in the Central region**

The consistent rise and recent slight decline in graduation rates was evident in every region of the state.

In addition to increased graduation rates, the gap between the rates for at-risk students and their more advantaged peers has been reduced by more than half in the past six years.

In 2009-10, there was a difference of 14 percentage points statewide, and in 2014-15 that had been reduced to 6 points. The reduction of the graduation 'gap' is consistent in all regions of the state.

Graduation Gap Between Non- At Risk Students and At Risk Students, By Region, 2009-10 and 2014-15 (Percentage Point Difference)



{ STUDENT GROWTH }

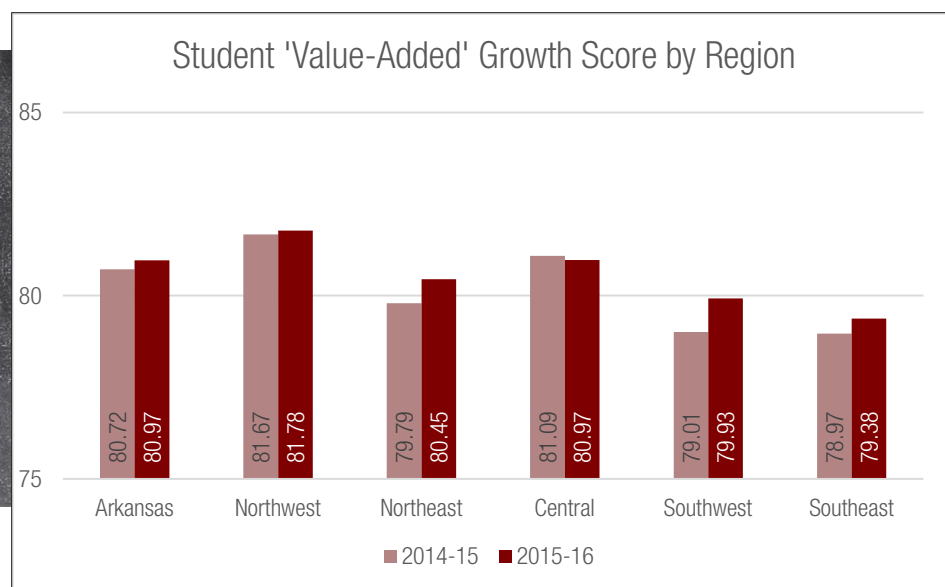
For the past two years, Arkansas has been measuring how much students are **growing academically** throughout the state. Measuring student growth is different than determining if students are meeting the grade level expectations on the state assessment each year. Growth measures if students grew academically from one year to the next as much as we expected them to grow based on what we know about them.

Each student's state test score history is used to predict what the student would be likely to score on the annual test. If students scored higher than predicted the school is awarded a higher growth score, and if students scored lower than predicted the school received lower growth scores.

The growth score reflects how much 'value' the school added to the student's experience, and is called a "Value-Added" measure. Schools that received a growth score close to 81 had students who grew academically at the expected rate. Higher values indicate that the school had students, on average, who grew more than expected, while lower values indicate the average student at the school grew less than predicted.

Students in the Northwest and Central regions experienced the highest growth, and students in Northeast, Southwest, and Southeast regions increased student growth over the prior year

It is important to measure growth in addition to proficiency, because by measuring growth we focus on the learning of **all students**— including those who are well below or well above grade level. More information about Arkansas' growth scores, including school-level scores, can be found at officeforeducationpolicy.org

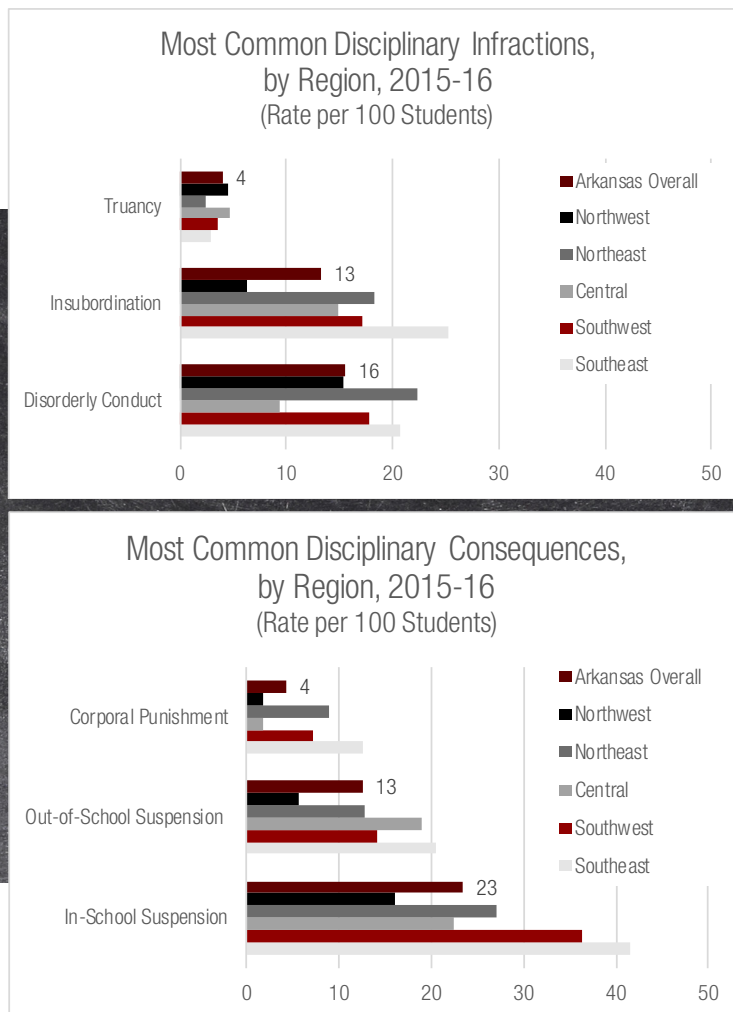


{ DISCIPLINE }

During the 2015-16 school year, school districts reported 59 disciplinary incidents per 100 students. **Over 80% of the reported infractions are minor and non-violent.**

Disorderly conduct and insubordination account for 50% of the infractions. The majority of consequences received by students for misbehavior exclude students from their learning environment, with 57% of the consequences reported as **in-school suspension or out-of-school suspension.** Corporal punishment was used as a disciplinary consequence in 80% of school districts in 2015-16, but, it is used less frequently than in the past and amounted to a consequence in only 7% of disciplinary incidents.

The Office for Education Policy has been studying school discipline since 2013 and creates an annual report for Act 1329. The goal of the law is to evaluate and to track the progress of school districts in reducing disciplinary rates and disciplinary disparities. More information about our research into school discipline, including disparities by student and school characteristics, can be found at officeforeducationpolicy.org



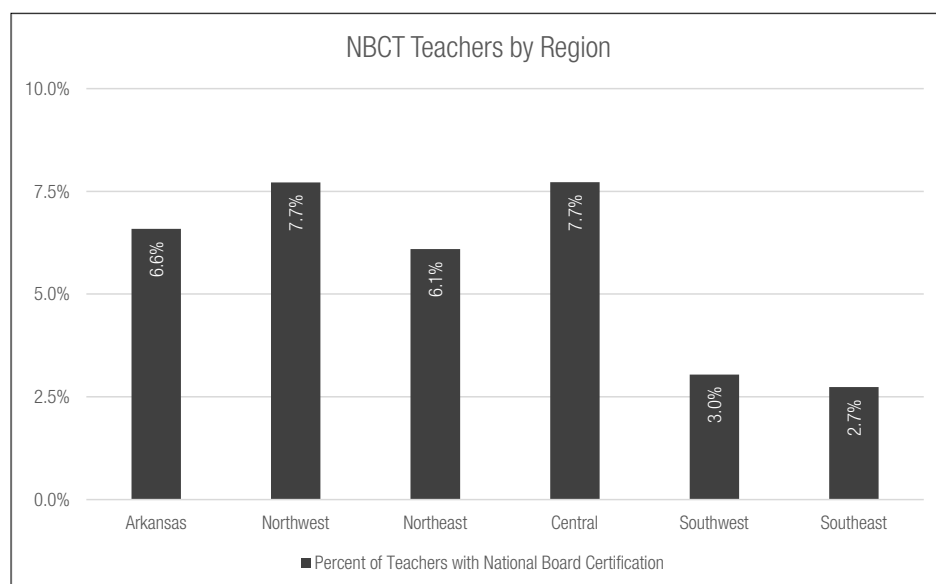
NATIONAL BOARD CERTIFIED TEACHERS

National Board Certified Teachers are teachers who have completed a process that, according to the National Board for Professional Teaching Standards, **“have developed and demonstrated the advanced knowledge, skills and practices required of an outstanding educator.”** According to the best research on the topic, NBC teachers are more effective than their peers, but the process of National Board certification is likely not the cause of their increased effectiveness. What is more likely is that already-excellent teachers choose to pursue this rigorous path.

Currently, 6.6% of Arkansas teachers are NBC. Given the substantial monetary gains associated with NBC, it is not surprising that increasing numbers of Arkansas teachers are seeking certification. In 2001, there were 59 NBC teachers, in 2007, the state had fewer than 600 NBC teachers, and today, there are 2,901. We don't have quality data to evaluate if Arkansas' NBC teachers are having a significant positive impact on students' academic outcomes, but we can examine data to see what kind of students NBC teachers are working with.

NBC teachers are far more likely to work in the most-advantaged districts (those serving the fewest high-poverty students). Only 2% of NBC teachers work in the poorest 10% of districts; while 22% of the state's NBC teachers serve students in the most advantaged 10% of Arkansas districts.

NBC teachers are more likely to work in Northwest and Central Arkansas. Nearly 8% of the teachers in the Northwest and Central regions of the state are National Board Certified, but just 3% of the teachers in the Southwest and Southeast regions are certified by the National Board.



There are substantial financial benefits to NBC:

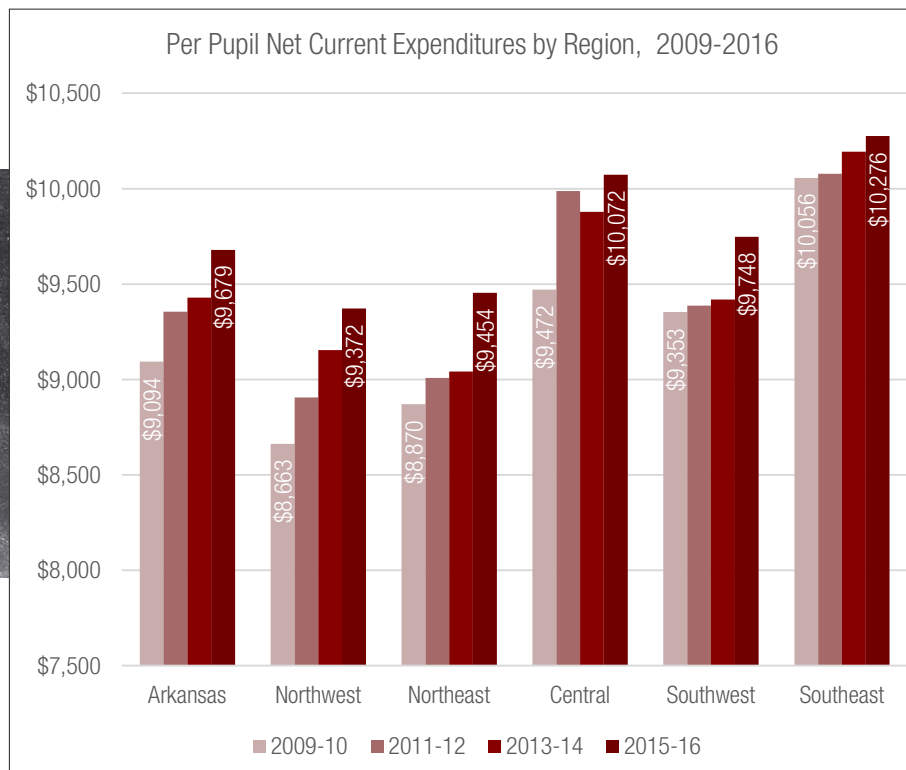
Currently Board Certified teachers receive a \$5,000 annual bonus for up to 10 years after certification. Act 937 of 2017 made changes to bonuses for future NBCTs. In addition to the state bonus, 128 districts provide NBC teachers additional annual stipends, most between \$2,000 – \$4,000.

{ K-12 FINANCE }

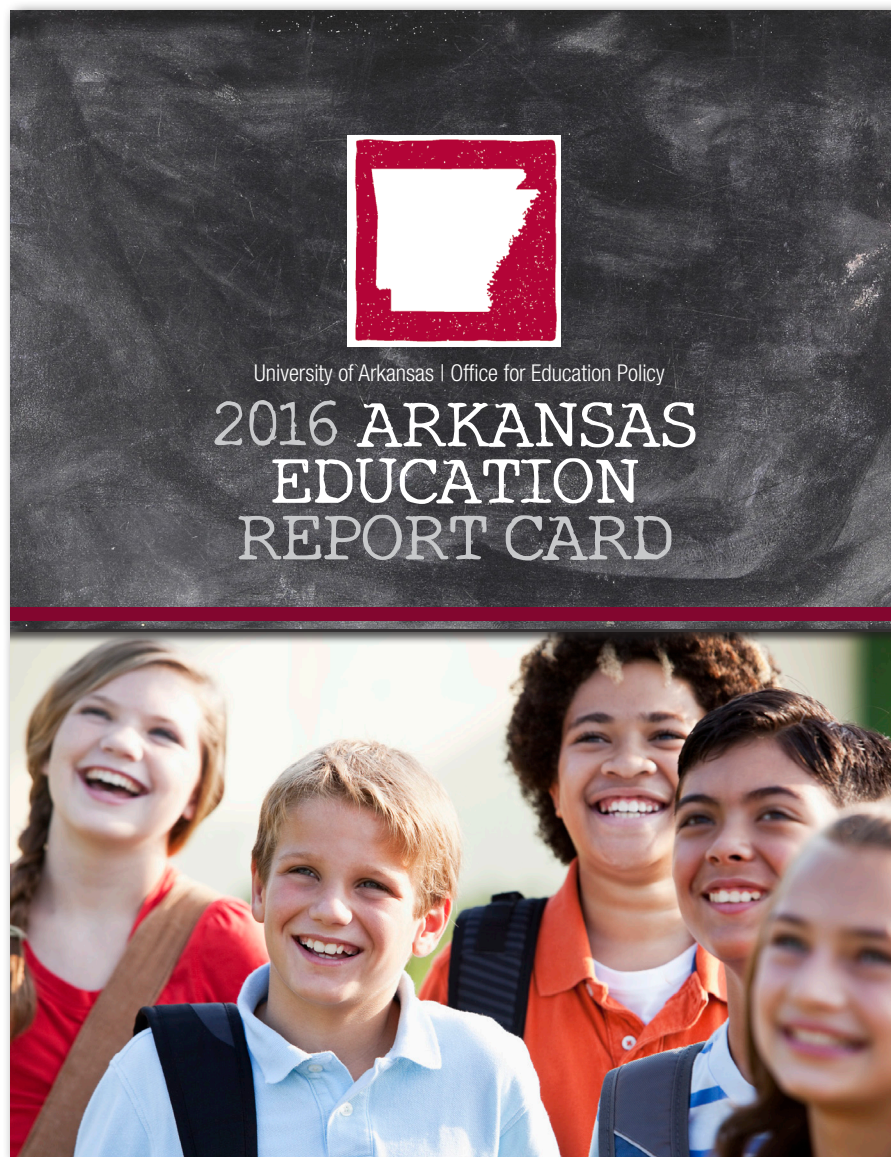
Arkansas ranks 11th out of the 50 states and Washington, D.C. with respect to the percentage of taxable resources that are spent on education (Quality Counts, 2017). Like many states, Arkansas uses a foundation formula for education funding. These formulas provide the state a method for ensuring that all districts have access to the base amount needed to provide an adequate education. In 2015-16, every school district in Arkansas received \$6,584 per student.

Districts may receive additional monies from local tax receipts, federal sources, and special programs that support students who are disadvantaged, English Language learners, or participate in special education.

Local districts determine how to spend the money they receive to best support their students. Arkansas' per pupil expenditure for 2015-16 was \$9,679. Per pupil expenditures by region are represented in the graph below. The Southeast region consistently spends the most money per pupil, while the Northwest reported the lowest spending in 2015-16.



{ SOURCES & STAFF }



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Sources

We would like to reference the following sources for data used in this State Report Card. All graphs and tables used in this publication come from publicly-available data. If you have any questions about how this publication was constructed please contact our office.

ACT.org, Arkansas Department of Education, Arkansas Department of Higher Education, Bureau of Labor Statistics, Census.gov, Fortune.com, Institute of Education Science, U.S. News and World Report

Mission: The Office for Education Policy (OEP) provides relevant education research, data, and policy analysis to support data-driven decision-making for Arkansas PK-12 policymakers and educators.