## 2015 Arkansas REPORT CARD



## Director Letter

## Dear Readers,

The Office for Education Policy is pleased to bring you its 2015 Arkansas Report Card for highlighting our students' characteristics and educational performance through the 2014-2015 academic year. his year marked the first significant change in student assessment in more than a decade, the implementation of a letter grade system for grading schools, and new national data from the NAEP.
As we head into a new assessment system this spring, we hope the data presented within continue the conversation that surrounds our education system. The following data are intended to provide a snapshot of K-12 education in our state. Although there are many bright spots across the state, it is important for our policymakers, administration, and educators to monitor and adjust based upon current trends and student performance measures at both the state and national level.

Thank you,
Sarah McKenzie, PhD Executive Director

Gary Ritter, PhD
Faculty Director

Office for<br>Education Policy



## State Profile

24High schools ranked top 10\% in nation by U.S. News (2015)


Percent of students participating in FreerReducedLunch (2014-15)

12:1 32,181 שַ
Certified teachers employed by public schools in the state

## $\$ 9,642$

K-12 Per Pupil Spending
(2014-15)


ACT
Average score
(2015 graduates)

Average enrollment of school district

(2015-16)

9,856
The number of students in Arkansas schools identified as homeless


Schools receiving

(2014-15)

索摂 National Merit
Semi-Finalists
(2015)

$\frac{22}{\text { Open }}$
enrolment
charter
schools
(2015-16)

237
Traditional districts
(2015-16)


## Executive Summary

Arkansas K-12 education experienced several important 'firsts' in the last year:

- School Letter Grades: In Spring 2014, schools were assigned A-F letter grades for the first time. The letter grades were intended to help parents understand how schools were performing. In 2015, only $1 \%$ of schools received an "A" grade. The grades are based on student performance on state assessments, improvement in students' scores, as well as graduation rates for high schools.
- New Literacy and Math Assessments: In Spring 2014, Arkansas students completed new assessments in English Language Arts and Mathematics. PARCC was the first state assessment aligned to Common Core State Standards and the first that allowed for cross-state comparisons of student performance. Although proficiency rates were much lower than they had been on previous state assessments, Arkansas' PARCC scores were in line with what we would expect given the background characteristics of our students and the scores from students in other states.

Although PARCC assessments were new this year, some assessments remained the same, allowing for comparison over time.

- Science Assessments: There was a slight increase in 5th grade science scores, but the 7th grade scores declined while Biology scores remained consistent with 2013-14 performance.
- ITBS for Grades 1-2: Scores declined for first and second grade students in reading and math on the norm-referenced Iowa Test of Basic Skills (ITBS).
- NAEP: Since the NAEP was first administered, Arkansas' NAEP scores in reading and mathematics have grown at a rate similar to (or better than) the national trends. The 2015 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 averages.
- Graduation Rate: Arkansas' high school graduation rate is above the national average, and increasing!

The coming year brings more changes to Arkansas $\mathrm{K}-12$ education, as the ACT Aspire replaces the PARCC assessments and state science assessments. As students progress through their schooling during these changing times, it is critical that parents, teachers and policy makers thoughtfully use all information available to ensure students are on track for success.

## Making the Grade

In an effort to make it easier for parents to understand how schools are performing, Arkansas schools are assigned A-F letter grades. In 2015, only 10 schools, or $1 \%$ of all schools in the state, received an "A". This chart illustrates the number of schools receiving each grade.

## Arkansas Schools: 2015 A-F Letter Grades



Similar to the letter grades students receive from their teachers, school letter grades are an overview of several different measures. The components are Performance, Growth and, for schools serving high school seniors, Graduation Rate.

## - Performance:

The weighted performance score awards schools points for student achievement on state assessments in English Language Arts and math. Schools with more students meeting or exceeding expectations receive higher performance scores, while schools where fewer students met expectations receive lower performance scores.

## - Growth:

The growth score is awarded for increasing students' assessment scores. Schools that improved student scores more than was predicted receive higher growth scores, while schools where students did not improve as much as expected receive lower growth scores.

## - Graduation Rate:

The overall percentage of students who graduate from high school in four years.

Although Performance, Growth and Graduation Rate are the basis for the letter grade, small adjustments are made to the scores based on the following:

## - Achievement Gap Adjustment:

The achievement gap is the difference in performance between students who are At-Risk and those who are not. The adjustment assigns a bonus to schools with a smaller than average achievement gap and a penalty to schools with a larger than average achievement gap.

## - Graduation Gap Adjustment:

The percentage of students who graduate from high school in four years is calculated for high schools. In addition, a bonus or penalty is assigned to schools based upon the difference between the graduation rate for At-Risk and those who are not.

## - Challenge Points:

Schools whose performance exceeds the expected performance considering the schools' level of poverty receive extra points.

## Assessment: PARCC Results

This year Arkansas students completed a new assessment in English Language Arts and Mathematics. PARCC (Short for Partnership for Assessing Readiness for College and Careers) is the first assessment aligned to Arkansas' Common Core State Standards.

These standards set a higher bar for student learning, emphasizing the need for students to demonstrate critical thinking, problem solving, and clear writing. PARCC results cannot be compared with the earlier Arkansas Benchmark results, both because this is a new test and a different test. This will be the only year of PARCC results, as Arkansas switched to ACT Aspire for assessment this school year.

Arkansas PARCC Results -
Percent Meeting or
Exceeding Expectations

|  |  | ELA |
| :--- | :--- | :--- |
|  | Math |  |
| Grade 3 | 29 | 31 |
| Grade 4 | 34 | 24 |
| Grade 5 | 32 | 24 |
| Grade 6 | 33 | 25 |
| Grade 7 | 35 | 22 |
| Grade 8 | 32 | $17^{\star}$ |
| Grade 9 | 36 | - |
| Grade 10 | 37 | - |
| Algebra | - | 28 |
| Geometry | - | 21 |

*Results exclude students who completed a higher-level math course


## Assessment: PARCC

One of the benefits of PARCC was that we would be able to compare Arkansas student performance to the performance of students in other states. Nine other states and the District of Columbia have released their scores for grades 3-8. The nine other states that have released PARCC results are: New Mexico, Louisiana, Illinois, Rhode Island, Maryland, Ohio, Colorado, New Jersey, and Massachusetts.



The states are VERY different in many ways, but a key characteristic related to assessment is poverty.

We would expect states that enroll a greater percentage of students who are eligible for Free/Reduced Price Lunch (FRL-a proxy variable for poverty) will under-perform states that enroll fewer students eligible for FRL. PARCC states range in FRL percentages, from D.C., with the greatest poverty at 76\% of its students, to Massachusetts, with only $35 \%$ of students eligible for Free/Reduced Price Lunch. In the figures below, states are arranged from MOST FRL on the left to LEAST FRL on the right. Not surprisingly, students in Massachusetts outperformed D.C. students.

Arkansas enrolls 62\% of students eligible for FRL and is represented by the RED bars.

PARCC States \% of Students Eligible for Free/Reduced Lunch

| D.C. | $76 \%$ |
| :--- | :--- |
| New Mexico | $69 \%$ |
| Louisiana | $67 \%$ |
| Arkansas | $\mathbf{6 2 \%}$ |
| Illinois | $49 \%$ |
| Rhode Island | $47 \%$ |
| Maryland | $46 \%$ |
| Ohio | $44 \%$ |
| Colorado | $42 \%$ |
| New Jersey | $36 \%$ |
| Massachusetts | $35 \%$ |

## Overall: Science

This year Arkansas students continued to take the same assessments in science: at grades 5, 7 and at the end of their Biology course. There was a slight increase in 5th grade science proficiency to $60 \%$, but the 7th grade proficiency rates declined. Only $34 \%$ of Arkansas students met proficiency expectations in 7th grade science this year.

Biology scores remained consistent with 2013-14 performance, but only 47\% of Arkansas high school students demonstrated proficiency in 2014-15. Beginning this spring, these assessments will be replaced by ACT Aspire, which will assess science annually in grades 3-10.





## Assesment: Science

Most regions demonstrated an increase in 5th grade science proficiency in 2014-15. The northwest region had the highest proficiency rate at $67 \%$, but the southwest region experienced the greatest increase, from 52\% proficient in 2013-14 to $57 \%$ proficient in 2014-15.

In 7th grade science, declining proficiency rates were seen in all regions of the state. Proficiency rates in all regions were at the lowest level in 5 years.

Biology proficiency rates increased in 2014-15 in northeast, southwest ad southeast regions. Northwest and Central experienced the highest proficiency even though the rate dropped slightly from 2013-14.

## Assesment: ITBS

The IOWA Test of Basic Skills (ITBS) is administered to students in grades 1 and 2. These norm-referenced tests allow for comparisons across state borders using National percentile Ranks (NPR).

In 2014-15, scores declined for first and second grade students in reading and math on the norm-referenced Iowa Test of Basic Skills (ITBS).

While the decline of one or two national percentile ranks may seem slight the results continue a downward slide in all subjects since the ITBS was reinstated in Arkansas in 2010-11.

ITBS declines, however, may be due to the implementation of Common Core State Standards. All Arkansas students are being taught CCSS in ELA and math, but the ITBS was not developed to measure those standards. This disconnect, between what teachers are teaching and what the ITBS is measuring, could be a factor in the declining scores for our first and second grade students. ITBS will continue to be the assessment for students in first and second grades until a new test is selected. Although a new, more aligned assessment is needed, 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

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.


## Graduation Rate

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, and increasing. Arkansas is graduating students at rates similar to states that have fewer students at risk, and has the largest gains in overall graduation rates of the bordering states. Arkansas' overall graduation rate has increased 6 points since 2011, and although 62\% of students in Arkansas are eligible for Free/Reduced Lunch, the graduation rate of $87 \%$ matched that of Missouri where only $45 \%$ of students are economically disadvantaged.


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

| US | $\mathbf{7 9} \%$ | $\mathbf{8 0} \%$ | $\mathbf{8 1 \%}$ | $\mathbf{8 2 \%}$ |
| :--- | :---: | :---: | :---: | :---: |
| AR | $81 \%$ | $84 \%$ | $85 \%$ | $87 \%$ |
| LA | $71 \%$ | $72 \%$ | $74 \%$ | $75 \%$ |
| MS | $75 \%$ | $75 \%$ | $76 \%$ | $78 \%$ |
| OK | $*$ | $*$ | $85 \%$ | $83 \%$ |
| M0 | $81 \%$ | $84 \%$ | $86 \%$ | $87 \%$ |
| TN | $86 \%$ | $87 \%$ | $86 \%$ | $87 \%$ |
| TX | $86 \%$ | $88 \%$ | $88 \%$ | $88 \%$ |

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## ACT \& College Readiness

Almost all Arkansas students take the ACT near the end of their high school career. Beginning this spring, ALL Arkansas students will be provided the opportunity to take the ACT free of charge.

Typically taken by students on a college-going path, nationally $57 \%$ 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. Sixtytwo percent of Arkansas students met the benchmark for English, and 42\% met the benchmark for Reading.


While these percentages were near the national average, Arkansas' students showed larger gaps in college readiness in science and mathematics, where only $32 \%$ and $35 \%$ of students met the benchmarks.

| Average ACT Score 2015 |  |  |
| :--- | :--- | :--- |
|  | AR | US |
| Composite | 20.4 | 21.0 |
| English | 20.0 | 20.4 |
| Reading | 20.9 | 21.4 |
| Mathematics | 20.0 | 20.8 |
| Science | 20.3 | 20.9 |
| Participation rate | $93 \%$ | $59 \%$ |

## K-12 Finance

Arkansas earns high marks from national reports for its investment in education. As with any investment, it is important to review the trends over time. Arkansas' per pupil expenditure for 2014-15 was $\$ 9,642$. Per pupil expenditures by region are represented in the graph below. The southeast region consistently spends the most money per pupil, while the northeast reported the lowest spending in 2014-15.



## Adequacy \& Equity

This year, the Office for Education Policy released an updated report on Education Funding in Arkansas (our earlier comprehensive analysis was published in 2008). In this 2015 report, we again considered the Adequacy and Equity of school funding. Both of these terms can have many interpretations, and indeed have been considered for years in a series of school funding lawsuits in Arkansas referred to as "Lakeview" litigation. In our OEP analyses, we do not assess the extent to which the funding is adequate or equitable in the eyes of the court - only the Arkansas Courts can draw such conclusions. Nevertheless, for the purposes of this report, we consider Adequacy by examining how Arkansas compares to the nation and other states in education investment and spending, and we consider Equity by examining how spending differs between school districts based on student and community characteristics. The following are the key findings:

## Adequacy of Education Funding in Arkansas

- Net current expenditures per pupil, which include all current expenditures other than capital, debt service, and land expenditures, have risen from $\$ 5,531$ in the 2000-01 school year to \$9,429 in the 2013-14 school year.
- In the 2000-01 school year, Arkansas spent less than all of its neighboring states except Mississippi; by the2011-12 school year, Arkansas outspent all of its neighbors.
- Arkansas has been spending more per pupil than the regional average since the 2005-06 school year (without adjusting for cost-of-living).
- After adjusting for cost-of-living, Arkansas spends more per pupil than its neighbors. Furthermore, in recent years, Arkansas spending has caught up to the national average.


## Equity of Education Funding in Arkansas

- The smallest districts in the state spent roughly $\$ 10,000$ per pupil in net current expenditures in 2013-14; this was roughly $\$ 1,000$ more than was spent on the average student in Arkansas.
- Districts with the most students of color annually spend roughly $\$ 2,000$ more per pupil than the districts with the fewest students of color.
- Districts with the highest poverty annually spend roughly $\$ 2,500$ more per pupil than districts with the least poverty.
- The lowest-achieving districts in literacy annually spend roughly $\$ 2,500$ more per pupil than the highest-achieving districts.
- The lowest-achieving districts in math annually spend almost $\$ 3,000$ more per pupil than the highest achieving districts.
- Districts with the highest local property values spent roughly $\$ 1,000$ more per pupil than districts with the least wealth in 2013-14.


## Info \& Staff



Information 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, Census.gov, Fortune.com, Institute of Education Science, U.S. News and World Report and Bureau of Labor Statistics

## Office for

Education Policy
University of Arkansas
201 Graduate
Education Building
Fayetteville, AR 72701
Phone: (479) 575-3773
Fax: (479) 575-3196
E-mail:
oep@uark.edu
www.officeforeducationpolicy.org
Twitter:
@Office4EdPolicy
Facebook:
Office for Education Policy

## Staff <br> OEP Faculty Director

Professor of Education Policy
Gary W. Ritter, PhD
OEP Executive Director
Sarah C. McKenzie, PhD

## Research Staff

Joy Benton, PhD
Charlene Reid

## Design Editor

Christine L. Magness

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.


[^0]:    * Note: Oklahoma did not calculate cohort graduation rates until 2012-13

