



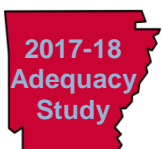
Research Report

Student Achievement

November 29, 2017

Prepared for

**THE HOUSE INTERIM COMMITTEE ON EDUCATION
AND THE SENATE INTERIM COMMITTEE ON EDUCATION**



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CONTENTS

Introduction	1
ACT Aspire.....	1
2016-2017 ACT Aspire Results	1
Achievement Gaps	4
District and Charter School Comparison.....	7
National Comparison	8
NAEP	10
Reading.....	10
Math	11
Science	11
Advanced Placement (AP).....	12
ACT.....	12
High School Graduation Rates.....	14
Higher Education Attainment.....	15
Education Week’s Quality Counts	16
Conclusion.....	17



INTRODUCTION

In the 2002 *Lake View* case, the Arkansas Supreme Court agreed with Judge Collin Kilgore's (Pulaski County Chancery Court) 2001 order that the state's school funding system was unconstitutional. Among the reasons listed for this finding included low Arkansas educational rankings, low benchmark scores, and the need for Arkansas student remediation in college.¹ At the time, according to Judge Kilgore's 2001 order, only 16% of 8th graders statewide tested proficient or advanced in math, and 58% of high school graduates entering college required remediation in English or math.²

This report reviews results from statewide assessments, national assessments, and additional educational measures including high school graduation rates, higher educational attainment statistics and national "Quality Counts" rankings. While Arkansas students have made significant improvements in some areas, they continue to score below the national average on some national assessments, and achievement gaps between student subgroups remain. However, since assessments have changed multiple times in the last several years, it is difficult to determine overall increases and decreases in student achievement.

ACT ASPIRE

The Arkansas Benchmark exams in math and English language arts (ELA), which consisted of English, reading, and writing, were administered for the last time in 2013-14 and replaced with the PARCC (Partnership for Assessment of Readiness for College and Careers) exams. The PARCC exams were administered in the 2014-15 school year.

In summer 2015, Governor Hutchinson's Council on Common Core Review recommended that the Arkansas State Board of Education (SBOE) replace the PARCC with the ACT Aspire, and on July 9, 2015, the SBOE voted to accept this recommendation and adopt the ACT Aspire as the state's annual assessment beginning in 2015-16.³

2016-2017 ACT ASPIRE RESULTS

The ACT Aspire is administered to students in grades 3-10. Each student is assessed in English, reading, math, science, and writing. Scores are labeled as: in need of support, close, ready, and exceeding. Results from the 2016-17 exams are preliminary.

With the exception of the 5th grade in English, 6th grade in science, and 3rd grade in writing, there were increases across the board in 2016-17 from the previous year. The biggest increases were in writing and math, and the smallest increases were in reading. There were a greater percentage of students scoring ready or exceeding overall in English than in any other subject. Since the ACT Aspire was administered for the second time in 2016-17, some increases are expected as teachers and students become more familiar with the assessment.

The readiness benchmark listed in Tables 1-5 shows the percentage of students who scored ready or exceeding. The green boxes indicate an increase in percentage points in the amount of students that scored ready or exceeding from 2015-16, and the red boxes indicate a percentage decrease.

¹ *Lake View Sch. Dist. No. 25 v. Huckabee*, 351 Ark. 31, 61 (2002).

² *Lake View Sch. Dist. No. 25 v. Huckabee*, No. 1992-5318 (*Pulaski Cty. Chancery Ct. 2001*).

³ Governor's Council on Common Core Review. Memo: "Findings and Recommendations", July 30, 2015: https://static.ark.org/eeuploads/lt-gov/The_Governors_Council_on_Common_Core_Review_-_Findings_and_Recommendations.pdf

Table 1: ACT Aspire Math Results by Grade and Performance Level

Grade	Number of Students	% In Need of Support	% Close	% Ready	% Exceeding	% Met Readiness Benchmark & Percentage Point Change from 2015-16	
3	37,876	13.98%	27.50%	35.82%	22.71%	58.52%	2.43%
4	37,821	7.75%	37.09%	39.71%	15.44%	55.15%	1.24%
5	35,260	9.38%	38.47%	36.64%	15.51%	52.15%	3.78%
6	35,203	7.59%	30.36%	34.70%	27.35%	62.05%	6.59%
7	35,520	20.93%	30.90%	27.33%	20.84%	48.17%	4.54%
8	35,338	28.45%	27.97%	22.30%	21.28%	43.58%	5.58%
9	36,585	44.18%	25.59%	16.68%	13.55%	30.23%	1.84%
10	34,702	51.71%	23.56%	14.02%	10.71%	24.72%	3.20%

Data Source: Arkansas Department of Education⁴

There was an increase in each grade in the percentage of students scoring ready or exceeding in math. The biggest increase was in the 6th grade with 6.59 percentage points. However, there is a significant variance in the percentage of students scoring ready or exceeding in math among the grades tested. More than 62% of 6th graders scored ready or exceeding in math compared to only 24.72% of 10th graders.

Table 2: ACT Aspire Science Results by Grade and Performance Level

Grade	Number of Students	% In Need of Support	% Close	% Ready	% Exceeding	% Met Readiness Benchmark & Percentage Point Change from 2015-16	
3	37,870	45.09%	16.66%	15.81%	22.45%	38.25%	1.66%
4	37,825	33.14%	24.47%	25.07%	17.32%	42.40%	3.31%
5	35,255	32.29%	26.20%	25.57%	15.95%	41.51%	2.20%
6	35,210	28.78%	22.27%	27.61%	21.35%	48.95%	-3.40%
7	35,514	36.45%	19.20%	23.59%	20.76%	44.35%	3.39%
8	35,321	36.92%	21.00%	23.48%	18.61%	42.08%	3.47%
9	36,587	43.93%	23.92%	19.17%	12.97%	32.14%	4.94%
10	34,694	47.16%	19.62%	19.80%	13.43%	33.22%	3.91%

Data Source: Arkansas Department of Education⁵

With the exception of the 6th grade, there was an increase in each grade in the percentage of students who scored ready or exceeding in science. The highest increase was in the 9th grade with almost 5 percentage points. There was a 3.4 percentage point decrease of 6th grade students scoring ready or exceeding. However, less than half of all students tested scored ready or exceeding in science.

^{4 5} <http://www.arkansased.gov/divisions/learning-services/student-assessment/test-scores>

Table 3: ACT Aspire English Results by Grade and Performance Level

Grade	Number of Students	% In Need of Support	% Close	% Ready	% Exceeding	% Met Readiness Benchmark & Percentage Point Change from 2015-16	
3	37,787	4.15%	22.69%	24.24%	48.92%	73.17%	1.29%
4	37,737	8.47%	21.86%	33.12%	36.55%	69.67%	1.88%
5	35,158	4.61%	22.94%	37.01%	35.45%	72.45%	-1.04%
6	35,136	5.87%	20.14%	27.83%	46.16%	73.99%	2.96%
7	35,416	4.63%	16.76%	31.74%	46.87%	78.61%	1.06%
8	35,239	8.79%	17.93%	26.92%	46.36%	73.28%	2.31%
9	36,430	20.48%	21.06%	24.62%	33.84%	58.46%	4.22%
10	34,612	20.48%	19.40%	24.36%	35.76%	60.11%	3.86%

Data Source: Arkansas Department of Education⁶

More than half of all students tested scored ready or exceeding in English, and in the 7th grade, more than 75% of students did. With the exception of the 5th grade, each grade had an increase in the percentage of students scoring either ready or exceeding in English. There was a 1.04 percentage point decrease of 5th grade students who scored ready or exceeding in English. Students in Grade 9 had the biggest percentage point increase, 4.22.

Table 4: ACT Aspire Reading Results by Grade and Performance Level

Grade	Number of Students	% In Need of Support	% Close	% Ready	% Exceeding	% Met Readiness Benchmark & Percentage Point Change from 2015-16	
3	37,790	40.60%	22.40%	19.24%	17.76%	37.00%	1.87%
4	37,732	30.21%	26.60%	27.23%	15.95%	43.19%	1.80%
5	35,164	38.06%	27.38%	20.72%	13.84%	34.56%	0.90%
6	35,129	33.70%	19.66%	22.80%	23.84%	46.64%	1.00%
7	35,411	32.31%	29.00%	29.49%	9.20%	38.69%	2.49%
8	35,237	25.06%	25.95%	32.16%	16.83%	48.99%	0.68%
9	36,429	35.44%	25.16%	20.64%	18.77%	39.40%	3.16%
10	34,605	40.97%	22.66%	25.81%	10.57%	36.38%	1.77%

Data Source: Arkansas Department of Education⁷

There was an increase in each grade in the percentage of students scoring ready or exceeding in reading. The highest increase was in the 9th grade with 3.2 percentage points, but most increases were less than 2 percentage points. However, less than half of all students tested scored ready or exceeding in reading.

^{6 7} <http://www.arkansased.gov/divisions/learning-services/student-assessment/test-scores>

Table 5: ACT Aspire Writing Results by Grade and Performance Level

Grade	Number of Students	% In Need of Support	% Close	% Ready	% Exceeding	% Met Readiness Benchmark and Percentage Point Change from 2015-16	
3	37,783	35.32%	45.52%	17.01%	2.15%	19.17%	-1.21%
4	37,741	19.81%	47.42%	31.59%	1.18%	32.78%	19.28%
5	35,165	19.66%	38.24%	26.21%	15.89%	42.09%	21.72%
6	35,131	12.51%	28.20%	50.57%	8.72%	59.29%	15.20%
7	35,425	23.50%	38.46%	34.20%	3.84%	38.04%	9.55%
8	35,242	14.43%	47.99%	31.46%	6.13%	37.58%	14.21%
9	36,422	21.02%	28.27%	47.84%	2.86%	50.71%	6.81%
10	34,596	17.61%	25.64%	52.30%	4.45%	56.75%	4.96%

Data Source: Arkansas Department of Education⁸

With the exception of the 3rd grade, there were significant increases in the percentage of students scoring ready or exceeding in writing. In the 5th grade there was nearly a 22 percentage point increase in the percentage of students scoring ready or exceeding. In the 3rd grade, there was a 1.2 percentage point decrease in students scoring ready or exceeding. However, less than 60% of all students tested scored ready or exceeding in writing. In the 3rd and 4th grade, less than a third of students test scored ready or exceeding in writing

According to the Arkansas Department of Education, there was a greater focus on writing professional development last year which may account for some of these increases. The ACT Aspire assessments are the first time in Arkansas assessment history that schools have seen individual writing scores as they were previously incorporated into the ELA score. Starting in 2017-18, ACT will no longer report the writing scores separately and only include them as part of the overall ELA score.

ACHIEVEMENT GAPS

In their recommendations to the Joint Committee on Educational Adequacy, Lawrence O. Picus and Associates, an education finance consulting firm hired by the General Assembly in 2003, listed five themes that underscored their recommendations. One of these themes included closing the achievement gap.⁹ The 2014 Student Achievement Adequacy Report showed the achievement gap was decreasing between White and African American students and White and Hispanic students on the Benchmark exams. In the 4th grade the gaps were cut in half between 2007 and 2013 and even eliminated between Hispanic and White students in math. In the 8th grade, the gaps continued to decrease but at a slower rate.¹⁰ While the PARCC exams were only used for one year, there were also achievement gaps in the 2014-15 results. Asian students scored the highest, with 56.4% scoring in Levels 4 or 5 (met or exceeded expectations) and White students scored the second highest with 39.6%. This is compared to 17.3% of African American students and 11.9% of Native Hawaiian/Pacific Islander students scoring Level 4 or 5.

⁸ <http://www.arkansased.gov/divisions/learning-services/student-assessment/test-scores>

⁹ Lawrence O. Picus and Associates, An Evidenced-Based Approach to School Finance Adequacy in Arkansas, Final Report, September 1, 2003.

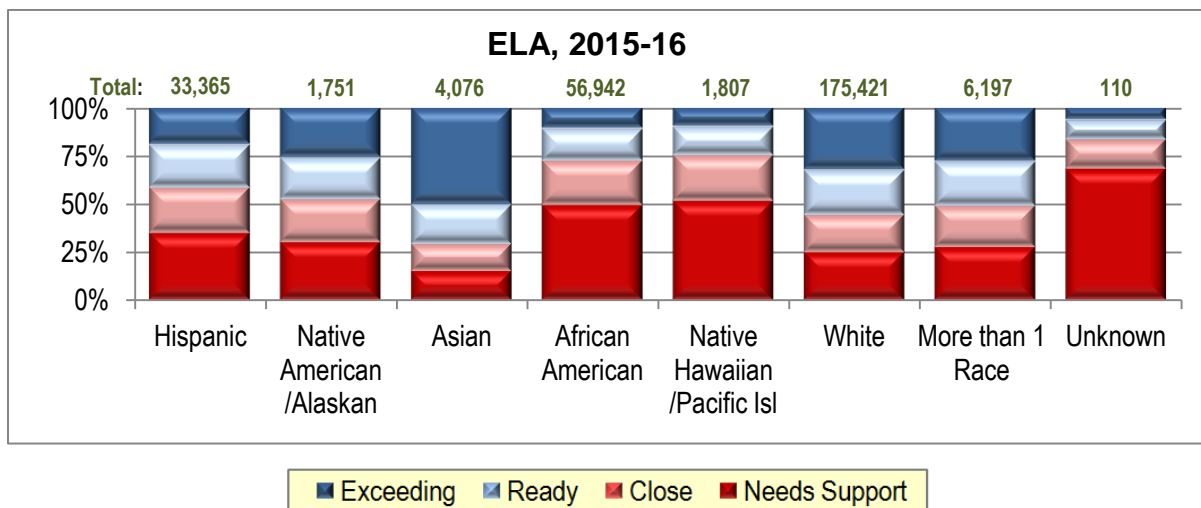
¹⁰ [http://www.arkleg.state.ar.us/education/K12/AdequacyReports/2014/2014-01-13/03-Student%20Achievement%20Statistics%20Report,%20BLR%20\(34\).pdf](http://www.arkleg.state.ar.us/education/K12/AdequacyReports/2014/2014-01-13/03-Student%20Achievement%20Statistics%20Report,%20BLR%20(34).pdf)

Student-level data broken out by student subgroups for 2016-17 was not available yet for inclusion in this report so the following analyses on achievement gaps rely on 2015-16 data. Charts 1-3 show there are achievement gaps among students of different races and ethnicities in the ACT Aspire. Nearly two-thirds of Asian students and about half of White students scored ready or exceeding in every ACT Aspire section, English language arts (ELA), math, and science compared to more than 75% of Native Hawaiian/Pacific Islander and African American students who scored close or needs support in each section.

There were also some achievement gaps for males and females but not quite as pronounced. Chart 4 shows that in each section of the ACT Aspire, a slightly higher percentage of female students scored ready or exceeding. In ELA, the gap was slightly higher with 55% of female students scoring ready or exceeding compared to 40% of male students.

There were additional achievement gaps for students in poverty. Chart 5 shows that for each section of the ACT Aspire, students receiving free/reduced price lunches (FRL) scored lower than non-FRL students. The gap was largest in ELA in which 65% of non-FRL students scored ready or exceeding compared to 37% of FRL students.

Chart 1: ACT Aspire ELA Results by Race/Ethnicity

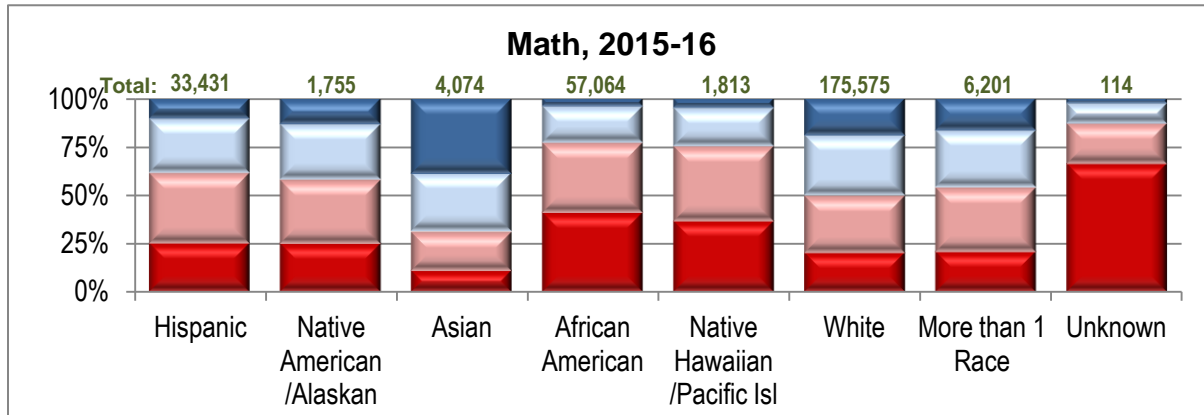


Asian students had the highest percentage of students scoring ready or exceeding (70%) with nearly half scoring in the exceeding range. White students had the second highest percentage of students scoring ready or exceeding (55%) with 32% scoring exceeding.

After students whose race was not indicated when completing the assessment, Native Hawaiian/Pacific Islander students had the highest percentage of students scoring close or needs support (75%). African American students had the next highest percentage of students scoring close or needs support (73%).

Chart 2: ACT Aspire Math Results by Race

■ Exceeding ■ Ready ■ Close ■ Needs Support

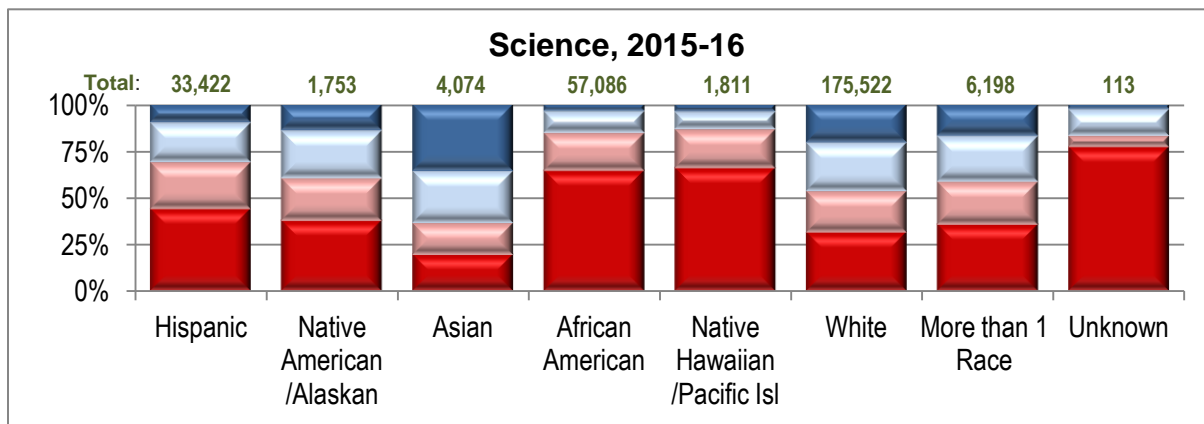


Asian students also had the highest percentage of students scoring ready or exceeding (69%) with 38% scoring exceeding. White students had the second highest percentage of students scoring ready or exceeding in math (50%) with 19% scoring exceeding.

After students whose race was not indicated on the assessment, African American students had the highest percentage of students scoring close or needs support (77%) with 41% scoring needs support. Native Hawaiian/Pacific Islander students had the next highest percentage of students scoring close or needing support (75%) with 37% scoring needs support.

Chart 3: ACT Aspire Science Results by Race

■ Exceeding ■ Ready ■ Close ■ Needs Support

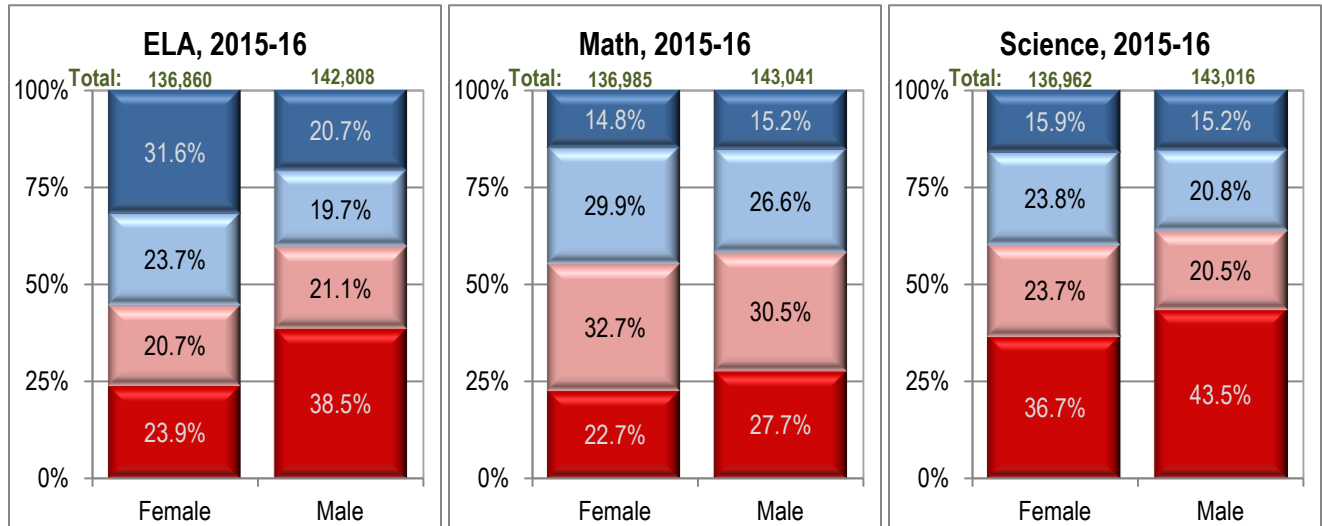


Asian students also had the highest percentage of students scoring ready or exceeding (63%) with 35% scoring exceeding. White students had the second highest percentage of students scoring ready or exceeding (46%) with 20% scoring exceeding.

After students whose race was not indicated on the assessment, Native Hawaiian/Pacific Islander students had the highest percentage of students scoring close or needs support (87%) with 66% scoring in the lowest category of needs support. African American students had the next highest percentage of students scoring close or needs support (85%) with 64% scoring needs support.

Chart 4: ACT Aspire Results by Gender

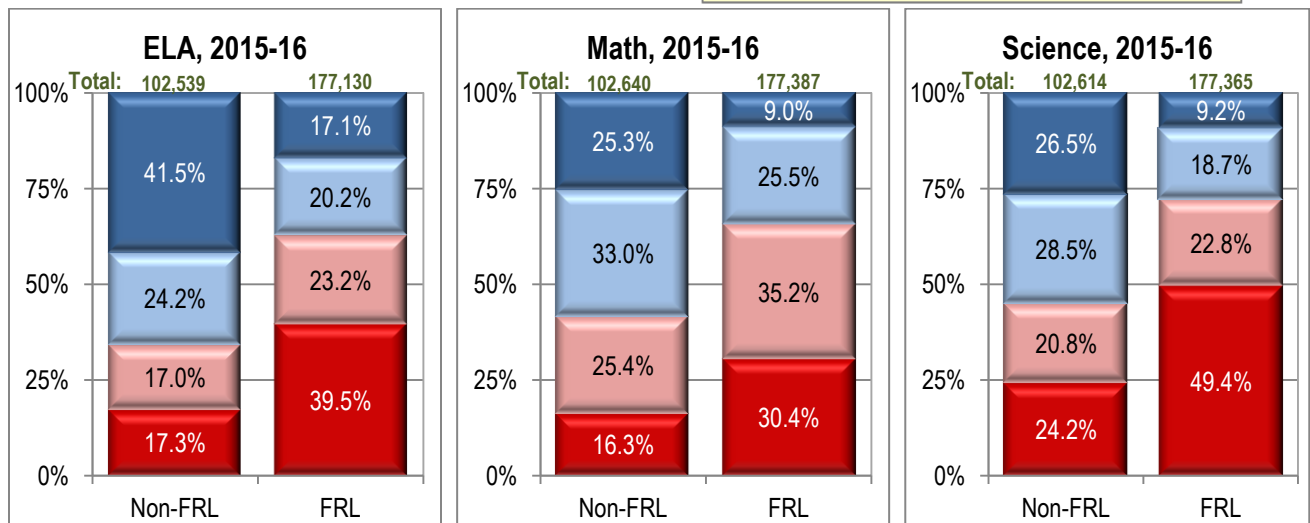
■ Exceeding ■ Ready ■ Close ■ Needs Support



In ELA, 55.3% of female students scored ready or exceeding compared to 40.4% of male students. The gap between male and female students in math and science was closer. In math, 44.7% of female students scored ready or exceeding compared to 41.8% of male students. In science, 39.7% of female students scored ready or exceeding compared to 36% of male students.

Chart 5: ACT Aspire Math Results by Poverty

■ Exceeding ■ Ready ■ Close ■ Needs Support



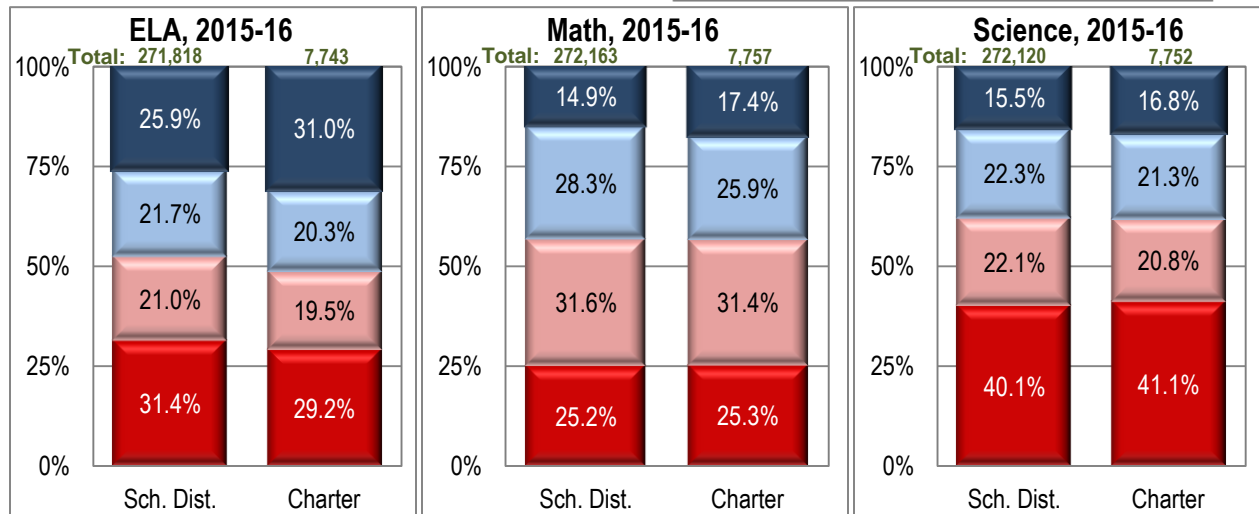
For each section of the ACT Aspire, non-FRL students scored higher than FRL students. In ELA, 65.7% of non-FRL students scored ready or exceeding compared to 37.3% of FRL students. In math, 58.3% of non-FRL students scored ready or exceeding compared to 34.5% of FRL students. In science, 55% of non-FRL students scored ready or exceeding compared to 27.9% of FRL students.

DISTRICT AND CHARTER SCHOOL COMPARISON

Among ELA, math, and science sections of ACT Aspire, scores among school districts and open enrollment charter schools did not vary significantly. In ELA, 51.3% of students in charter schools scored ready or exceeding compared to 47.6% of students in school districts. In math, 56.8% of students in school districts scored close or needs support compared to 56.7% in charter schools. In charter schools, 17.4% of students scored

exceeding in math compared to 14.9% students in school districts. In science, 38.1% of students in charter schools scored ready or exceeding compared to 37.8% of students in school districts. Since student-level data from 2016-17 was not yet available for inclusion in this report, the following analysis uses 2015-16 data.

Chart 6: ACT Aspire Results by School Type ■ Exceeding ■ Ready ■ Close ■ Needs Support

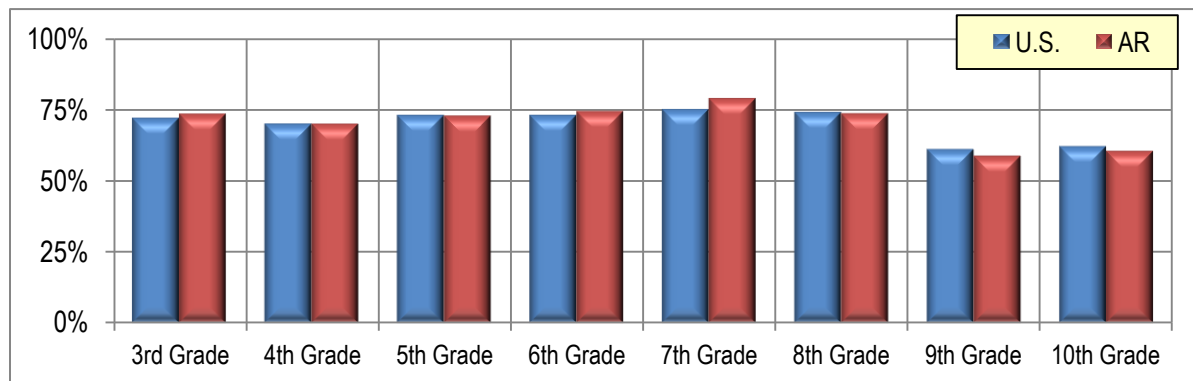


NATIONAL COMPARISON

The following national comparison includes a sample of two million students across 48 states who took the ACT Aspire in 2016-17. However, the sample is heavily represented by Alabama, Arkansas, and South Carolina in grades 3-8, and Wyoming in grades 9-10 since these states had the largest populations taking the exam. Beginning in 2017-18, Alabama and Wyoming will no longer be administering the ACT Aspire.^{11 12}

Arkansas remains close to the national average in most subjects but exceeded the national average across the board in writing and select grades in the remaining subjects. However, the percentage of students scoring ready or exceeding in writing in both Arkansas and the country remains below 60%. Less than 20% of 3rd graders nationwide scored ready or exceeding in writing. 9th and 10th grade students taking the English, math, and science section had the lowest percentage of student scoring ready or exceeding, both at the state and national level.

Chart 7: ACT Aspire English Results – National Comparison



¹¹ http://www.al.com/news/index.ssf/2017/07/alabama_act_aspire_testing.html

¹² <https://edu.wyoming.gov/educators/state-assessment/act/>

Chart 8: ACT Aspire Reading Results – National Comparison

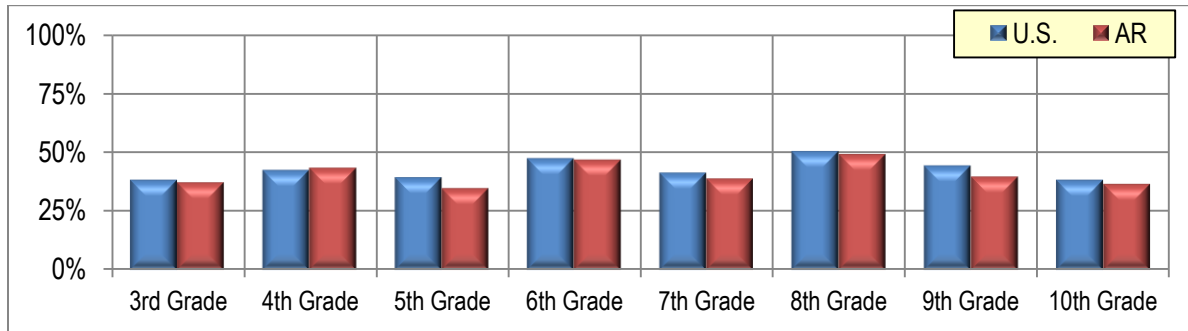


Chart 9: ACT Aspire Writing Results – National Comparison

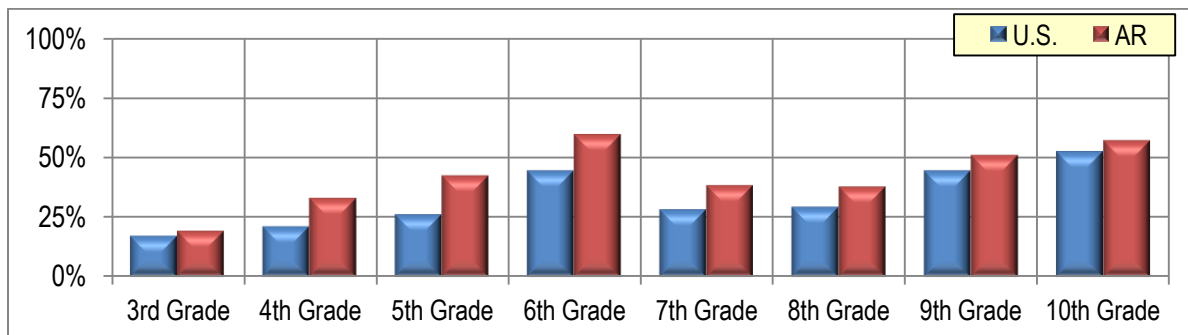


Chart 10: ACT Aspire Math Results

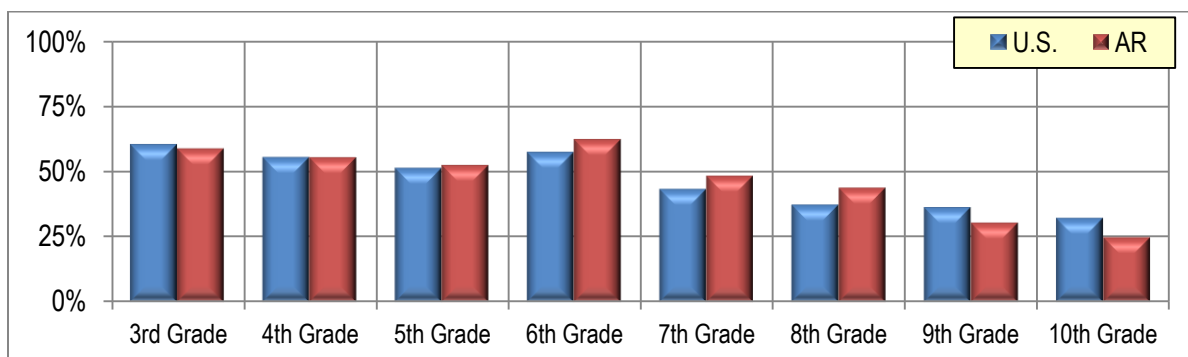
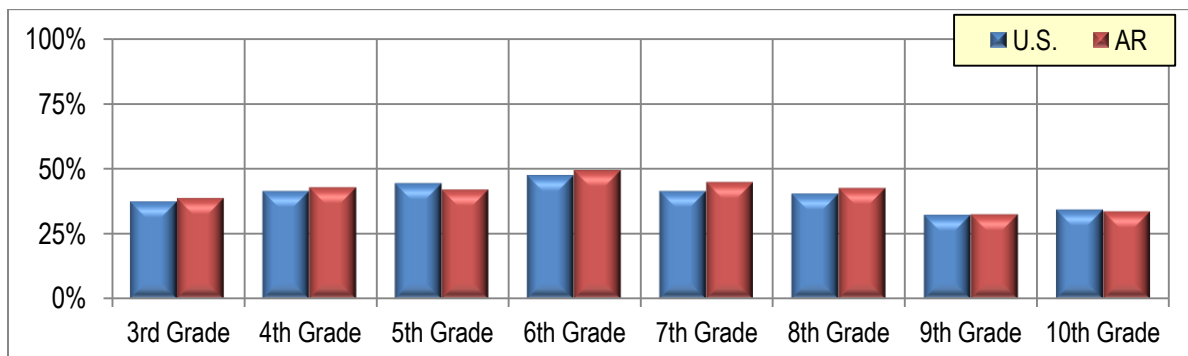


Chart 11: ACT Aspire Science Results – National Comparison



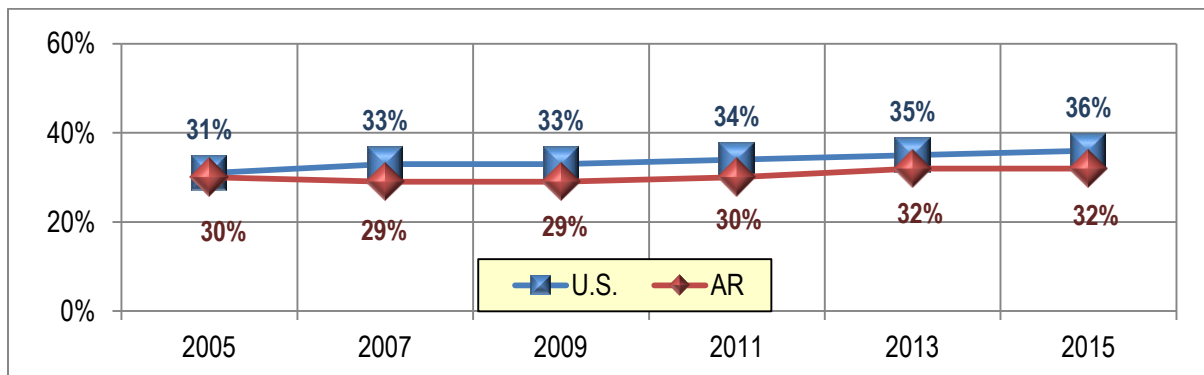
NAEP

The National Assessment of Educational Progress (NAEP) is a nationally representative, norm-referenced exam administered to a sample of students in all states every other year in certain subjects, including math and reading. Norm-referenced exams measures a test-taker’s performance compared to the performance of a larger group. Science was administered to 4th grade students in 2009 and 2015 and administered to 8th grade students in 2009, 2011, 2015.¹³ The 2017 results have not been released.

Since 2005, Arkansas’s students improved slightly in 4th and 8th grade reading, 4th and 8th grade science, as well as 8th grade math, though performance dipped in 8th grade reading and 4th and 8th grade math between 2013 and 2015. According to the Arkansas Department of Education, there was a change in the reading and math frameworks which caused many states, including Arkansas, to see decreases as well. However, Arkansas students still trail behind the national average in all NAEP assessments.

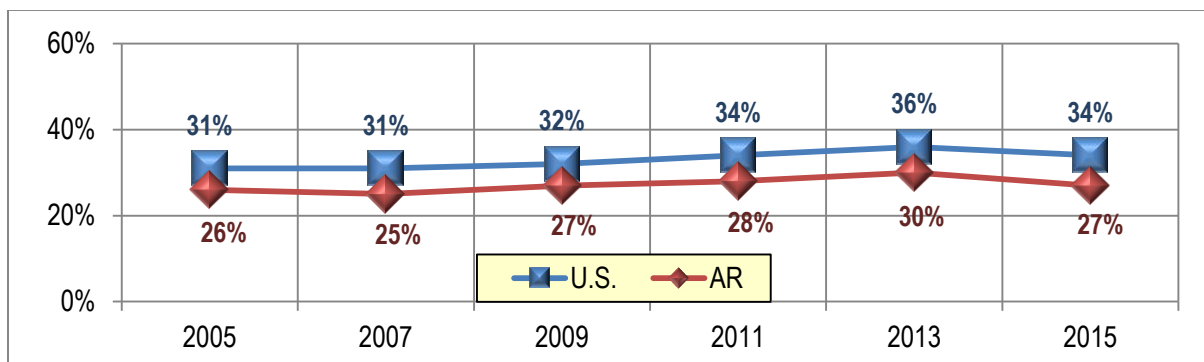
READING

Chart 12: NAEP 4th Grade Reading: % Proficient or Above



Source: National Assessment of Educational Progress¹⁴

Chart 13: NAEP 8th Grade Reading: % Proficient or Above



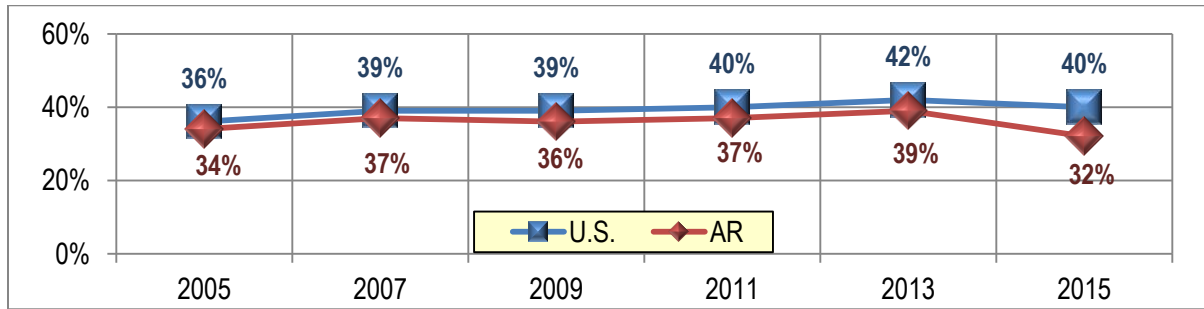
Source: National Assessment of Educational Progress

¹³ U.S. Department of Education, National Center for Education Statistics (NCES), various years. https://www.nationsreportcard.gov/profiles/stateprofile/overview/AR?cti=PgTab_OT&chort=1&sub=SCI&sj=AR&fs=Grade&st=MN&year=2015R3&sg=Gender%3A+Male+vs.+Female&sgv=Difference&ts=Single+Year&tss=2015R3-2015R3&sfj=NP

¹⁴ <http://nces.ed.gov/nationsreportcard/naepdata/>

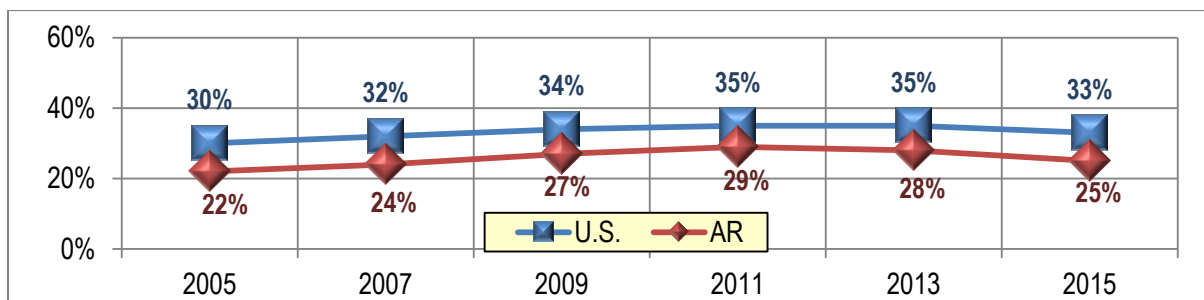
MATH

Chart 14: NAEP 4th Grade Math: % Proficient or Above



Source: National Assessment of Educational Progress

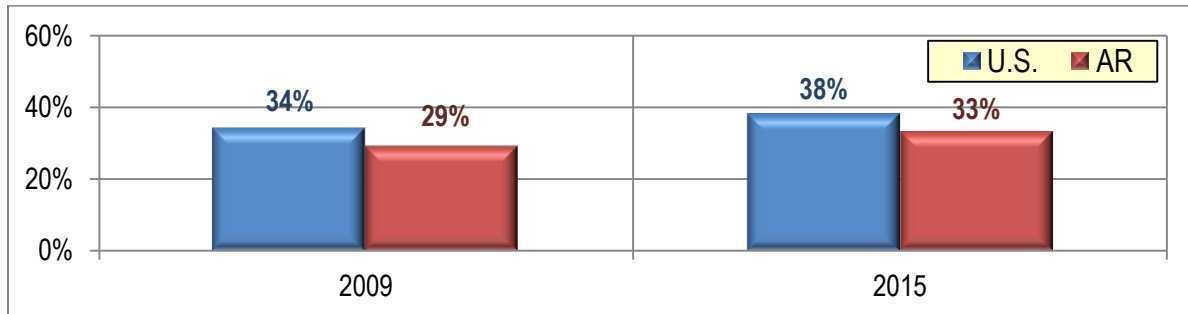
Chart 15: NAEP 8th Grade Math: % Proficient or Above



Source: National Assessment of Educational Progress

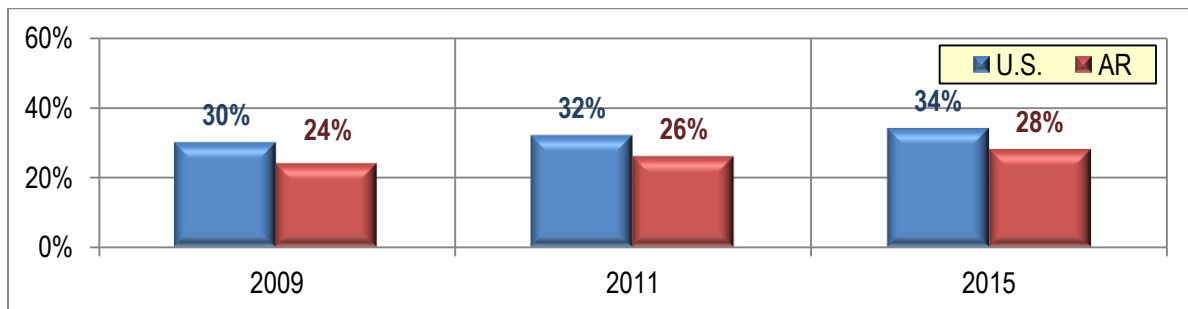
SCIENCE

Chart 16: NAEP 4th Grade Science: % Proficient or Above



Source: National Assessment of Educational Progress

Chart 17: NAEP 8th Grade Science: % Proficient or Above



Source: National Assessment of Educational Progress

ADVANCED PLACEMENT (AP)

Under §6-16-1204, Arkansas school districts must provide high school students the opportunity to enroll in at least one Advanced Placement (AP) course in English, math, science, and social studies. This law was created under Act 102 of the 2nd Extraordinary session of 2003 and began phasing in this requirement in 2005-06 over four years by 2008-09. According to the Arkansas Department of Education (ADE) Rules for AP, AP test fees can be covered by the state, contingent upon legislative appropriation and availability of funding (which have continued to be funded).¹⁵ Additionally, the Arkansas AP and International Baccalaureate Diploma Incentive Program provides schools with up to \$50 for each score of three or higher on the AP test or equivalent on the International Baccalaureate Program Exam. AP courses are designed to prepare students for the rigors of college coursework, and students may earn college credit by scoring high enough on the AP exam.

Table 6: Advanced Placement Scores, 2016-17

Score	Arkansas		U.S.	
	Total Exams	Percent	Total Exams	Percent
5	2,257	4.70%	614,792	12.80%
4	4,947	10.20%	930,023	19.40%
3	9,641	19.90%	1,217,483	25.30%
2	14,445	29.80%	1,145,105	23.80%
1	17,135	35.40%	896,019	18.70%
Total Exams	48,425		4,803,422	
Avg. Score	2.19		2.84	

Data Source: The College Board.

Note: The number of total exams includes exams in any subject. A student taking more than one AP exam is counted more than once.

Table 6 shows the number of exams taken and the percentage of Arkansas students who scored at each level on the AP exam in 2016-17 compared to the country. The range is from 1 being the lowest to 5 being the highest. In 2017, only 34.8% of the exams taken received a passing grade (3 or higher), which is up from 32.6% in 2015. In Arkansas, the number of AP exams taken has more than doubled since 2005 when 23,140 exams were taken. This may be due to Act 102 requiring districts to begin offering four AP courses in English, math, science, and social studies by 2008-09. The number of AP exams taken nationwide also increased from 2,065,045 exams taken in 2005 to 4,803,422 taken in 2017. In 2014, Arkansas was ranked number three in the country in the percentage of 11th and 12th graders who took the AP exam (32.7%), well above the national average of 21.9%¹⁶. In 2016, 65.4% of the test-takers were white, which is down from 76.4% in 2005.

ACT

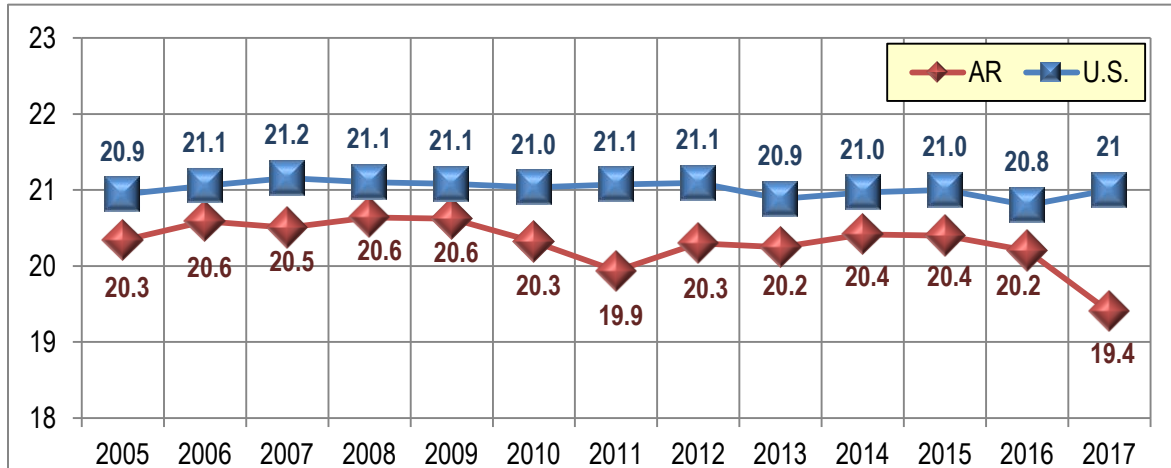
The ACT is a college-readiness assessment taken by more than two million high school students across the country each year. It is also the most commonly-required college entrance exam for postsecondary schools in Arkansas. Under § 6-15-2907, districts and charters are required to administer “college and career readiness assessments as determined by the state board” to students in grades 10-12. The SBOE determined that this

¹⁵ http://www.arkansased.gov/public/userfiles/Learning_Services/Gifted%20and%20Talented/AP_IB_Rules_August_2007.pdf

¹⁶ <https://www.collegeboard.org/program-results/2014/ap>

assessment would be the ACT. Under § 6-18-1606 and § 6-15-2907(a)(4)(c), many students are able to take the ACT at no cost since districts can use district funding, including National School Lunch (NSL) state categorical funds, to pay the ACT test fee. Act 601 of 2017 now allows 12th grade students the opportunity to take the ACT at no charge instead of just 9th-11th grade students. Act 601 also gives districts the ability to let students choose to take the ACT either in the 10th or 11th grade.

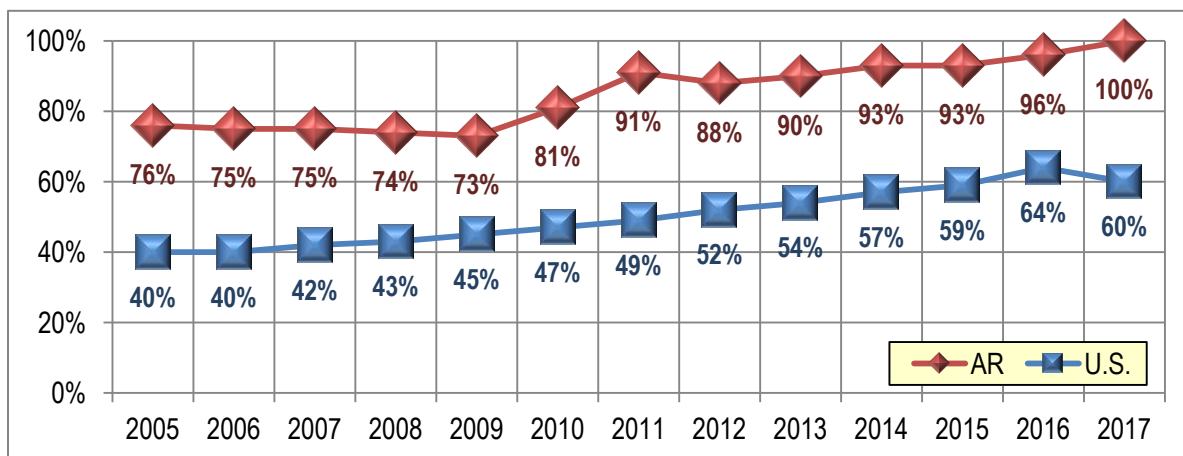
Chart 18: Average ACT Composite Scores, 2005-2017



Data Source: ACT, Inc.

Chart 16 shows the average ACT composite in Arkansas has remained relatively steady - around 20 - but has remained below the national average score of 21. The Arkansas average ACT composite score dropped slightly from 20.2 in 2016 to 19.4 in 2017 whereas the national average increased slightly from 20.8 to 21. The drop in Arkansas's score may be due to more students taking the exam, as seen in Chart 17 below.

Chart 19: Percentage of Graduates Who Took ACT



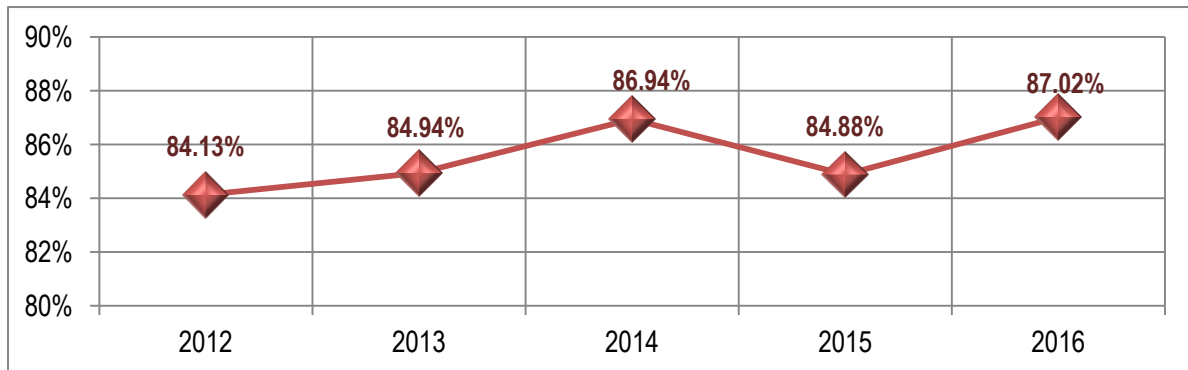
Data Source: Act, Inc.

Chart 17 shows that the percentage of students in Arkansas taking the ACT exam has significantly increased from 76% in 2005 to 100% in 2017, far surpassing the 60% taking the test nationwide. The high percentage of Arkansas students taking the ACT is due to state laws that require high schools to administer the ACT to students in grades 10-12 and allows districts pay for the cost of the exam on behalf of the students.

HIGH SCHOOL GRADUATION RATES

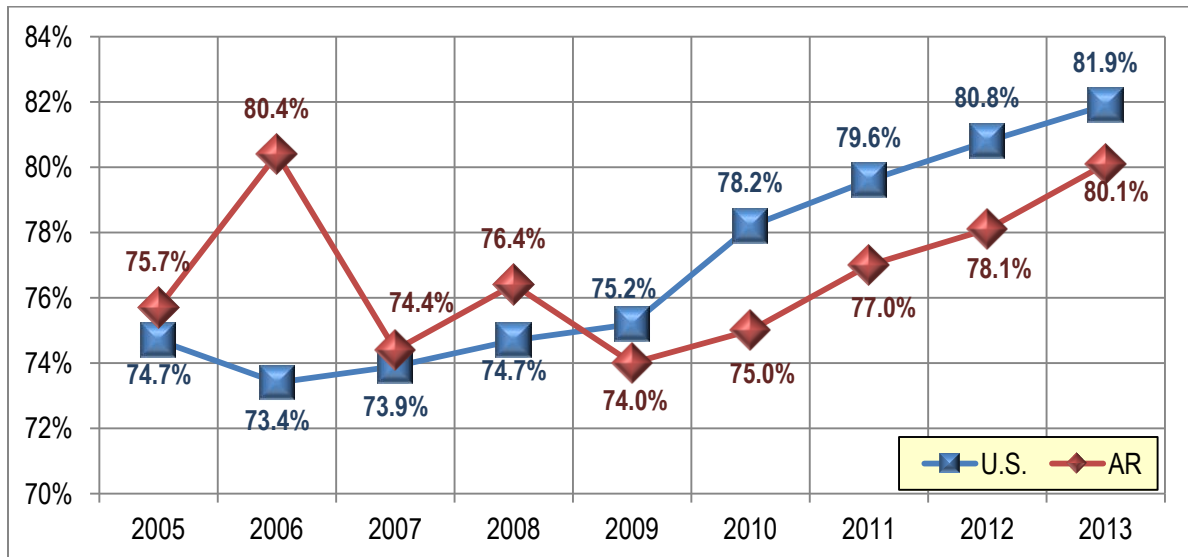
According to the Arkansas Department of Education, the high school graduation rate has increased from 84.13% in 2013 to 87.02% in 2016. To show a national comparison, data from the National Center for Education Statistics (NCES) is also used. NCES and ADE calculate the graduation rate slightly differently so they are not comparable. Since 2009-10, the ADE has used the four-year adjusted cohort graduation rate defined by the U.S. Department of Education. That calculation looks at the number of students who earned a diploma in a given year and the number of first time 9th graders four years prior. The NCES high school graduation data looks at the averaged freshman graduation rate, which is an estimate of the percentage of students who receive a regular diploma within 4 years of entering 9th grade. While Arkansas did surpass the national average between 2005 and 2008, Arkansas now trails behind the national freshman graduation rate.

Chart 20: Arkansas High School Graduation Rate



Data Source: Arkansas Department of Education.¹⁷

Chart 21: Public High School Averaged Freshman Graduation Rate



Data Source: *Digest of Education Statistics, 2016*; U.S. Department of Education, National Center for Education Statistics¹⁸

¹⁷ <http://www.arkansased.gov/divisions/public-school-accountability/school-performance/graduation-rate>

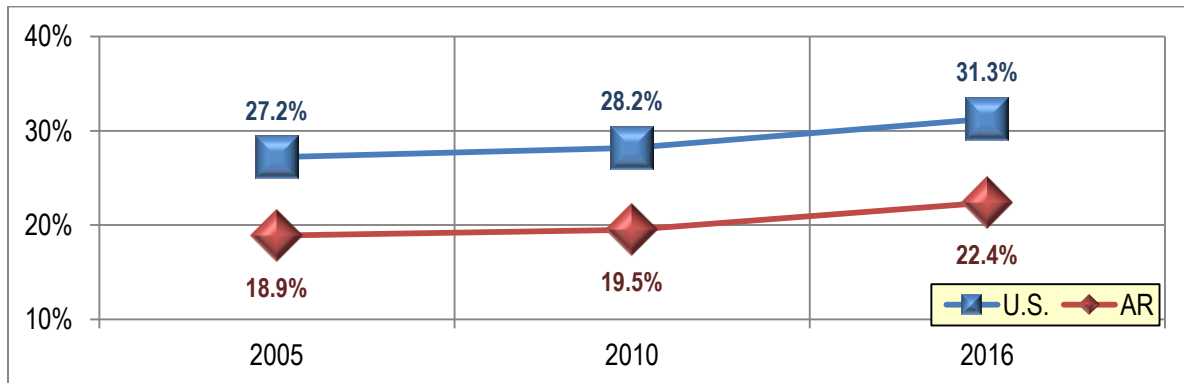
¹⁸ *Digest of Education Statistics: 2016*. Table 219.35: Public high school averaged freshman graduation rate (AFGR), by state or jurisdiction: Selected years, 1990-91 through 2012-13. https://nces.ed.gov/programs/digest/2016menu_tables.asp

According to NCES, there is no definitive reason as to what caused the spikes in data between 2005 and 2008. NCES stated that the fluctuations were also happening across other states which may have been the result of high stakes graduation tests, increasing graduation requirements, and how rigorously these results/course requirements were enforced.

HIGHER EDUCATION ATTAINMENT

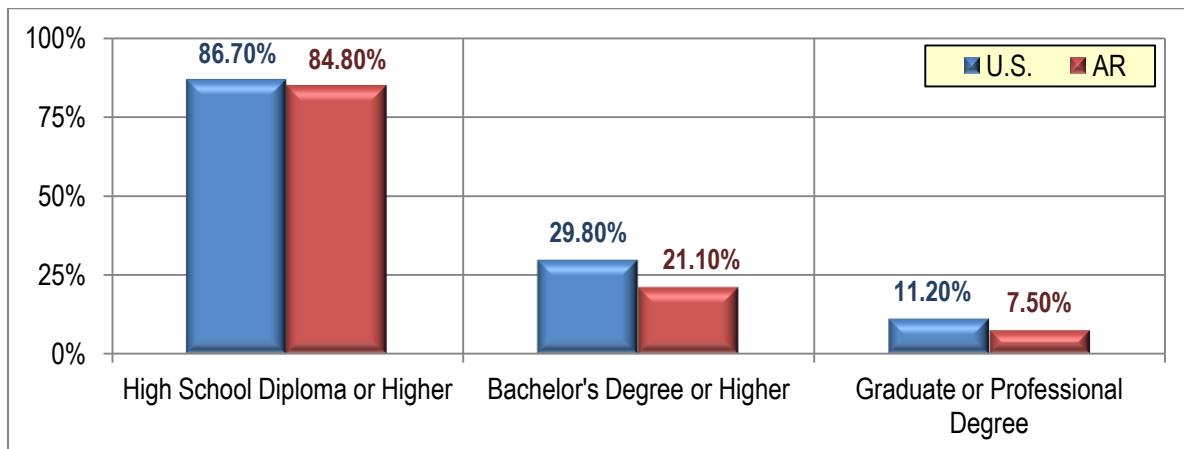
The percentage of students completing college has been increasing in Arkansas and in the United States since 2005. Based on the latest one-year estimates (2016) from the U.S. Census Bureau, Arkansas is still behind the country with about 22% of adults 25 years and over having a bachelor’s degree compared to about 31% nationwide. Based on the most recent five-year estimates (2011-2015) from the U.S. Census Bureau, in Arkansas, 84.8% of adults 25 years and older have a high school diploma or higher which has increased from 82% in the 2006-2010 five-year estimates. 7.5% of Arkansans 25 years and older have a graduate or professional degree compared to 11% nationwide. The percentage of adults 25 years and older with a bachelor’s degree has increased both at the state and national level. In 2010, the 2006-2010 five-year estimates showed 21% of Arkansans had bachelor’s degrees compared to 30% nationwide.

Chart 22: Percentage of Adults with a Bachelor’s Degree or Higher



Source: U.S. Census Bureau.¹⁹

Chart 23: Educational Attainment



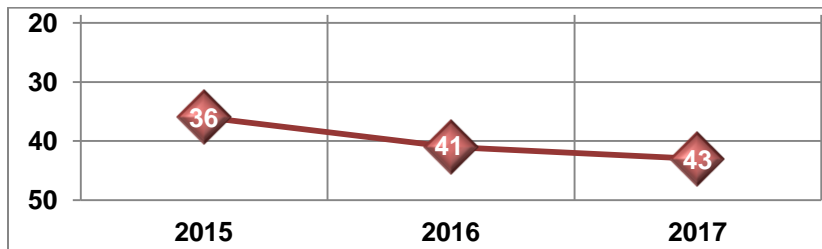
Source: U.S. Census Bureau.²⁰

¹⁹ U.S. Census Bureau, American Community Survey (ACS), ID: S501, 1-Year Estimates, 2005, 2010, 2016.

EDUCATION WEEK'S QUALITY COUNTS

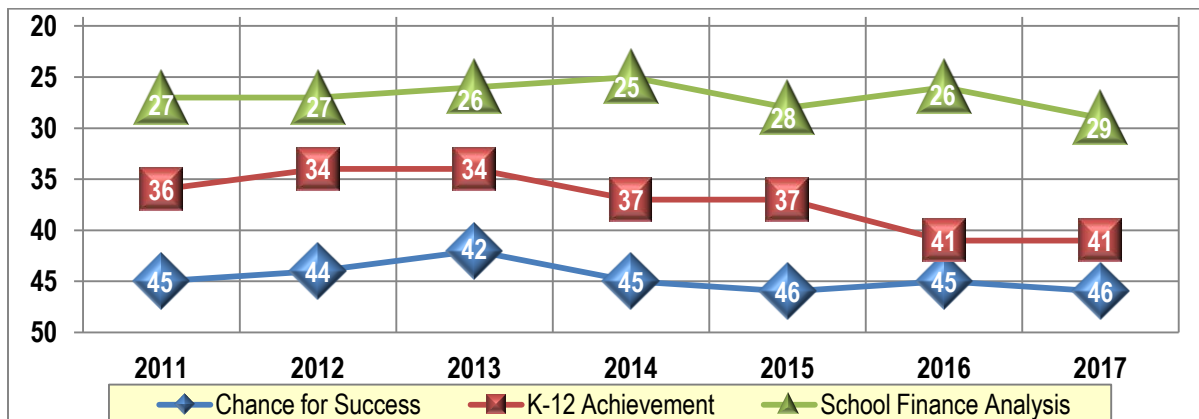
Education Week, a national K-12 education publication, releases an annual report on “state-level efforts to improve public education.”²¹ This report includes grades and rankings for the country as well as for each state and the District of Columbia on key education indicators. These indicators include: Chance for Success, K-12 Achievement, and School Finance Analysis. Chart 22 shows Arkansas’s current overall Quality Counts ranking and how it has changed since 2014. There was no overall ranking assigned in 2014 and the methodology changed in 2014 so the overall rankings prior to 2015 are not included since the rankings are not comparable. Chart 22 shows that Arkansas’s ranking decreased from 36 in 2015 to 43 in 2017.

Chart 24: Overall Quality Counts Arkansas National Ranking



Source: *Education Week's "Quality Counts" Reports, 2014-2017*

Chart 25: Arkansas National Rankings in: Chance for Success, K-12 Achievement, and School Finance Analysis



Source: *Education Week's "Quality Counts" Reports, 2011-2017*

Chart 23 shows Arkansas’s rankings in each of the three indicators used to determine the overall *Quality Counts* ranking. Arkansas’s K-12 achievement ranking fell from 34 in 2013 to 41 in 2017. The Chance for Success Index looks at 13 indicators to analyze the role of education in a person’s life. Indicators are broken down by early foundations, school years, and adult outcomes. Some indicators include: family income, parent education, kindergarten enrollment, 4th grade reading, high school graduation, adult educational attainment, and steady employment. The School Finance Analysis Index analyzes educational expenditure patterns and how states distribute those funds.²² The K-12 Achievement Index assesses the “performance of a state’s public schools against 18 indicators that look at current achievement levels, improvements over time, and poverty-based gaps.” The K-12 Achievement ranking is based on NAEP scores, AP scores, and high school graduation rates. Since there were drops in Arkansas’s NAEP scores in 2015, this could factor into the drop in Arkansas’s *Quality Counts* ranking.

²⁰ U.S. Census Bureau, American Community Survey (ACS), ID: S501, 5-Year Estimates, 2015.

²¹ <https://www.edweek.org/ew/qc/index.html?intc=thed>

²² Education Week. “*Quality Counts* Report Examines State Scramble to Put Federal ESSA Law Into Effect.”

CONCLUSION

Since the 2002 *Lake View* case, data show that while there have been some improvements in student achievement in Arkansas, there have also been some declines. However, since assessments have changed multiple times in the last several years, it is difficult to determine overall increases and decreases in student achievement. The ACT Aspire replaced PARCC and was administered in 2016-17 for the second time among students in grades 3-10. There are increases in almost every grade on each section. There were significant improvements in writing. However, with the exception of the 6th grade in writing, less than half of all students tested scored ready or exceeding in writing, in science, and in reading. There were increases in math scores in every grade tested, but math still had the lowest percentages of students scoring ready or exceeding of any subject tested. Less than a third of 9th and 10th grade students scored ready or exceeding in math.

When compared to the national sample of those taking the ACT Aspire, Arkansas remained close to the national average but exceeded it in writing. The national sample consisted of two million students across 48 states. However, only four other states were administering the ACT Aspire statewide, so the sample is heavily represented by Alabama, Arkansas, South Carolina, (Grades 3-8) and Wyoming (Grades 9-10). In the 2017-18 school year, Arkansas and Wisconsin (Grades 9-10) are the only confirmed states to be administering the ACT Aspire statewide. Any future national comparison will still include a sampling of students across the country.

Achievement gaps are still evident in the ACT Aspire scores between students of different races, genders, and economic statuses. Asian and White students had the highest percentage of students scoring ready or exceeding in each section of the ACT Aspire and African-American and Native Hawaiian/Pacific Islander students had the lowest. Among male and female students, females slightly outscored males, more so in the ELA section. FRL students scored lower than non-FRL students with the gap being largest in ELA in which 65% of non-FRL students scored ready or exceeding compared to 37% of FRL students.

National assessments show some improvements and declines for Arkansas. The most recent NAEP assessment in 2015 showed that Arkansas's students improved slightly in 4th grade reading and 4th and 8th grade science, though performance dipped in 8th grade reading and 4th and 8th grade math between 2013 and 2015. However, Arkansas students still trail behind the national average. Arkansas's *Quality Counts* national ranking has fallen from 41 to 43 in 2017 and their Chance for Success, K-12 Achievement, and School Finance Analysis rankings also dropped.

Data also show some changes in Arkansas students completing high school and preparing for higher education. The Arkansas average ACT composite score dropped slightly in 2017 to 19.4 but had held relatively steady since 2005. However, it has also continued to remain below the national average composite score of 21. In 2017, the percentage of Arkansas students taking the ACT increased to 100%, far surpassing the national average of 60%. Arkansas's high ACT participation rate may be due in large part to districts being required to administer the exam and some covering the costs. Based on ADE data, the graduation rate in Arkansas in 2016 was 87%, a 2 percentage point increase from 2015. NCES data is also used to show a national comparison. According to NCES's most recent numbers, Arkansas's graduation rate has remained below the national average from 2010-2013. The percentage of students completing college has been increasing in Arkansas and in the United States since 2005. But Arkansas is still behind the country with 22% of adults completing college compared to 31% of the country. Based on the most recent five-year estimates (2011-2015) from the U.S. Census Bureau, 85% of Arkansans 25 years and older have a high school diploma or higher, 21% have a bachelor's degree or higher and 8% have a graduate or professional degree.