EDUCATION IN THE POST LAKE VIEW ERA A 2015 UPDATE ON CLOSING THE ACHIEVEMENT GAP





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EDUCATION IN THE POST LAKE VIEW ERA A 2015 UPDATE ON CLOSING THE ACHIEVEMENT GAP

by Jerri Derlikowski, Education Policy Director Arkansas Advocates for Children and Families February 2015





FOREWARD TO 2015 EDITION

When Keith A. Nitta, then of the University of Arkansas Clinton School of Public Service, and I developed our 2008 study "Arkansas Education in the Post-Lake View Era: What Is Arkansas Doing to Close the Achievement Gap?," Arkansas was just emerging from the dramatic alterations in state education policy created by the adequacy and equity litigation in the landmark Lake View cases. That report served two roles: to celebrate the achievements of state policy leaders from all three branches of government and to urge those leaders to build on that momentum and tackle the persistent inequities in educational achievement for Arkansas's young people. I'm proud that the 2008 report did spur important dialogue about inequities in the opportunity to learn across Arkansas and has also been tied to some important efforts to advance policies related to out-of-school programming, school health initiatives, and continued expansion of early childhood program access.

As a new generation of policy leaders in all three branches of Arkansas's government takes center stage in 2015, it's important to both remind ourselves (and those leaders) of the ability of our state to create fundamental change in educational opportunities, like what happened in the Lake View era, but also that—despite efforts by advocates on the topics noted above—important gaps in educational achievement remain a reality in Arkansas and they threaten to erode the promise of that era. That's why this updated study arrives at such a fortuitous time.

It reiterates the reality that change in educational outcomes in Arkansas will not be the result of any single alteration in public policy. Instead it will come from a variety of interventions, all proven in their positive impact through high-quality research. This must occur for Arkansas's public school system to serve as the impetus for opportunity for all of our youngsters.

I hope that, just as the 2008 study did, this update will provoke the type of dialogue and advocacy necessary to create an opportunity to learn that transcends income, race, ethnicity, and zip code in our state.

Jay Barth, M.E & Ima Graves Peace Distinguished Professor of Politics, Hendrix College; Member, Arkansas State Board of Education

5 THINGS TO TAKE AWAY FROM THIS REPORT

- 1. The report, "Education in the Post-Lake View Era: What is Arkansas Doing to Close the Achievement Gap?" was written by Dr. Jay Barth and Dr. Keith Nitta (2008), five years after the first Arkansas education programs were proposed (2003) by the legislature to meet the requirements placed on the state by the Arkansas Supreme Court. The report assessed changes being put in place and identified additional strategies for closing the achievement gap. This 2014 update of that report re-examines the status of Arkansas education and its progress in addressing the strategies outlined in the 2008.
- 2. The state has made academic progress. NAEP scores have improved significantly between 2003 and 2013. The percent of students taking the ACT has increased, high school graduation rates are up, teacher salaries are higher and college remediation rates have decreased slightly.
- 3. The achievement gap still hasn't closed but it has narrowed. On Benchmark exams for third grade reading, 84.5 white readers are proficient or advanced and only 67.6 percent of black readers are as successful. On the eighth grade 2013 NAEP exams, the gap is 25 student percentage points (37 to 12) for literacy and for math 25 percentage points (34 to 9).
- 4. Strategies to reduce the achievement gap haven't been sustained. Pre-K funding is stagnant while program costs grow. Funding for the program has not been increased since the date of the last report in 2008. School districts have not uniformly implemented the recommended after-school, summer and school-based health programs recommended in the 2008 Lake View report.
- 5. Significant barriers remain to closing the achievement gap. Property wealth remains a factor in making school districts "haves" or "have-nots." Basic student funding has been equalized, and basic facilities insured but

the ability to attract the best teachers through higher salaries and to offer facilities (particularly career programs) far above the basics is limited to districts with the highest property values per student.

- Family poverty is barrier for academic achievement of children low-income families. It can be overcome by the students but the odds are against that student and the statistics prove that low-income students lag behind their fellow students.
- Community support is a critical outside resource for successful schools. Not all schools enjoy the support of their local business community. The Whole Child-Whole Community program is built around this concept.
- We won't eliminate the achievement gap by continuing the same policies used to reach our current standing. New thinking is needed to insure that every child has the same opportunity for success as his peers.

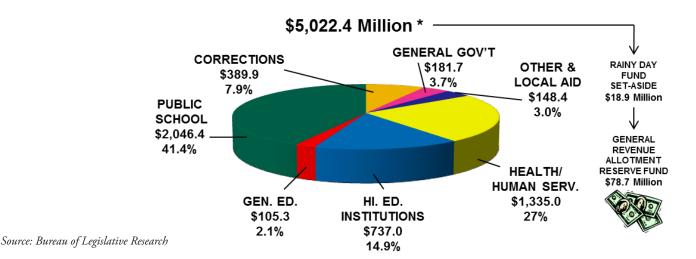
INTRODUCTION

Education is a huge investment for Arkansas. Just over \$5 billion dollars of general revenue is used to run the state government. More than \$2 billion of it goes to support public schools (See Figure 1). Has that investment improved all students' outcomes? Has it closed the achievement gap between poor students and their more affluent peers?

Each biennium the House and Senate Education Committees study all the components of an "adequate" education to determine if the resources being used to provide an adequate education are efficient and effective. The committees then determine whether additional resources are needed for the next two years.

Six years ago, a small group of colleges and education

FIGURE 1: DISTRIBUTION OF FY 2014 "NET AVAILABLE" GENERAL REVENUES



advocates produced a study of their own, looking at what the state was doing to provide an adequate education for all children. That report, "Education in the Post-Lake View Era: What is Arkansas Doing to Close the Achievement Gap?" assessed the changes being put in place and identified additional strategies for closing the achievement gap.

It was written five years after the first programs were proposed (in 2003) by the legislature to meet the requirements placed on the state by the Arkansas Supreme Court. The Supreme Court didn't declare the state's education system to be constitutional until after additional legislation and funding were provided through the 2007 legislative session.

This report is a follow-up to the 2008 study, and will update its findings and assess the progress, to the extent that any has been made. The state defines an adequate education as:

- The standards included in the state's curriculum frameworks, which define what all Arkansas students are to be taught, including specific gradelevel curriculum and a mandatory thirty-eight (38) Carnegie units defined by the Arkansas Standards of Accreditation to be taught at the high school level;
- 2. The standards included in the state's testing system. The goal is to have all, or all but the most severely disabled, students perform at or above proficiency on these tests; and

3. Sufficient funding to provide adequate resources as identified by the General Assembly.¹

LOOKING BACK TO THE 2008 ASSESSMENT "EDUCATION IN THE POST-LAKE VIEW ERA: WHAT IS ARKANSAS DOING TO CLOSE THE ACHIEVEMENT GAP"

In 2008, Dr. Jay Barth, Hendrix College, and Dr. Keith Nitta, Clinton School of Public Service authored a study examining progress made in the years following the Arkansas Supreme Court's decision. Academic successes and remaining challenges were examined with attention to research-based practices put in place across the state.

Academically the state had made great strides. In 2001, 42 percent of fourth graders had proficient math scores on the Arkansas Benchmark math exam. In 2007, 65 percent were proficient on a more difficult math Benchmark exam. Arkansas improved on three of four National Assessment of Education Progress (NAEP) exams between 2003 and 2007. Student scores on the ACT exam also climbed from an average of 17 in 2001 to 21 in 2006.²

The report noted that the achievement gap remained a significant challenge. Other states had experienced more success in reducing the gap. This partial table from the 2008 Post-Lake View report shows the challenges Arkansas faced in reducing the gap for

FIGURE 2: NAEP TEST SCORE GAPS (IN POINTS*), WHITE VS. AFRICAN AMERICAN AND BY INCOME (2007)

	4th grade Reading Income Gap	4th grade Reading Income Gap	4th grade Math Income Gap	4th grade Math Racial Gap	8th grade Reading Income Gap	8th grade Reading Racial Gap	8th grade Math Income Gap	8th grade Math Racial Gap
Arkansas	27	31	20	28	22	30	22	28
WestVirginia	19	14	15	14	16	15	19	21

*The number is the amount that white students outscore African-American students and that middle-class students outscore low-income students, measured in raw test points.

low-income and minority students compared to West Virginia, a rural state also facing many education challenges (See Figure 2).³

The report presented a rigorous literature review to identify strategies that work. Early childhood education was identified as a promising strategy. Arkansas invested strongly in the Arkansas Better Chance program through the 2008 fiscal year. Improving teacher quality was another recommended strategy for reducing the achievement gap. Arkansas invested strongly in increasing teacher pay in an effort to improve teacher quality early on.

However, since 2009, while annual cost of living adjustments have been provided to districts through foundation funding, the minimum salary schedule has not increased. Charter schools were established as a measure to provide options. By 2007, Arkansas had eight open-enrollment charter schools.⁴ Choice options have greatly expanded in the state since that time.

Strategies such as student health programs were slower to be adopted. In 2008 no schools had state-funded school-based health clinics. There was no statewide initiative for after-school, summer, or extended learning time. Private non-profits and the federallyfunded 21st Century Community Learning Centers met some of the need. Improving parent engagement was listed as an effective tool to improve student achievement. Federal requirements related to Title I and the No Child Left Behind (NCLB) initiative brought about state efforts to ensure compliance with parent engagement.

Some early childhood education programs, including Head Start and HIPPY, have strong parental engagement elements. Few schools have undertaken class-size reduction efforts due to costs. Several reading curricula have been implemented in locations throughout the state. But those decisions have remained local ones.

Finally, Arkansas invested significant state revenue on school facilities through 2008 with a one-time General Improvement Fund allotment of nearly \$500 million that year.

The 2008 date of the Post-Lake View report should be noted. The next session (2009) began to deal with the impact of the recession, which began nationally in 2008-2009. The days of big investments in Arkansas education had come to an end. The next seven years of state budgeting saw only minimal increases for cost-of-living adjustments. Even those were limited to programs designated as part of the adequacy agreement. New strategies to address the achievement gap and to improve overall academic achievement have been limited.

ARKANSAS SUPREME COURT RULINGS STILL GUIDE STATE EDUCATION POLICY IN 2014

A set of Arkansas Supreme Court rulings related to the Lake View case forms the basis for education policymaking in Arkansas. The Arkansas Constitution requires that the state "shall ever maintain a general, suitable and efficient system of free public schools and shall adopt all suitable means to secure the people the advantages and opportunities of education."⁵ The court held that this means the state must provide "equal educational opportunity."⁶

In 2002, the court found the state's public school funding system was unconstitutional. Among the reasons: Arkansas's "abysmal" educational rankings, college remediation rates, disparities in teacher salaries, special needs of poverty level students, and the needs of school districts in low-income areas.⁷ In the 2002 ruling, the court defined the state's responsibilities for education.

The ruling was in conflict with the long-established practice of strict local-control for education. The court stated that it is the state's responsibility to define adequacy, assess, evaluate, and monitor the entire spectrum of education. They went further to say that the state must know how state revenues are spent and whether true equality in education is being achieved.⁸ After years of steps forward and shifts back again, in 2007 the state system of education was found to be constitutional by the Arkansas Supreme Court.⁹

Requirements from the Lake View case are still in effect today, however, legislators familiar with the case and its rulings have been term-limited out of office. New members work to understand the history, context, and nuance of provisions requiring adequate funding based on a study of actual needs without regard to the amount of revenue the state may have.

Education's unique status in this regard compared to other state programs and services is questioned by those looking for ways to fund other projects or to cut taxes.

STATE ACTIONS THROUGH 2007 TO SATISFY THE ARKANSAS SUPREME COURT INCLUDED:

I. Act 57 of the Second Extraordinary Session of 2003 – the Adequacy Study;

2. Act 108 of the Second Extraordinary Session of 2003 – the "doomsday" provision that protects funding in the Educational Adequacy Fund and other resources available to the Department of Education Public School Fund Account of the Public School Fund;

3. Establishment of the Immediate Repair Program for facilities, the Academic Facilities Partnership Program, modification of the academic facilitieswealth index, and other provisions assisting school districts with academic facility needs;

4.Adoption of Amendment 74 to provide a 25 mill Uniform Rate of Tax;

5. Categorical funding for alternative learning environments, English – language learners, and national school lunch students;

6. Foundation funding;

7. Growth or Declining enrollment funding;

8. Adoption of a minimum teacher salary schedule.

Source: Bureau of Legislative Research

Proponents of local control question state interventions into the ways local school districts use funds. Local control stalwarts try to maximize available unrestricted funds and expand the use of restricted funds far beyond their originally designed purposes.

The biennial adequacy study¹⁰ is one of the requirements for compliance with the court's decision. It is how the legislature determines whether the state's education policy and funding are adequate to provide equal opportunity.

In practice, the study has become an exhaustive research exercise that results in few legislative efforts to address deficiencies and problems noted in its pages.

FIGURE 3

Education Measures	Before Lake View	Most Recent Arkansas Data	U.S. Average	Data Years
NAEP Scores				
4th grade math	26%	39%	42%	2003 & 2013
8th grade math	19%	28%	35%	2003 & 2013
4th grade literacy	28%	32%	35%	2003 & 2013
8th grade literacy	27%	30%	36%	2003 & 2013
ACT Composite Score	20.3	20.4	21.0	2003 & 2014
% Taking the ACT	73%	93%	57%	2003 & 2014
High School Grads 25 & older	75.3%	84.8%	86.4%	2003 & 2014
College Going Rate	47.5%	54.9%	66.2%	2003 & 2012
Adults with Bachelor's or more	16.7%	21.0%	2000 & 2012	2003 & 2012
Average Teacher Salary	\$33,386	\$46,632	2000 & 2013	2003 & 2013
Minimum Teacher Salary	\$21,860	\$29,244	N/A	2004 & 2014
College Remediation Rates	55%	48%	N/A	2009 & 2012

Source: College Remediation Rates are from the Arkansas Department of Higher Education

"abysmal." The Arkansas Supreme Court affirmed that ruling in 2002.

The data¹¹ show that much progress has been made but the state still lags behind the U.S. Average in many cases (Figure 3).

"Quality Counts" published by Education Week annually provides a ranking of states on a variety of measures. Arkansas has ranked high for several years on policy issues (Standards, Assessment, and Accountability) but very low on K-12 Achievement. This hasn't changed (Figure 4).

FIGURE 4

Quality Counts Category	2008 Score and Letter Grade	2014 Score & Letter Grade
K-12 Achievement	66.3 D	66.7 D+
Standards, Assessments, & Accountability	89.4 B+	94.4 A

For that reason, it is helpful to take a step back from the rigorous and prescribed adequacy study. We should look at the bigger picture. How is education in Arkansas better today than before the Lake View Era? What challenges still remain? What efforts would be beneficial for improving access to equal opportunity for all students?

CURRENT EDUCATION SETTING

PROGRESS

Pulaski County Circuit Court Judge Collins Kilgore found in 2001 that the state's student performance was

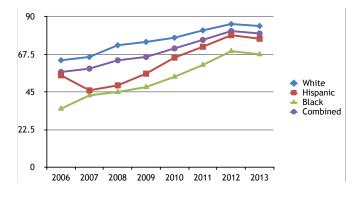
CHALLENGES

Despite some progress, many challenges remain, particularly for low-income and minority students. Those challenges can be seen in discouraging achievement gap data, inconclusive results from NSLA funding, and high concentrations of poorly-performing schools that serve Little Rock and rural, low-income areas of the state with high minority populations.

ACHIEVEMENT GAP

The achievement gap is the difference in the average scores of subgroups of students or as the percentage of students from various subgroups who perform proficiently or at an advanced level. The subgroups

FIGURE 5: PERCENT OF 3RD GRADERS READING ON GRADE LEVEL, ARKANSAS BENCHMARK



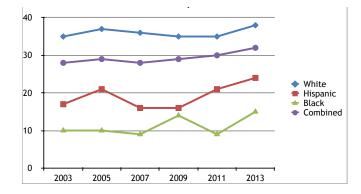
Source: Arkansas Department of Education

reviewed here are composed of students of different racial status. Ninety-five percent of Arkansas's K-12 enrollment is composed of three races. Nearly two thirds (64 percent) of Arkansas students are White, 20 percent are Black, and 10 percent are Hispanic.¹²

Arkansas's measure of accountability for NCLB or the Elementary and Secondary Education Act has been the Benchmark exam through the 2013-14 school year. That test will be replaced this year (2014-15) by the PARCC¹³ exam.

The Arkansas Campaign for Grade-Level Reading has focused on reading achievement at the third grade level because it is a strong indicator of future academic success. As Figure 5 indicates, reading proficiency for third graders steadily increased between the 2005-2006 and 2011-2012 school years. The achievement

FIGURE 6: PERCENT OF 4TH GRADERS READING ON GRADE LEVEL, NAEP



gap between white students and black and Hispanic students shrunk as well.

However, white students are still reading proficiently at higher rates than black and Hispanic children. In 2013, 80.1 percent of all third graders could read on grade-level. While 84.5 percent of white third graders could read proficiently, only 76.9 of Hispanic third graders and 67.6 percent of black third graders could do so. The gap between white and black students is 17 percent. During the last two schools years, 2012-

2013 and 2013-2014, reading proficiency rates for all students have dropped. Recently released Benchmark data show that only 77 percent of all third graders read proficiently in 2013-2014.¹⁴

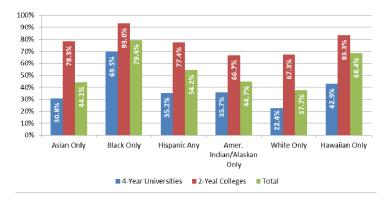
The National Assessment of Educational Progress (NAEP) is the best measure at this time for assessing

FIGURE 7: NAEP TEST SCORE GAPS (IN TEST SCORE POINTS), WHITE VS. AFRICAN AMERICAN AND BY INCOME (2013) ¹⁵

	4th grade Reading Income Gap	4th grade Reading Racial Gap	4th grade Math Income Gap	4th grade Math Racial Gap	8th grade Reading Income Gap	8th grade Reading Racial Gap	8th grade Math Income Gap	8th grade Math Racial Gap
2007 Arkansas	27	31	20	28	22	30	22	28
2013 Arkansas	25	24	18	23	22	25	25	31
Change in gap out of 300 points	2	7	2	5	0	5	-3	-3

how Arkansas's reading scores compare to other states. The NAEP is given every two years. As Figure 6 on the previous page shows, the percentage of fourth graders reading on grade level is significantly lower on the NAEP than on the Benchmark and has been fairly steady over the past decade. In 2013, 32 percent of fourth graders were reading on grade level, an increase of just four percent since 2003. As with the Benchmark, the disparities between racial and ethnic groups are large, but the gaps are shrinking. In 2013, 38 percent of white, 24 percent of Hispanic, and 15 percent of black fourth graders read on grade-level.

FIGURE 8: ANYTIME REMEDIATION RATES BY RACE/ETHNICITY: 2012 FALL



On eighth grade Benchmark exams, the literacy gap is seven percentage points (percentage of students proficient and advanced) and the math gap is only four points. The NAEP exam reflects a much different story See Figure 7 on previous page).

On the eighth grade 2013 NAEP exams, the gap is 25 percentage points (37 percent of white students scored proficient or above compared to 12 percent of black students) for literacy and for math (34 to 9).¹⁶ More than three times as many Caucasian students are proficient as are African American students on the eighth grade NAEP literacy exam. Almost four times as many Caucasian students are proficient on the eighth grade NAEP math exam.

Over the years since the 2008 Post-Lake View report, the gaps in Arkansas NAEP scores have lessened only slightly and in some cases they've actually gotten worse since 2007.

These primary and secondary grade-level assessments reflect the presence of an achievement gap that persists into college. Remediation rates don't reflect achievement for all high school graduates. They only reflect the scores of students taking the ACT (college entry) exam in a given year. "Anytime remediation" means students seeking to enter college any time after high school graduation. In some cases this could be several years later.

The success rate of students taking the exam and presumably hoping to enter a college or university program is disappointing. The remediation rate, shown in Figure 8, for African-American students (at both two-year and four-year institutions) is more than double the rate (79 percent to 37 percent) for Caucasian students: ¹⁷

SCHOOLS IN ACADEMIC DISTRESS

In July 2014, the State Board of Education announced the "academic distress" designation for 26 schools. A school is considered "academically distressed," if 49.5 percent or less of its students scored at proficient or advanced levels on standardized math and literacy tests for the most recent three-year period. The Board postponed a decision on six alternative schools. The 26 schools are distributed as follows:

- Seventeen of the schools were high schools, three of which are located in Little Rock, two in Pulaski County, and the remainder located in East and South Arkansas.
- Five others were middle or junior high schools with two in Forrest City, one located in Little Rock, one in Pine Bluff, and one charter school in Little Rock.

• Four elementary schools were also designated as distressed with two in Little Rock, one in Pulaski County, and one in Pine Bluff.

PRIORITY SCHOOLS

The Arkansas Department of Education designated 42 schools as "Needs-Improvement-Priority Schools" ¹⁸ in the 2012-13 school year. They represent the lowest-performing five percent of schools in the state. Priority schools receive more oversight from ADE and are required to develop an intensive three-year improvement plan. All schools on this list are in Little

Rock (7), Pulaski County (3), and south and east Arkansas with the exception of one elementary school in Ft. Smith. Jefferson County alone has eight needsimprovement-priority schools.

Alternative Learning Centers designated as priority schools are not included in this list.

INTERVENTIONS UNDERWAY IN 2008 TO REDUCE THE ACHIEVEMENT GAP

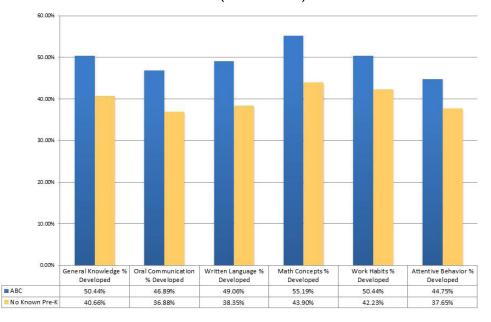
The 2008 Post-Lake View study provides extensive background research on nine interventions that could reduce the achievement gap. The study describes national research identifying these evidence-based interventions and provides descriptions of model programs in other states.

The report was produced in late 2007 and released in 2008. The discussion below will identify the most current research and debates on these topics and assess the current status of each intervention in Arkansas.

PRE-K

The Arkansas Better Chance program serves about 38 percent of eligible children in the state. The program

FIGURE 9: 2012 FREE / REDUCED LUNCH (ABC) VS. FREE / REDUCED LUNCH (NO PRE-K)



serves 3- and 4-year olds at or below 200 percent of the federal poverty level. When the Head Start program is added, about 56 percent of eligible children are served in high-quality pre-K programs.

RESEARCH

Current early childhood education research can be divided into a few topic areas: continuing longitudinal studies, the economic value of pre-K research, and child brain development research. Two longitudinal (or long-term) studies have been conducted specifically on the Arkansas Better Chance program. The Arkansas Research Center found that pre-K attendance had a positive impact. Half of economically disadvantaged students that attended ABC were developed, nearly 10 percent more than students with no pre-K background (See Figure 9).¹⁹

The National Institute for Early Education Research (NIEER) at Rutgers University also conducted a longitudinal study of the Arkansas Better Chance (ABC) pre-K program. Positive effects were found at the end of first and second grade for language, math, and literacy, and at the end of third grade for literacy.²⁰

National researchers consistently release studies on the positive outcomes of pre-K participation. However, one recent negative study deserves a mention here. The brief by Dr. David J. Armor for the Cato Institute is titled the "Evidence on Universal Preschool."²¹

The following is a high-level summation of his questioning the value of pre-k programs: successful programs used more intensive interventions than are commonly included in most pre-K settings and there is "fadeout" of improved academic results as children progress through elementary school. The author also questions the research methodology of previous, positive studies. Finally he concedes that there may be benefit to pre-K but proposes that it has not been conclusively proven.

A response to this policy brief was prepared by Dr. W. Stephen Barnett of the National Institute for Early Education Research. Dr. Barnett, along with economist Tim Bartik, details a list of errors in the CATO brief.²² They agree that pre-K programs with intensive interventions are successful and call for putting into place resources so that programs can continue to improve quality and provide longer programs for children.

They defend the studies that Armor questioned and, in fact, cite Armor's own evidence as proof that the methodology does not bias the studies. They make the case that the Tennessee experimental study Armor calls into question shows that pre-K reduces subsequent grade retention from eight percent to four percent.

This counters the fadeout claim, in their opinion. Barnett contends that Armor over-stated costs for pre-K. He goes on to cite findings in several studies that were not considered in the CATO brief, such as the Washington State Institute for Public Policy (WSIPP) statistical review of 49 studies that showed the positive impact of pre-K.

CURRENT PROGRAM STATUS

Funding for the Arkansas Better Chance program rose rapidly from 2004 to 2008 through a five-year funding plan phased in over three legislative sessions. Funding increased from \$13 million to \$111 million during that time. However, since 2008 the program has received no additional funding. During the recession, most state programs and state personnel experienced stagnant or even reduced funding. Fortunately the ABC program was not cut. However, as the state began to move forward with revenue growth, state programs and personnel received at least cost-ofliving adjustments. But, pre-K was overlooked. It has not had an increase of any kind from 2008 through the 2015 fiscal year.

The program and particularly the private business owners that make up a large portion of its providers are now struggling. In 2008 providers received \$4,860 per student. In 2014-15 providers still receive \$4,860 per student. The first closures began in 2012 and more are expected if there is no relief in the 2015 legislative session.

NEXT STEPS

Before Arkansas can begin to consider expanded access through more slots at the current eligibility level or expanding the eligibility level, the state must provide funding for the existing program up to a level that can sustain the current number of students. An overall increase of 12.4 percent or \$14 million is needed through 2014-15 to insure that providers can continue to serve the 3- and 4-year old children currently in the program. For the 2015-16 fiscal year, another \$2 million is needed for a total of \$16 million.

ABC is also working to improve program standards and coordinate those with the standards in K-12 schools. More degreed teachers are needed. Expanding the state's current Tiered Quality Rating System is needed but not possible without better funding for providers. Additional funds are needed to meet the costs of reducing classroom sizes and hiring more highly-qualified staff.

Finally, several local and state-based initiatives have launched over the past year to address the word gap. The goal is to increase the number of words heard by children, especially low-income children, in their home before they enter kindergarten. A deficit in the



number of words low-income children hear prior to kindergarten is a barrier to development of reading skills. Improving vocabulary in the home before preschool programs start is an effective and efficient way to reduce the achievement gap.

TEACHER QUALITY

Researchers agree on at least one thing—that highquality teachers have one the most significant impacts on student performance. The agreement dissipates when the discussion turns to how to bring that about.

CURRENT PROGRAM STATUS

Teacher Preparation. New developments in the area of teacher preparation include the May 2014 release of ADE's first "Educator Preparation Performance Report."²³ The report provides information about graduates' success at the institution and program level. Information includes:

- Licensure exam pass rates; required credit hours
- Surveys that gauge novice teachers' perception of program
- Program field experiences, clinical practice and faculty data
- Enrollment/race data, numbers of teachers prepared, licensed and working in Arkansas public

schools

• Out-of-state teacher data.

Another recent policy change, a 2013 law regarding children with dyslexia, requires that teacher preparation programs include information on the identification of students at risk of dyslexia. Implementation of these rules under the new dyslexia law cannot be handled solely by colleges of education.

They will need to draw upon other disciplines such as Speech Language Pathology. For example, UALR has already begun to add references to dyslexia in relevant teacher education courses, and they are developing a two-year, graduate-level dyslexia therapist training program that would result in a certification.

Personalized Learning. The 2012 Race to the Top funding provided more than \$350 million to support personalized learning and improve student achievement. Many of the districts are reporting positive outcomes for the efforts, including Puget Sound Educational Service District, IDEA Public Schools in Weslaco, Texas, Harmony Public Schools in Houston, and Middletown School District in New York. ²⁴

Teacher Evaluation. Legislation to establish the Arkansas Teacher Excellence Support System (TESS) was enacted through Act 1209 of 2011 and amendments to the system passed in 2013. The system combines growth in test scores and teacher artifacts in support of their performance. Another significant input into the TESS results is observation by the Principal.

The system provides for the development of personalized Professional Growth Plans. It also helps to move districts toward some standardization in assessing what constitutes a strong teacher.

Teacher Recruitment and Retention. Over the years Arkansas has attempted a variety of programs to improve recruitment and retention of teachers in the neediest parts of the state. One such effort, the highpriority district incentive program (A.C.A. 6-17-811) was discussed in a March 2014 meeting of the education committees in which its effectiveness was questioned.

The program is available to small districts (less than 1,000 students) where 80 percent or more students are eligible for the national school lunch program (free and reduced-price lunches). Among other things, the program provides a \$5,000 bonus to newly-hired teachers in one of the participating districts. There are lower incentives to retain one of these teachers in subsequent years.

The ADE is trying the Teacher Cadet program in an effort to assist district with the "grow your own" strategy. The Arkansas Teacher Cadets Program is aimed at attracting the best and brightest students to the teaching profession.

Arkansas currently has three such pilot programs in the Conway, Southside (Batesville), and Warren School Districts. This year, there are 43 cadets. These efforts must be expanded to improve the odds for access to quality teachers in low-income parts of the state. There are districts in the state that cannot recruit enough fully-accredited teachers to staff their classrooms. These districts rely on programs such as Teach for America and use waivers so that teachers may teach out of area (not the grade or subject of their certification) for more than thirty days.

The Bureau of Legislative Research (BLR) also reported that 95 districts (out of 239) had difficulty in recruiting high-quality teachers due to difficulty in offering competitive salaries.²⁵ Another 57 districts reported difficulty due to scarcity of appropriately licensed personnel. Typically these are districts with higher percentages of students who do not perform proficiently. These students need our best teacher resources.

NEXT STEPS

Raising the minimum salary structure should be a first step in reducing the disparity in district minimum salaries. According to a March 2014 BLR report, eight districts in the state are hiring at the minimum level of \$29,244 while there are five large districts



paying more than \$41,000 for starting teachers. The disparity has been increasing over the years, going from \$13,763 in 2010 to \$15,326 in 2013.²⁶ The House and Senate Education Committees voted in October 2014 to recommend in their adequacy report raising the minimum teacher salary schedule from \$29,244 to \$31,000. The funding currently provided to districts is already based on an average salary in excess of the average salaries in the lowest paying districts. However, the committees also voted to recommend an increase to teacher salaries of 0.84 percent.

Arkansas should explore ways to make better use of technology in the classroom to provide personalized learning experiences for students and offer a wider selection of courses. Personalizing learning through technology and other strategies offers promise in reducing the achievement gap.

CHARTER SCHOOLS

The 2008 Post-Lake View report indicated that highquality charter schools such as KIPP Delta can be successful in reducing the achievement gap. Much of the research, even by organizations favorable to charter schools, indicates strong variation among charter schools. Like traditional public schools, some charter schools perform better than others.

FIGURE 10

School	8th Grade Literacy % Proficient and Advanced				Minority % of Student
	Combined	Subgroups	Combined	Subgroups	Population
KIPP Delta College Prep (Phillips Co.)	85.29	85.07 Black	50	49.25 Black	95.6% Black
Covenant Keepers (Pulaski Co.)	62.86	64 Black 60 Hispanic	22.86	20 Black 30 Hispanic	62.1% Black 37.9% Hispanic

Source: 2013 Arkansas Department of Education https://adesrc.arkansas.gov/

RESEARCH

In Arkansas, charters have had a mixed record. Some are excellent and others have been closed because they failed to meet the terms of their charter, which in some cases meant students had not improved in performance. Figure 10 shows an example of a charter school that is performing well is KIPP Delta in Helena-West Helena. A struggling charter school listed as a Priority school is Covenant Keepers Charter School in southwest Little Rock in Pulaski County.

Efforts to move past the debate about charter schools and to encourage partnerships between charter schools and traditional public schools have been sponsored by the Bill and Melinda Gates Foundation.²⁷ The foundation started a District-Charter Collaboration Compact initiative in December 2010. The Foundation provided \$100,000 grants to 16 cities that have "compact" documents promising to collaborate in a variety of ways, including the sharing of resources, data, and ideas. Examples of these partnerships can be found in Los Angeles, Denver, and Baltimore.

CURRENT PROGRAM STATUS

There have been two controversial issues related to charter schools in Arkansas. The first was a debate over the state's charter authorizing entity. Legislation in 2013 attempted to set up a separate authorizing organization that would have been unaccountable to the Arkansas Department of Education or to the State Board of Education.

The measure's main focus was to have one or more university-related authorizing entities. In

a compromise measure, the state's Department of Education became the authorizing entity. The State Board of Education still retains some review authority after ADE has approved or denied a charter application.

The other issue that came up during the 2014 Fiscal Session was the issue of facilities funding for charter schools. A one-time \$5 million statefunded loan program was established and matched by an additional \$5 million from the Walton Family Foundation. The issue is expected to be re-opened in the 2015 legislative session. A factor in that discussion is access to empty school district facilities. Charter schools now legally have the right of first refusal for those facilities, but districts are refusing to sell them, letting them sit empty instead.

In a more positive development, the Walton Family Foundation granted \$500,000 to KIPP Delta Public Charter Schools for a partnership project with the Helena-West Helena School District and the Lee County School District. The grant is for a two-year pilot to provide two college advisers to work with juniors and seniors in the traditional district high schools. It is based on the KIPP Through College program used in the KIPP charter school.

NEXT STEPS

Charter Schools. Expansion of partnership agreements between charter and public schools will help spread successful initiatives that charter schools develop. Further efforts to resolve the divide over other issues such as charter facilities and charters' impact on traditional schools will be essential to insuring that all students benefit from these policy choices. Discussions to find solutions are needed outside the legislative environment. Such discussions would be better facilitated by a neutral party, assuming one could be found agreeable to both camps.

Choice Initiatives. Initial reporting by the Arkansas Department of Education on K-12 choice options left legislators and State Board of Education members asking for better analysis. It is important that policy makers can be confident that the current choice programs don't contribute to increased segregation.

The segregated private academies that sprung up during the 1970s resistance to school integration enforcement are still thriving in parts of the state. It is critical that expanded choice options among public schools put in place by Act 1227 of 2013 don't further segregate the state.

Efforts to expand choice options to private schools were unsuccessful in the 2013 legislative session. These efforts include a wide variety of mechanisms but the ultimate outcome of them all is to send public tax dollars to private schools. Additional efforts are expected in the 2015 session. Among the practical issues to be considered in that debate is public accountability to taxpayers and state education officials, as well as legal restrictions on the use of public funds to benefit a private entity.

FACILITIES

State support for academic school facilities was a part of the resolution of the Lake View lawsuit. Efforts by the state to bring facilities up to adequate conditions and improve equity have led to significant improvements. The state supplements local district funding of facilities through a "wealth index" that provides a higher rate of state dollars for projects in low-property wealth areas. It is important to know that the state has defined the bar for adequate facilities as warm, safe, and dry—a very low bar. Consequently, school districts with additional resources from higher levels of property wealth are able to construct the most upto-date facilities using state assistance to cover some of the basics. Most rural districts continue to function with outdated but recently repaired warm, safe, and dry basic facilities.

In the late 1990's, Arkansas became one of the first states in the country to provide broadband connections to every school district. The connections were to administrative offices, used to support statewide data collection and accounting within the district and at the state level. These were known as T-1 lines using a now outdated copper wire infrastructure.

The connectivity was never designed for academic use although some school districts were able to expand their use of the lines for those purposes. After making a large investment for a state of the art system (T-1 lines), Arkansas did not update it or provide room for growth in the academic needs of school districts. The result is an outdated system in 2014. Individual districts with favorable geographic locations have expanded access within their schools through use of their own funds. Other districts don't have access at any price.

RESEARCH

Facilities have less impact on achievement than some other interventions. But the learning environment created by schools can affect student performance. A school's "climate" is made up of everything from clean, bright, well-repaired facilities to a school's discipline policies, leadership, and expectations of students. Education Week's "Quality Counts" for 2013 focused on safety, discipline and school climate highlighted the role facilities can play in building a positive school climate, asserting that "school buildings can affect students' morale and academic achievement."²⁸ Examples of facilities designed to improve school climate were shared.

An outdated high school in Washington state was redesigned to resemble the feel of a college campus. Students at the school indicated an increased sense of pride and responsibility. One school facility designer said districts were looking to build learning environments that encourage engagement.

The goal is to move away from settings that support

direct instruction to environments that are more conducive to student-centered instruction. Finally, facilities that support a varied and engaging cadre of career and technical programs range from limited offerings in small, rural districts to over a 100 programs in a large high school like Har-Ber High School in Springdale which boasts an in-house television station among its offerings.

CURRENT PROGRAM STATUS

In 2013, AACF staff documented the successes and disparities in the state's school facilities program, with a video called "Better School Facilities for a Better Arkansas" (just search the title on YouTube. Username: aradvocates).

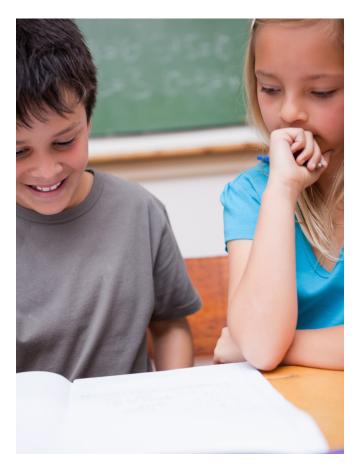
The video has a companion report outlining concerns about the program's direction. In addition to funding woes one of the chief areas of concern is the program's change in priorities to school districts with growing enrollment. The change will go into effect with the next funding cycle.

NEXT STEPS

The 2014 adequacy study conducted by the House and Senate Education committees recommended that funding for the program be increased to meet the costs of the next cycle of approved projects. In that hearing legislators expressed concern that the cost of projects being approved was more than the available money. Lawmakers expressed interest in changing the approval process. This would be a violation of the principle of adequacy that says the state is not to decide what school district's need based on the amount of funding available.

Three other issues need to be addressed. Priorities for the program have been changed to favor districts with growing enrollment. This change favors wealthier districts. Another area for review is the wealth index itself.

While low-property wealth districts receive more funding than wealthier districts, the formula may not sufficiently offset costs in a low-property wealth



district to maintain equity in the resulting physical plant of the district. Finally, the House and Senate Education committee recommended that an update to the original school facility study, conducted 10 years ago and prior to establishing the Partnership Facilities program, be made. The study will not be as exhaustive or expensive as the original but will assess to what degree equity has been improved by the program and identify needs that remain.

CURRICULUM REFORM - COMMON CORE STATE STANDARDS

The major update since the 2008 report is the 2010 adoption of Common Core State Standards by the Arkansas State Board of Education. Arkansas currently stands with 42 other states (Louisiana is not included) in raising the standards for students.

RESEARCH

In 2013 the Arkansas legislature held two full-days of hearings on Common Core. National experts,

state personnel, and community organizations all testified on current research and local experiences. Generally, the opponents cast CCSS as a federal effort to control local schools. They also had concerns about the curriculum schools were beginning to adopt in response to the new standards.

Proponents countered that states met to compile the standards and subsequent federal interest in the standards was not a mandate. The full list of materials provided by those testifying at the hearings is compiled on the Arkansas General Assembly's website.²⁹

CURRENT PROGRAM STATUS

CCSS were fully implemented in the 2013-14 school year. The adoption of the standards requires a new annual accountability test that matches the standards. During the 2014-15 school-year, the state plans to participate in the PARCC³⁰ exam. Arkansas began phasing in the Common Core State Standards with grades K-2 in 2011-12, followed by grades 3-8 in 2012-13 and grades 9-12 in 2013-14.

NEXT STEPS

The standards were rolled out with varying degrees of success in different districts. Some districts were more effective with efforts to communicate with parents and bring teachers into the process. The Arkadelphia School District reported to the House and Senate Education Committees that it had experienced very little pushback and confusion with Common Core because of the groundwork the district did in conducting numerous parent meetings and open discussions with teachers about how to implement the standards. Efforts in many communities are still needed to bring about parental support and understanding and to get teachers on board.

It will also be important to assess how new standards and new testing processes impact struggling students. Without significant planning and effort to provide additional resources to students who were already not performing under the previous standards, those students will fall further behind. It will be important to advocate for the resources needed so all students will have the same opportunities to succeed.

UPDATE ON ADDITIONAL INTERVENTIONS RECOMMENDED IN 2008

In the 2008 Post-Lake View report, the state was urged to explore and invest in student health programs, extended learning models, parent and community engagement, and smaller class sizes. As in the case of interventions already in place in the state at that time, the earlier report provides extensive research related to these topics.

The discussion below will identify the most current research on these topics and assess the current status of each intervention in Arkansas.

STUDENT HEALTH PROGRAMS

Student Health Programs is a broad term. Student conditions requiring mental and behavioral health services and care for students with very severe physical and emotional problems stretch the ability of schools to meet these needs. Improvements in these programs could be a strong resource for reducing the achievement gap. This report will focus on two issue areas that have potential to address many of these needs. They have been the subject of recent legislative and education discussions: chronic absence as part of the Arkansas Campaign for Grade-Level Reading and school nursing needs as identified by the Public School Health Services Advisory Committee. Schoolbased health clinics are a valuable resource; however they are available only in a limited number of districts.

Chronic Absence. Since 2008 a great deal of research has been undertaken nationally on school attendance and its impact on achievement. A national organization dedicated to this work "Attendance Works" has been created.

A growing body of research on school attendance makes the case for looking at attendance in a different way. Rather than relying on average daily attendance (ADA), districts around the country are beginning to use a measure called chronic absence. Chronic absence is defined as missing more than ten percent of the school year, for any reason. Both excused and unexcused absences are counted. Research has also found that a significant percentage of children scoring below proficient on state and national assessments are chronically absent.

An interim study prepared for the Arkansas General Assembly states, "Barriers that keep children from coming to school include struggling with treatable health issues such as asthma, diabetes, or cavities." ³¹ A recent analysis of Arkansas data found that more than one in 10 kindergartners and first graders are chronically absent, and half of all chronically absent students in grades 1 through 3 are not reading proficiently.³²

Over the past school year, seven Arkansas school districts have been working with the Arkansas Campaign for Grade-Level Reading and Attendance Works to analyze chronic absence data, develop strategies for reducing chronic absence, and as a result, increase academic outcomes for children. These districts are Blytheville, Conway, Dermott, Flippin, Marvell-Elaine, Pulaski County, and Springdale.³³ Fort Smith and Wilmot are joining the group this year. Next steps for the effort include identifying and sharing best practices for improving attendance and maximizing use of attendance data through the state education data system's new point of access for local districts and schools known as "GPS."

School Nurses. Funding for school nurses has been debated since the establishment of a "matrix" that serves as the economic measure for the amount of school funding required for typical students in groups of 500 (what we typically call foundation funding). The matrix clearly provides funding for .67 full-time equivalent (FTE) nurses per 500 students. School administrators do not acknowledge that funding is provided for nurse staffing at this level. A complicating factor is that the state's education Standards of Accreditation don't require the same staffing level as provided for in the matrix.

The Act 414 of 2013 created the Public School Health Services Advisory Committee. The committee completed and shared a study with the Arkansas House and Senate Education Committees. The full report can be found online.³⁴ This partial list of

recommendations made by the group will illustrate the findings:

- Extend the Public School Health Services Advisory Committee's work for an additional period of time
- Require the Arkansas School Nurse Survey to be completed annually
- Improve compliance with the Arkansas Nurse Practice Act regarding supervision of nurses
- Update the Arkansas Department of Education Rules Governing Standards for Accreditation to require, at a minimum, nurse staffing in schools to equal positions funded through foundation funding or one registered nurse to 750 students.
- By the 2017-19 Facilities Partnership Cycle, require any new school facilities to have a "Nursing Center."

School-based Health Clinics. Lavaca is a great model of a school-based health center that can demonstrate the successes it has had in improving attendance and achievement. Lavaca reported over 2,000 fewer student absences since the center opened (January 2011) along with a 20 percent decrease in faculty absences.³⁵

However like so many resources needed to improve achievement and reduce the achievement gap, access to facilities in east and south Arkansas is extremely limited, especially when contrasted with the schoolbased health centers in Northwest Arkansas. See Figure 11 on next page.³⁶ Next steps would include expanding access to these resources in more school districts.

AFTER-SCHOOL AND SUMMER PROGRAMS

Two recent Arkansas-related publications have addressed after-school and summer programs. The Picus Odden & Associates "Desk Audit" provides an evidence-based recommendation that school districts provide the equivalent of one teacher position for



FIGURE 11: SCHOOL-BASED HEALTH CENTERS

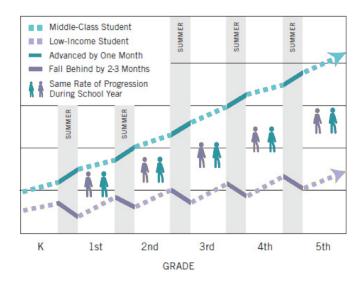
every 120 at-risk (unduplicated National School Lunch (NSL) and English Language Learner (ELL) students.³⁷

This would provide a teacher for two hours per day, five days per week. They further recommend class sizes of 15 students for a six to eight week session at four hours of core instruction with up to two additional hours for non-academic activities per day. The Bureau of Legislative Research³⁸ reports that only 1.97 percent of NSLA funds are used for programs before and after school. Another 1.26 percent is used for summer programs.

The legislative interim study on the Arkansas Campaign for Grade-Level Reading³⁹ notes the availability of Title I funds and the 21st Century Community Learning Centers program (21C CLC). Unpublished analyses of Title I funding by AACF show that only 6.4 percent of Title I funding is used for after-school and summer programs.

In addition to school district sponsored programs, community programs can provide important access to after-school and summer program. These programs blend academic programs and additional learning experiences such as fine arts and performing arts activities. The Arkansas Grade-Level Reading Interim Study also reported that low-income students are more likely to experience summer learning loss than their higher-income peers because they have less access to educational opportunities in their homes and communities. Low-income students can fall behind two to three months each summer, which by 5th grade, can put them two and a half to three grade levels behind their peers (See Figure 12).⁴⁰

FIGURE 12: LOW INCOME STUDENTS FALL 2.5 TO 3 YEARS BEHIND BY FIFTH GRADE



Research from Child Trends demonstrates children from low-income families are much less likely to participate in summer and after-school programs than their higher-income peers (See Figure 13 on next page). In Arkansas, parents report that just 37 percent of low-income 6 to 11-year-olds participate, compared to 68.4 percent of children in families whose incomes are above 200 percent of the federal poverty line (for a family of four in 2012, \$46,100). The patterns are the same for older children – just 43 percent of lowincome kids ages 12 to 17 participate, compared to 70 percent of higher income kids. Arkansas children participate at rates similar to national averages.⁴¹

In an effort to provide more quality resources for all students, the Positive Youth Development Act was passed by the Arkansas legislature as Act 166 of 2011. The act established the intent and structure for the use of state funds for grants to local communities

FIGURE 13

Out-of-School Activities in 2012	6-11 year-olds Family Income 200% FPL or Iower	6-11 year-olds Family Income > 200% FPL	I 2-17 year-olds Family Income> 200% FPL or Iower	12-17 year-olds Family Income> 200% FPL
Arkansas	37.3	68.4	43.0	70.2
U.S. Average	38.3	65.5	43.9	72.7

to operate high-quality after-school and summer programs. The rules for the program were approved in July 2013. However, efforts to secure funding for pilot programs based on the legislation have been unsuccessful. The act builds on the standards, practices, and goals recommended by the 2008 Governor's Task Force on Best Practices for After-school and Summer Programs. Funding for this program is a critical next step to expand access to quality out-of-school programming to reduce the achievement gap.

CLASS-SIZE REDUCTIONS

Class-size reduction is not specifically identified in the eligible uses of NSLA funding but using the funding for teacher salaries (a listed eligible use) is, as long as the funding does not cover any required staffing levels.. However there is no specific coding to permit expenditure tracking explicitly for class-size reduction.

Picus Odden & Associates were contracted to provide a "Desk Audit" as part of the House and Senate Education Committees' Adequacy Study. Their evidence-based recommendation for class-size is 15 students for K-3 and 25 students for grades 4-12 See Figure 14 on next page).⁴² Arkansas Standards of Accreditation have both an average class size and a maximum class size.

School districts are funded based on the average size but in practice schools use the maximum class size as much as possible. The following table demonstrates the comparison. Requirements for grades Kindergarten through Grade 3 clearly do not meet recommendations for reduced class-size.

Barriers to expanded use of the class-size reduction strategy for reducing the achievement gap include

inadequate funding for significantly increased staffing levels and, in some areas of the state, limited human resources to meet the needs of current staffing levels. An alternative strategy being used in many schools is the practice of using paraprofessionals or teacher's aides as support to classroom teachers.

The Bureau of Legislative Research indicates that 9 percent of NSLA funding is used to provide teacher's aides. Anecdotal reports indicate that many districts using these positions are providing training for these personnel prior to their use in the classroom.

PARENT ENGAGEMENT

The most recent statewide effort to improve parent engagement is the Arkansas Department of Education's My Child/My Student campaign. Through ADE's website the campaign will support both parents and teachers. Parents will receive information and helpful tips on the best ways to support their child's educational achievement. Teachers will get resources they can use to improve communication with parents.

In addition to these efforts the Arkansas State Board of Education has formed a subcommittee to consider ways to improve parent engagement efforts. The subcommittee is meeting with a wide range of education and community organizations for input including groups representing parents.

Arkansas does not require employers to enable parents to attend school activities, but did pass legislation (Act 1028 of 2007) to allow state employees one day of paid leave for participation in their children's educational activities. Other legislative efforts such as Act 1423 and Act 1507 of 2013 have been passed to facilitate better parent and community engagement. FIGURE 14

Grade Level		sas Standards of ditation	Evidence-Based Recommendation
	Average Size	Maximum Size	Recommendation
К	20	20	15
I-3	23	25	15
4-6	25	28	25
7-12	25	30	25

However, even with good policy, leadership from school officials at the local level is essential to making parent engagement happen.

Parent and community engagement is one of four impact areas that guide the Arkansas Campaign for Grade-Level Reading. An example of a parentcentered program supported through the campaign by the Winthrop Rockefeller Foundation is One Community Reads - UnaComunidad Leyendo! During the 2012-2013 school year, the program partnered with the Springdale School District to pilot Parents Taking Leadership Action (PTLA). PTLA was coordinated with the district's existing Family Literacy Program, where parents spend 10 hours a week learning English, spending time in their child's classroom, and learning about community resources.

PTLA is a 15-week parent engagement program. PTLA includes "legacy" projects where parents assess the needs of their school and community and develop an action plan to implement changes and address those needs. During the 2013-14 school year, 43 families with children at George and Lee Elementary schools participated in PTLA.⁴³

EMERGING STRATEGIES TO REDUCE THE ACHIEVEMENT GAP

In the intervening time since the 2008 Post-Lake View report, several new education issues and strategies have been adopted. A few of them are mentioned here. 1) As struggling schools accumulated years in school improvement status and the ESEA waiver was approved, efforts to turn around these schools became focused on external providers. More recently ADE has itself become more involved in leading these efforts. 2) Attention to quality career and technical opportunities has greatly expanded. The interest is due to efforts to improve workforce and reach students who have disengaged from strictly academic programs. Linkage with career technical programs and academic material is sought as a way to prepare

students in these programs to enter the workforce directly from high school or to encourage students to seek additional training after high school in either a college or university setting. 3) ADE has begun reporting on school discipline issues in school districts. Many districts are adopting policies that promote discipline in a way that keeps students engaged in school and establishes a school climate that is conducive to learning. 4) Efforts to secure adequate access to broadband and the technologies it supports have heated up. Access in rural schools and even poor neighborhoods in more urban areas is limited. Schools with adequate broadband are moving ahead with the most up-to-date technologies to engage students and reinforce learning.

SCHOOL IMPROVEMENT STRATEGIES

With poor performing schools now designated as Needs Improvement-Priority, Needs Improvement-Focus, and Academic Distress, the responsibility shifts to the state to provide the resources necessary so that students in these schools have the same opportunities to learn as their peers.

The state has responded by taking a wide range of actions including taking over school districts after dismissing the district superintendent and the locallyelected school board. Districts large and small, rural and urban have been taken over by the state. To avoid the need for a takeover or as part of the process after one, the state has developed a set of interventions and resources to make the necessary improvements.

Support for Priority Schools. ADE assigns each Priority school a staff member, or School Improvement

Specialist (SIS), who helps them develop and implement a Priority Improvement Plan (PIP). The SIS is present on campus one day a week. The SIS works to support and improve principal leadership, including how to support the instructional process. Currently Priority Schools must select an external vendor, from an ADE-approved list. New guidelines under the updated ESEA Waiver will permit schools to hire full-time support positions instead. Some schools have multiple vendors on site.

School Improvement Grants. School Improvement Grants are provided by the U.S. Department of Education to ADE. Arkansas receives about \$6 million a year and invites Priority Schools to compete for the funds. The schools must use the funds to implement one of four models: turnaround, restart, school closure, or transformation.⁴⁴

Office of Intensive Support. ADE has established an Office of Intensive Support to work with those districts that are under academic or fiscal distress or that are otherwise under state watch or governance. The office works with both fiscal and academic needs. State Personnel Development Grant.

The State Personnel Development Grant provides professional development for a model called Response to Instruction and Intervention (RtI2) designed to help close the achievement gap.

QUALITY CAREER/TECHNICAL OPPORTU-NITIES

Too many students disengage in school and eventually dropout. Engaged students have more academic success, and create fewer disciplinary problems. They leave high school with options that include entering the workforce directly, entering employer training programs, obtaining post-secondary certifications or associates' degrees, and starting university professional programs. A few of the opportunities to engage students are listed here:

STEM Works. STEM Works (Science, Technology, Engineering, and Math) is an initiative to overhaul STEM education in Arkansas high schools and to

increase the number of well-qualified STEM teachers. For secondary education STEM Works has three models: Project Lead The Way, EAST Core, and New Technology Network.

Project Lead the Way. Arkansas participates in the national initiative Project Lead the Way (PLTW) designed to provide high school students hands-on curriculum and practical applications in science, technology, engineering, and math. Gateway to Technology is the PLTW middle school program.⁴⁵

EAST. The EAST initiative (Environmental and Spatial Technology) is an Arkansas-born program that has expanded to four other states. The program is project-based. The projects use high-end technology including geographic information system (GIS) software to conduct service-learning projects.⁴⁶

New Tech Network. New Tech schools also engage students through project-based learning. Students are assessed on academic content and on their ability to apply those concepts to real-world problems.⁴⁷

AAIMS. The Arkansas Advanced Initiative for Math and Science (AAIMS) is not specifically included in the STEM Works models but in a complementary role works to strengthen the teaching of AP math, science, and English courses to build enrollment and improve the success of students who take the courses. One of the goals of the program is to expand enrollment of traditionally underserved students.⁴⁸

SCHOOL DISCIPLINE POLICIES

In early 2013, AACF released a report on school discipline that led to legislation in the 2013 session (Act 1329 of 2013) requiring ADE to report to the State Board of Education on school discipline for all students and rates of discipline comparatively for student subgroups. The Office of Education Policy (OEP) at the University of Arkansas completed the analysis on behalf of ADE in July of 2014. They found that almost three times as many non-white students (10.2 percent) received out-of-school suspension as did white students (just 3.6 percent). The OEP report recommends that schools and districts be required to

report when they refer students to law enforcement authorities along with other disciplinary data they already report, to build transparency into this practice. The report also recommended more research on the number of times individual students were suspended as well as several other categories. Disparity is not a statewide status. Many districts had no disparity while other districts had high rates of disparity.

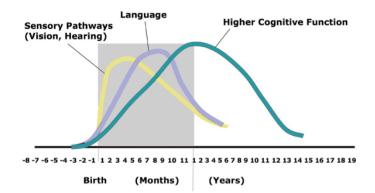
To reduce the achievement gap, barriers to student success, like disparities in discipline must be reduced. Strategies such as Positive Behavior Intervention and Support (PBIS) systems and Restorative Justice are proven ways to provide discipline and keep students in school and learning. PBIS proposes progressive levels of intervention as needed, including mental health supports and anger management. Restorative justice includes student courts and student-based solutions to resolve conflicts. Districts in Arkansas who are exploring these programs include Hot Springs, Jonesboro, and Bentonville.

BROADBAND ACCESS

Broadband is an education adequacy issue. Access to broadband is an essential component of providing an adequate education. It is also an essential component of a fundamental opportunity to learn for our lowincome families. Broadband is readily available although not inexpensive in the urban and suburban areas of our state. It is limited or non-existent in many other areas. Areas without access or limited access don't have the same educational opportunities as the highly populated areas.

Broadband is the fiber cabling that allows schools to connect to the internet, to ADE, and to have enough bandwidth in their schools to run administrative functions without having to stop academic use. It will also provide enough bandwidth to insure that online testing and even online delivery of courses is possible. This issue primarily affects rural districts and lowincome areas of the state. The Senate and House Education Committees received the report of the Quality Digital Learning Study (QDLS) Committee. The report recommended that schools in these rural and unserved areas of the state be allowed to connect

FIGURE 15: HUMAN BRAIN DEVELOPMENT NEURAL CONNECTIONS FOR DIFFERENT FUNCTIONS DEVELOP SEQUENTIALLY



to an existing network already in place that connects Arkansas's public universities, hospitals, and some law enforcement facilities. That network is the Arkansas Research and Education Optical Network (ARE-ON). Corporate telecom providers are opposed to that action. Legislators have to decide whether to change the law the providers crafted to keep public schools off the system, or pay more for duplicate resources.

Arkansas was selected by non-profit EducationSuperHighway to participate in a comprehensive K-12 broadband pilot project.⁴⁹ Initial reports are that the state can shift \$15 million to broadband and leverage it with the federal E-rate program. The \$15 million is what the state is now spending on outdated copper networks.

WORD GAP

The early childhood period (birth to age 5) is a time of rapid brain development.⁵⁰ Early experiences are the foundation on which all later learning is built. They play a large role in determining how brain connections or "wiring" are formed. Babies start to understand the link between words and their meanings as early as 6 months. This sets the stage for language development and later reading.

Figure 15⁵¹ shows when these brain connections happen. Children from different backgrounds have very different early experiences in how often their parents talk with and read to them. The Hart and

Risley study of 1995 found that children from lowincome families heard roughly 30 million fewer words than their more affluent peers. The average vocabulary of a low-income 3-year-old was 500 words.

By contrast, a higher-income child used 1,100 words.⁵² This became known as the word gap. Subsequent research has revealed that the word gap is a factor in the achievement gap between the poor and higher-income students.⁵³

Other states have initiated programs to address this need including Georgia's "Talk with me Baby" campaign and Tulsa, Oklahoma's "Talking is Teaching" effort. The Arkansas Campaign for Grade-Level Reading is laying the groundwork for an Arkansas program.

BARRIERS TO CLOSING THE ACHIEVEMENT GAP

Some barriers to closing the achievement gap are outside state and school district control. Property wealth, family poverty, and community involvement and investment in local public schools impact student achievement.

PROPERTY WEALTH

There has been much research on the impact of school funding or expenditures on student achievement. Research shows that the most significant factor in improving achievement in better-funded school districts are teachers with higher levels of education, more experience, and higher scores on competency tests. Higher-quality teachers generate better achievement scores among students.⁵⁴

According to a report produced by The Albert Shanker Institute, on average, per-pupil spending is positively associated with improved or higher student outcomes. The significance of the impact varies among studies. School resources, including class size reduction or higher teacher salaries, are positively associated with student outcomes.⁵⁵ Arkansas has negated most of the impact of property wealth in foundation funding by equalizing the local property tax revenues up to the point determined to provide adequate education. There are eight school districts with more local revenue generated by their first 25 mills than required by adequacy.

Efforts have been made to provide greater equity for facilities funding as well through a wealth index that provides more state support to districts with lower property wealth. The results have been positive but inequities remain. The high school buildings in some of the more prosperous areas of the state should be compared with buildings in the rural areas. Wealthy districts are able to provide their students facilities with add-ons above adequate levels with their own additional millage and resulting tax revenue. The state bases its funding on the scope of the basic project requirements determined to constitute an "adequate" facility. Add-ons include additional space per student for career and technical learning opportunities such as television broadcast stations, health services centers, and engineering labs.

Finally, there's a big disparity in teacher salaries, discussed earlier in this report, becuase school districts with great property wealth can raise teacher salaries above what is provided through the state's foundation funding. These increased salary levels make it easier for wealthier districts to hire the highest quality teachers. The impact of property wealth on an adequate education is reduced because the state provides additional funding to districts so that all have funding equal to the amount determined by the legislature as necessary for adequacy.

This amount is based on the money a school district receives from its first 25 mills of property taxes. The impact comes when wealthier districts are able to provide resources in addition to those from the state funding system with local revenues to provide resources that lower wealth districts can't offer. The result is that the quality of a student's education is impacted by their zip code. The variety and quality of career technical programs and teacher salaries are the two most visible indicators of the differences this brings.

FAMILY POVERTY

Arkansas is a poor state. Poverty is both a cause and a result of too little education. Nearly one-third of the state's children live in poverty.⁵⁶ About 60 percent of Arkansas children qualify for a free or reduced lunch.⁵⁷ Often children living in poverty have parents who are poorly educated. One example of the impact family poverty has on educational success is the word gap discussed earlier in this report. The word gap research demonstrates that low-income children hear 30 million fewer words than more affluent peers. Consequently their vocabulary entering Kindergarten is limited. They start school behind and stay behind without significant interventions.

Poverty has less obvious disruptions to student achievement also. Child hunger, poor nutrition, and health issues impact student achievement. Child hunger affects one in four Arkansas children according to the Arkansas Hunger Relief Alliance.⁵⁸ Dr. Howard Taras, professor of pediatrics at the University of California – San Diego, writes in the Journal of School Health, "... food insufficiency was associated with significantly poorer cognitive functioning, decreased school attendance, or diminished academic achievement."⁵⁹ As discussed earlier, chronic absence due to health problems or otherwise is more prevalent among low-income children. School attendance is a known predictor of student academic success.

Family poverty brings student stresses that threaten academic success in other ways as well. Unstable housing, family structure, and employment/family income, make it difficult for students to sleep well or to feel safe and supported. A recent report from the U.S. Department of Education noted that the number of homeless children in Arkansas is increasing. The number grew to 10,851, a 14 percent increase between 2012 and 2013.⁶⁰ Research shows that homeless students transfer schools more often and are more likely to drop out of school. They are also more likely to be diagnosed with learning disabilities.

COMMUNITY

Legislation was passed in the 2013 session to establish the Whole Child-Whole Community



recognition program. The legislation is a first step in acknowledging the impact communities, families and other factors outside the school setting play on student achievement. The tenets that are to be assessed by the program include:

- Each student enters school healthy and learns about and practices a healthy lifestyle.
- Each student learns in an environment that is physically and emotionally safe for students and adults.
- Each student is actively engaged in learning and is connected to the school and broader community.
- Each student has access to personalized learning and is supported by qualified, caring adults.
- Each student is challenged academically and prepared for success in college or further study and for employment and participation in a global environment.

Community supports and resources for the school district can be a great asset. One example is the

Marvell-Elaine school district. The private non-profit Boys, Girls, Adults Community Development Center (BGACDC) is partnering with the school district during summer months to offer intensive literacy instruction, character development and academic support. The Children's Defense Fund (CDF) Freedom Schools model was a perfect fit for Marvell students and families needing summer learning opportunities. BGACDC and CDF have partnered to offer Freedom School to Marvell-Elaine students since 2007, providing summer learning opportunities to more than 500 children. The program helped 51 percent of its participants improve reading levels and another 29 percent to maintain their reading level, avoiding suffering summer learning loss.

INEFFECTIVE USE OF NSLA FUNDING

Arkansas has a funding source that was intended to help school districts reduce the achievement gap. The categorical funding that was established to meet the additional needs of struggling students has been diverted to so many additional uses that its effectiveness cannot be determined. This state funding source is called NSLA, after the National School Lunch Act. ADE uses the number of students eligible for free and reduced-price lunches to set the NSLA funding level for that district. The count of FRL students is also used as the multiplier of the funding level for each student.

In addition to concerns expressed by Arkansas Advocates for Children and Families beginning in 2010, research by others has also identified concerns. Picus, Odden, and Associates, in their September 2014 report on behalf of the Education Committees,⁶¹ recommended the funding be used for tutors, pupil support (social workers, speech therapists), extended day programs (after-school), and summer school programs. The Bureau of Legislative Research⁶² recommended several strategies for reducing the achievement gap.

Many of these are already funded through foundation funding or other categorical funding but these were not: tutoring, after-school programs, and summer programs. Finally, the Office of Education Policy at the University of Arkansas has been critical of both the distribution methodology of the funds and the extended number of purposes for which the funds may be used. They state, "due to general lack of focusing of poverty funds by districts, it is difficult to assign cause or even correlation to poverty funding and achievement."⁶³

The legislature itself acknowledged the need to reduce the permitted uses of the NSLA state funding. In April 2013, the education committees amended the 2012 adequacy report to add a recommendation to prioritize the allowable uses of the funding. Then the legislature added language to the education funding bill, Act 1467 of 2013, stating

The evidence... indicates that the method in which national school lunch state categorical funding is distributed should change... School districts should only be permitted to use national school lunch state categorical funding to fund evidence-based programs directed at improving student achievement for economically disadvantaged and low-performing students.

The bill further required that a study be completed to make a recommendation on NSLA usage prior to the 2014 Fiscal Session. During the Fiscal Session, a year later, the education committees informed the legislative leadership of their recommendation not to take any action. Nothing has been done.

SUMMARY

Many of the strategies outlined in the 2008 Post-Lake View report to reduce the achievement gap are in place. Arkansas invested heavily in pre-k through 2008 but has since neglected it. Some districts have remarkably skilled teacher workforces while others struggle to remain fully staffed. Charter schools were designed to be models of inventive practices but the first significant cooperative value is just getting underway. School-based health centers would be a boon to poor, rural school districts. The creativity that could result from community partnerships to energize after-school programs is in too short supply. There is negligible public or political will for expensive



class-size reduction programs. Ways to support and share successful parent engagement programs need more investment. School improvement strategies are showing promise primarily through the increased focus of ADE, which needs additional resources to insure success in the job ahead. New directions for improving opportunities such as quality career and technical programs, improvements in school climate and discipline, and expanded access to technology and broadband will insure equitable resources and equal opportunities for all students.

While the achievement gap has decreased on Benchmark exams, stark disparities in achievement persist. The remaining gap results at least partially from: inadequate resources in our schools; inadequate leadership to use available resources in the most effective manner; inadequate attention to the increasingly diverse needs of students who are attending public schools with far more severe physical, mental, and emotional disabilities than ever before; and the needs of students whose families have limited educational backgrounds and limited financial resources that would help provide the same supporting environment at home that reinforces what is taught inside schools.

Eliminating the achievement gap will require revolutionary thinking—rather than retrenched efforts to protect the status quo or efforts to undermine the existing public education infrastructure. District and state officials are seeking new strategies to meet long-standing challenges and newly identified needs. It will be important to identify those leaders' successes and share their practices as well as to find new ways to support and motivate others who have been complacent in addressing the achievement gaps within their schools.

RECOMMENDATIONS

Resources and Innovation

- Provide equitable resources to all school districts. Equity does not mean equal. It will take additional resources in some districts to secure equitable opportunities for all students. For example, improving access to career and technical programs is needed in rural schools.
- Require that state-provided resources be used in a way that both supports increased achievement for all students and reduces the achievement gap. This could mean additional legislative restrictions, particularly in low-performing districts to see that funds are used as intended.
- Improve the Schools of Innovation program based on the first year of experience to increase participation and expand the creativity of the proposals. Increase flexibility with state requirements where appropriate.
- Develop additional ways to celebrate and reward districts that are making academic gains for the combined student population and reducing the achievement gap. Publicize successful programs and strategies.

Sustain Existing Proven Programs and Implement New Programs Based on Recent Research

- Increase funding for the existing Arkansas Better Chance Program to insure that quality programs continue.
- Develop a program to decrease the Word Gap to improve vocabulary of children before entering Kindergarten.
- Find ways to personalize learning through technology and other strategies.
- Expand access to school-based health programs.
- Identify and share best practices of schools working to reduce chronic absence.
- Improved access to nursing care and appropriate nursing facilities should be provided through the adequacy process.
- Provide funding for after-school and summer programs that comply with rules for the Positive Youth Development Act of 2011.
- Pilot funding for reduced class-sizes in our poorest performing schools.
- Insure that all schools and students have equitable access to career training opportunities.
- Connect schools to ARE-ON.

Ensure Current Policies Don't Increase Disparities

• Work to minimize K-12 teacher salary disparity so that all districts have access to high-quality teachers.

- Conduct research to make sure school choice programs are not contributing to further desegregation within the state.
- Modify K-12 facilities funding policies and priorities to insure that funding is distributed to meet the needs in low-income areas of the state in a way that makes those facilities equitable with those in high-growth/high-wealth areas of the state.
- Conduct an updated study of school facilities across the state to assess equity.
- Complete the requirements of Act 1329 of 2013 and provide resources for schools interested in implementing best school discipline practices.

Support Parents and School Districts in Their Efforts

- Conduct new efforts to help parents with understanding of Common Core State Standards.
- Develop programs to incentivize school districts to improve the fidelity of the implementation of parent engagement efforts as designed in Arkansas Comprehensive School Improvement Plans.
- Evaluate the state's school improvement strategies and staffing to assess whether further efforts or adjustments are needed.
- Acknowledge barriers to reducing the achievement gap and develop multi-agency efforts to improve conditions that promote these barriers.

Acronym/Reference	Full Listing
2008 Post-Lake View report	Education in the Post-Lake View Era: What is Arkansas Doing to Close the Achievement Gap?
AACF	Arkansas Advocates for Children and Families
ABC	Arkansas Better Chance [Pre-K program]
ACT	A national college entry exam
ADE	Arkansas Department of Education
BLR	Bureau of Legislative Research
CCSS	Common Core State Standards
ESEA	Elementary and Secondary Education Act (Federal legislation)
FRL	Free and Reduced Lunch. Students eligible for Free and Reduced Lunch
NAEP	National Assessment of Education Progress
NSLA	A state categorical funding program for struggling students. The funding level for each district is based on the number and percentage of students in the district who are eligible for a free and reduced price lunch according to federal eligibility requirements established in the National School Lunch Act.
OEP-UA	Office of Education Policy at the University of Arkansas
PARCC	Partnership for Assessment of Readiness for College and Careers

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Arkansas Advocates for Children and Families 1400 West Markham, Suite 306 Little Rock, AR 72201 (501) 371-9678

> Northwest Arkansas Office 614 East Emma Avenue, Suite 107 Springdale, AR 72764 (479) 927-9800







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