



Research Report

A Comprehensive Review of School District Utilization of State Resources Provided for K-12 Public School Educational Adequacy

Volume 1: State-Level Analysis

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BUREAU OF LEGISLATIVE RESEARCH

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Introduction

Background

In 2003, Lawrence O. Picus and Associates (Picus) completed the first Arkansas K-12 adequacy study. That study included funding and staffing recommendations based on a school size of 500 students. Senator Dave Bisbee is widely credited with converting that school-based funding formula to a matrix that could be used to determine the per-pupil level of foundation funding. The matrix was not intended to reimburse schools for actual expenditures but rather to establish an adequate level of funding to allow schools to meet minimum accreditation standards and adequately educate Arkansas students. It was also designed to provide for equity and to provide additional funding for students considered difficult to educate.

The legislature adopted the Bisbee matrix during the Second Extraordinary Session of 2003. The General Assembly also passed Act 57 of the Second Extraordinary Session of 2003, amended by Act 1204 of 2007, which requires the legislature to conduct an adequacy study each biennium to assess needs related to providing an adequate education for all Arkansas K-12 students. Picus was selected to perform the first follow-up study with help from the Bureau of Legislative Research (BLR) staff. The resulting 2006 report used the Bisbee matrix to make recommendations on funding levels and called for some minimal restructuring (recalibration) of the matrix itself. In its final ruling associated with "Lake View" in May 2007, the Arkansas Supreme Court held that the state's system of funding public schools met the constitutional requirements of providing an adequate education and substantially equal educational opportunity for all of the state's public school children (Lake View, 2007).

Committee Process

Following the 2007 session, the House and Senate Interim Committees on Education (Education Committees) made the Joint Adequacy Evaluation Oversight Subcommittee (Adequacy Subcommittee) responsible for conducting the Act 57 study and making recommendations to the Education Committees in 2008. Instead of hiring contractors, the Adequacy Subcommittee determined that BLR staff would conduct the 2007-08 resource utilization study. As part of the Act 57 process, the Adequacy Subcommittee will receive input from many sources in addition to the BLR study, including the Arkansas Department of Education (ADE), school districts, teacher organizations, administrative organizations and various outside experts. Following the receipt of the recommendations, the Education Committees will prepare the final Act 57 report and submit it to the President Pro Tempore of the Senate and the Speaker of the House of Representatives by September 1, 2008.

Previous Study

In its 2006 study, Picus reviewed all the components of the Bisbee matrix. The matrix is provided in Appendix A. The goal was to recommend any adjustments in resources or costs required to more accurately reflect the needs of schools after one biennium of operation under the new funding structure. Some minor adjustments were made to the original Bisbee matrix, including the addition of a clerical position at the school level, and the carry-forward line item was broken into three distinct line items — central office, operation and maintenance, and transportation.

Purpose

The purpose of this 2007-08 resource utilization study is to determine how districts and schools are using resources to provide a substantially equal opportunity for an adequate education to public school students. The Arkansas Supreme Court, in *Lake View Sch. Dist. No. 25 of Phillips County v. Huckabee*, 370 Ark. 139, __ S.W.3d __ (2007), emphasized the importance of this review when it adopted the following language of the Special Masters' report:

We have no doubt that a successful future for Arkansas's public schools will depend, in large measure, upon the continuous financial and standards review that the General Assembly has undertaken at this point. Meeting the challenge of using the support which is in place, and that which will ensue, to give adequate education to Arkansas's children now passes to the local school districts.

The Court also concluded in that opinion, "A critical component of [the General Assembly's] undertaking has been the comprehensive system for accounting and accountability, which has been put in place to provide state oversight of school-district expenditures."

Act 57 of the Second Extraordinary Session of 2003, A.C.A. § 10-3-2101 et seq., requires the House and Senate Education Committees to use the *Lake View* opinion as their "guidepost." Therefore, this report compares the results of the utilization study conducted by the BLR with the current funding matrix (the matrix) to determine whether schools use the funding the way the legislature intended. It addresses the extent to which schools are successful in providing staffing and student programs that legislators envisioned. This report provides limited cost information reported by schools for some of the matrix items, but it does not attempt to assess whether funding levels are sufficient for these resources. The need for cost-of-living or other funding level adjustments, if any, will be reviewed separately by the Adequacy Subcommittee.

Methodology

This study replicates the methodology of the 2006 Picus study. BLR staff surveyed all 245 districts through a web survey and conducted on-site interviews with staff at 74 schools. The 74 schools were randomly selected after eliminating the schools included in the 2006 Picus study. A statistical analysis indicated that 67 schools would provide a representative sample. Seven additional schools were selected to ensure the proper sample size. A comparison shown in Appendix B illustrates that the sample is representative of the state population.

Format Explanation

Volume 1 of the study provides state-level data related to school size and to each line item of the current matrix for the 2007-09 biennium. Additionally, the study provides state-level data for each of the categorical funding programs, which include:

- 1) National Student Lunch Act (NSLA) (This category of state funding is based on the poverty data used for the federal National Student Lunch Act. However, the state program should not be confused with the federal school lunch program. The state NSLA program provides extra funding to schools for the education of students in poverty.)
- 2) English Language Learners (ELL)
- 3) Alternative Learning Environments (ALE)
- 4) Professional Development (PD)

Volume 2 provides a comparative analysis of the matrix and sample schools for various groupings of schools and districts. These groupings include grade level, school size, poverty, minority population, and student achievement. Volume 2 also includes other supplemental data related to teacher and staff experience as well as expenditure data for some of the matrix components and categorical programs.

Interim Study Proposals

Both the web survey and site-visit interviews covered topics related to interim study proposals (ISP) assigned to the Adequacy Subcommittee. Many of these ISPs were structured to complete requests for further study contained in the recommendations of the 2006 study entitled *A Report on Legislative Hearings for the 2006 Interim Study on Educational Adequacy*. That information will be provided in separate reports.

State-Level Analysis

1. School Size and Grade Distribution Assumptions

In the 2003 report to the legislature, Picus recommended funding and staffing for prototypical schools of 500 students each. The original Bisbee matrix for developing a per-pupil funding amount was calculated based on that recommended school size. After a thorough review, Picus concluded again in the 2006 study that the use of 500 students as the base school size is a valid model for per-pupil funding. Since that time the method of funding has been held constitutional by the Supreme Court. There is no evidence based on the data compiled for the present 2007-08 study conducted by the BLR that the assumptions regarding school size need to be changed.

The Table 1 shows that 71% of the schools in 2006-07 have fewer than 500 students. The size of schools is substantially consistent for the two years in which complete statewide data was available and for the 74 sample schools in 2007-08. The Arkansas 2006-07 total enrollment distribution by grade was converted to a distribution by grade for a school of 500.

Table 1.

School Size						
# of Students	Picus 2004-05		Actual Enrollment 2006-07		Study Sample 2007-08	
	# of schools	%	# of schools	%	# of schools	%
100 or less	58	5%	42	4%	3	4%
101-249	229	21%	212	20%	15	20%
250-349	228	21%	225	21%	17	23%
350-499	271	25%	278	26%	17	23%
500 or more	320	29%	315	29%	22	30%

An individual school does not typically have grades K-12, but for the purpose of establishing a model, the prototypical school of 500 is assumed to have 40 kindergarten students, 115 students in grades one through three, and 345 students in grades four through twelve. This assumption is necessary because the funding model must account for the different staffing levels required for each of these grade groupings.

The following table shows how closely the matrix assumptions matched actual district data and the school sample.

Table 2.

Class Size and Grade Distribution Assumptions								
Grade Level	Pupil/Teacher Ratio Standards		Enrollment by Grade					
	Avg. in Standards	Max. in Standards	Picus/Matrix Assumptions		AR Students 2006-07		Combined Study Sample 2007-08	
			#	%	#	%	#	%
Kindergarten	20:1	20:1	40	8%	39	7.82%	41	8.19%
Grades 1-3	23:1	25:1	115	23%	114	22.80%	110	22.04%
Grades 4-12	25:1	28:1	345	69%	346	69.34%	349	69.78%
Totals K-12*			500	100%	500	100%	500	100%

*Rounding

2. Pupil Support Personnel (Building-Level)

Staffing and funding of pupil support personnel at the building level is critical. Nearly three-fourths of these positions are classroom teachers who have direct daily interaction with students. Many studies consider the quality of the classroom teacher to be the most important factor in student achievement. In addition to classroom teachers, pupil support personnel include special education teachers, instructional facilitators, librarians, guidance counselors, principals, and other health and clerical support. Funding for the total pupil support personnel group constitutes 69% of the per-pupil funding funded in the current matrix.

The staffing levels established in the matrix were developed in the original Picus study, confirmed in the subsequent Picus study, and were components of the funding system that the Arkansas Supreme Court found constitutional. Those staffing levels serve as the basis of comparison for the schools in the BLR statistical sample (Lake View, 2007).

This study reviews each of the components making up the pupil support personnel grouping. It considers the state staffing requirements established in the ADE Rules Governing Standards For Accreditation of Arkansas Public Schools and School Districts (standards). This study also addresses the number of positions funded in the matrix for each job. Finally, staffing levels reported by the sample schools and by the 245 districts are compared with the matrix recommendations.

a. Classroom Teachers

The matrix separates classroom teachers into two groups. The first group, referred to in this report as core academic, includes teachers whose primary responsibility is to teach in one or more of four academic areas: literacy, math, science, and social studies. The second group, referred to as PAM/elective, includes educators who teach physical education, art, music, or other electives.

i. Core Academic

The number of core academic classroom teachers funded by the matrix is calculated by dividing the number of students by the average number of pupils per teacher established by state standards. The matrix assumptions are shown in Table 3.

Table 3.

Matrix Assumptions For Core Academic Classroom Teacher Staffing Levels			
Grade Level	Average Pupil/Teacher Ratio	# of Students	# of Teachers
Kindergarten	20:1	40	2
Grades 1-3	23:1	115	5
Grades 4-12	25:1	345	13.8
Totals		500	20.8

Table 4 compares the matrix number for core academic teachers with the average number in the 74 sample schools.

Table 4.

Core Academic Teachers					
Staff	Matrix Number	Sample Average	Percent More or Less than Matrix	Schools At or Below Matrix Number	Schools Above Matrix Number
Classroom Teachers	20.8	23.7	13.94%	23	51

The average number of core academic classroom teachers in the sample is slightly higher (14%) than the staffing level established in the matrix. Additional analysis of the schools that staff at a higher level than the matrix is provided in Volume 2.

ii. PAM/Elective

Both Picus studies and the matrix recommend that schools calculate the number of PAM/Elective teachers they need at 20% of the total core academic teachers. Twenty percent of 20.8 core academic teachers is 4.2 PAM/Elective teachers per 500 students.

Table 5 compares the matrix number for PAM/elective teachers with the average number in the 74 sample schools.

Table 5.

PAM/Elective Teachers					
Staff	Matrix Number	Sample Average	Percent More or Less than Matrix	Schools At or Below Matrix Number	Schools Above Matrix Number
PAM/Elective	4.2	8.9	112%	27	47

The average number of PAM/Elective classroom teachers in the sample is more than double the staffing level established in the matrix. Additional analysis of the characteristics of schools that are staffing at a higher level than the matrix will be provided in Volume 2.

b. Instructional Facilitators and Assistant Principals

The original Picus study and the original matrix established a staffing level of 2.5 instructional facilitators per 500 students. The 2006 Picus study indicated that .5 full-time equivalent (FTE) of the instructional facilitators was to be for technology expertise. The matrix used in the 2007-09 biennium adjusted the staffing level to two instructional facilitators per 500 students and a .5 FTE assistant principal.

Table 6 compares the matrix number for instructional facilitators and assistant principals with the average number in the 74 sample schools.

Table 6.

Instructional Facilitators and Assistant Principals					
Staff	Matrix Number	Sample Average	Percent More or Less than Matrix	Schools At or Below Matrix Number	Schools Above Matrix Number
Instructional Facilitators	2.0	1.9	-5%	50	24
Assistant Principals	0.5	0.5	0%	43	31
Instructional Facilitators and Assistant Principals	2.5	2.4	-4%	50	24

The average number of instructional facilitators in the sample is lower than the staffing level established in the matrix. The average number of assistant principals is the same as the matrix. The staffing level for the combined positions is lower than the matrix due to the lower instructional facilitator staffing. The web survey for all districts indicated an average of 1.52 instructional facilitators per 50 students compared with the site visit report of 1.9 instructional facilitators. Additional analysis of the schools that staff at a higher level than the matrix is provided in Volume 2. These two positions are grouped together and referred to as "instructional facilitators" in that volume.

c. Special Education Teachers

The matrix established staffing for special education teachers at a level of 2.9 teachers per 500 students.

Table 7 compares the matrix number for special education teachers with the average number in the 74 sample schools.

Table 7.

Special Education Teachers					
Staff	Matrix Number	Sample Average	Percent More or Less than Matrix	Schools At or Below Matrix Number	Schools Above Matrix Number
Special Education	2.9	3.8	31.04%	34	40

The average number of special education and resource room teachers in the sample is higher (31%) than the staffing level established in the matrix. The schools and districts receive additional federal and state funding for special education teachers and programs. Additional analysis of the schools that staff at a higher level than the matrix is provided in Volume 2.

d. Librarians and Media Specialists

The matrix established staffing for librarians and media specialists at a level of 0.8 positions. This was calculated by applying the state requirement for librarians and media

specialists to a prototypical school with 500 students. The requirement in the standards is a .5 FTE for schools with fewer than 300 students; 1 FTE for schools with 300 or more students; and 1.5 FTE for schools enrolling 1,500 or more students. The number of schools in each of those categories was used to compute the average FTE for schools in the state.

Table 8 compares the matrix number for librarians and media specialists with the average number in the 74 sample schools.

Table 8.

Librarians and Media Specialists					
Staff	Matrix Number	Sample Average	Percent More or Less than Matrix	Schools At or Below Matrix Number	Schools Above Matrix Number
Librarians and Media Specialists	0.8	1.5	87.50%	16	58

The average number of librarians and media specialists in the sample is almost double the staffing level established in the matrix and required by state standards. Additional analysis of the schools that staff at a higher level than the matrix is provided in Volume 2.

e. Student Services

The matrix established staffing for student services at a level of 2.5 positions. These positions include guidance counselors, nurses, speech therapists, social workers, psychologists, and family outreach workers. State standards require one counselor per 450 students, or approximately 1.11 per 500 students. State law requires one school nurse per 750 students if funding is available, or .67 per 500 students. This leaves approximately .72 positions for the other services.

Many of the schools surveyed indicated that they had contracts for some of these services. Support in these areas was available to students, but the expense to the school was determined by the use of the service. Other schools indicated that the district either had a student service worker on staff or contracted with a student service worker who was shared by all schools in the district. Despite efforts during the site visits to confirm how the information was prepared, inconsistencies in the reporting methodology may skew the results, which are shown in Table 9.

Table 9.

Student Services Staff: By Position					
Staff	Mean	Average Difference	Min.	Max.	Percent Schools With Zero
Attendance Officer	0.25	0.60	0	2.70	78.4%
Guidance Counselor	1.59	0.72	0	4.72	1.4%
Health Assistant	0.09	0.36	0	2.07	93.2%
Nurse	0.92	0.77	0	4.70	5.4%
Parent Advocate	0.14	0.38	0	2.44	75.7%
Psychologist	0.13	0.37	0	2.70	77.0%
Social Worker	0.18	0.49	0	2.45	77.0%
Speech/Phys/Occupational Therapist	1.07	1.77	0	13.71	20.3%

As shown in the table above, approximately three-quarters of the schools reported having no attendance officer, parent advocate/community liaison, psychologist, or social worker. Psychological and social work services generally are contracted with a community agency or provided by an educational cooperative. An attempt was made to gather information on the number of district and cooperative student service staff available to schools. However, very few schools reported on district and cooperative staff.

Nevertheless, the data provide some insight into how schools provide student support in some of the social and health needs areas. Table 10 compares the matrix number for student services personnel with the average number in the 74 sample schools.

Table 10.

Student Services Staff					
Staff	Matrix Number	Sample Average	Percent More or Less than Matrix	Schools At or Below Matrix Number	Schools Above Matrix Number
Student Services	2.5	10.6	324%	20	54

The average number of student services support staff in the sample is more than four times the number funded in the matrix. Still 20 schools — over one-fourth of the sample — have fewer positions than what is funded in the matrix. Additional analysis of the schools that staff at a higher level than the matrix is provided in Volume 2.

f. Total Non-Administrative Pupil Support Personnel

The matrix established total staffing for non-administrative pupil support personnel at a level of 33.665 positions. This includes classroom teachers, instructional facilitators, assistant principals, special education teachers, librarians, media specialists, and student service professionals, such as counselors and nurses.

Table 11 compares the matrix number for total non-administrative pupil support staffing with the average number in the 74 sample schools.

Table 11.

Total Non-Administrative Pupil Support Personnel					
Staff	Matrix Number	Sample Average	Percent More or Less than Matrix	Schools At or Below Matrix Number	Schools Above Matrix Number
Total Non-Administrative Pupil Support	33.665	50.877	51.27	13	61

The average number of personnel in the sample is higher than what is required by state standards or funded in the matrix. However, 17.6% of the schools have fewer personnel than what is funded in the matrix.

The vast majority of schools had more non-administrative pupil support than the matrix funds, which may be the result of lower teacher salaries or additional money beyond the state foundation funding. Schools that pay a lower average teacher salary than the

matrix funds should be able to afford more staff than specified in the matrix. Or some of the additional staffing may be funded with federal money or the extra state money schools receive. NSLA, declining enrollment, and growth funding are all available sources of state money for pupil support personnel. (The use of NSLA funding for across-the-board teacher salaries or bonuses is discussed later in this volume.) If foundation funding were raised to the point of covering all personnel, other sources of state funding for personnel would be duplicative. Additional analysis of the schools that staff at a higher level than the matrix is provided in Volume 2.

3. School-Level Administration Personnel

Principals and their building-level clerical support are correctly considered the glue that holds a school together. Principals must provide the operational management and instructional leadership to make schools run smoothly and to improve student achievement. The duties completed by school clerical personnel are too numerous to list completely, but they include record-keeping, answering phones, managing the office, and serving as liaison to parents.

a. Principals

The matrix established staffing for principals at a level of one per 500 students. Standards require that every school employ at least a half-time principal, and schools with 300 or more students must have a full-time principal.

Table 12 compares the matrix number for principals with the average number in the 74 sample schools.

Table 12.

Principals					
Staff	Matrix Number	Sample Average	Percent More or Less than Matrix	Schools At or Below Matrix Number	Schools Above Matrix Number
Principals	1	1.6	60%	22	52

The average number of principals in the sample is higher than the staffing level established in the matrix. Additional analysis of schools that staff at a higher level than the matrix is provided in Volume 2.

Picus concluded in the 2006 study that although state standards require one principal per 300 students, funding should support one principal for a school of 500 students. Picus reasoned that the actual salaries paid in smaller schools are typically low enough that the salary funding provided in the matrix is adequate even for schools with fewer than 500 students. Moreover, the salary level for principals was increased significantly in the 2007 matrix update.

b. Clerical

Clerical support is not required by state standards. However, the legislature believed that, as a practical matter, there is a clear need for clerical support. Therefore the matrix established staffing for clerical support at a level of one position per 500 students.

Table 13 compares the matrix number for clerical support with the average number in the 74 sample schools.

Table 13.

Clerical Support					
Staff	Matrix Number	Sample Average	Percent More or Less than Matrix	Schools At or Below Matrix Number	Schools Above Matrix Number
Clerical support	1	3.3	230%	10	64

The average number of clerical positions is more than three times the staffing level established in the matrix. Additional analysis of schools that staff at a higher level than the matrix is provided in Volume 2.

The remainder of the report presents expenditure data specific to the matrix line item or categorical fund when it is available. Data was retrieved from the COGNOS warehouse for this purpose. Where possible, the coding used for the data is provided. The term "combined" refers to the combination of multiple district defined fields. Funds 1 and 2 were used to limit expenditures as closely as possible to foundation funding however, some other sources of funding are included in those two funds.

4. Technology

Current Setting

Arkansas ranked 13th in the nation in the 2008 Technology Counts report produced by *Education Week*. In 2007, schools spent \$24.9 million statewide on technology, including administrative technology services. This equates to approximately \$54.15 per student in 2006-07, compared with \$185 funded in the matrix. The matrix provided \$220 per student in technology funding for FY 2007-08, which was a \$35 increase from \$185 in 2006-07. For FY 2008-09, technology funding was reduced to \$201 per pupil due to a decline in the price index for that sector.

Table 14.

2006-07 Technology Expenditures			
	Instruction-Related Technology 2230	Other -Combined-	Totals
Total Expenditures (in millions)	\$19.1	\$5.8	\$24.9
Expenditures Per Student	\$41.61	\$12.54	\$54.15

In a recent discussion on reducing the achievement gap, Ms. Kati Haycock, president of The Education Trust, stated that while technology can be a highly effective tool in reducing the achievement gap, it cannot be just "bolted on." Technology must be ingrained in the education system as a way of doing business. If equipment is added but processes and teaching styles remain unchanged, the technology will have no effect.

In its written comments, the Arkansas School Boards Association stated, "Technology purchases are wasted unless school personnel receive the training and support

necessary to build their knowledge and comfort levels to successfully use technology in their instruction."

School technology in Arkansas is used for an assortment of purposes, including:

- Student self-directed learning and research
- Student career vocational programs, such as the EAST program
- Distance learning
- Teaching an academic subject
- School administrative tasks

ADE Technology Plan: 2008-2012

ADE has produced a state technology plan that makes schools' eligibility for some technology funding contingent on their development of a comprehensive technology plan (ADE, 2008, p. 9). The components of those district plans, along with professional development outcomes, are outlined in the state technology plan. Critical issues related to the use of technology for professional development are discussed with specific recommendations. The district plan will provide a framework for technology use and management in the years ahead.

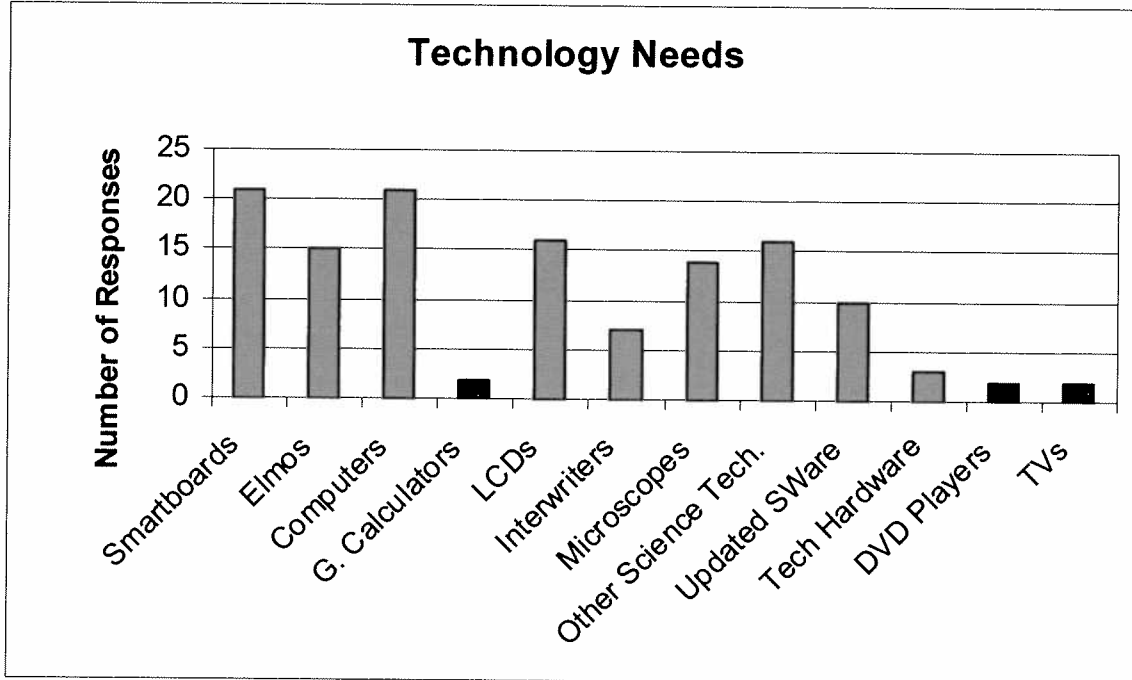
Glossary of Common Educational Technology Equipment

- Smartboard - interactive, electronic whiteboard that can enhance instruction and learning.
- ELMO projector - a device that projects three dimensional objects on a large screen for the entire class to see. It is also referred to as a document camera.
- Navigator System - system that provides wireless communication between students' graphing calculators and the teachers' computers. It allows for real-time formative assessment in the classroom and sometimes used with graphing calculators.
- LCD projector - a type of video projector used for displaying video, images, or computer data on a screen or other flat surface.
- Interwriter - patented interactive, electronic white board with wireless options available.
- Graphing calculator - calculators capable of advanced math and science calculations.

Site Visits

Of the 74 schools surveyed, 21 indicated a need for Smartboards and computers. Fewer schools indicated a need for other types of technology. Chart 1 reflects the percentage of districts lacking one of the other three types of technology.

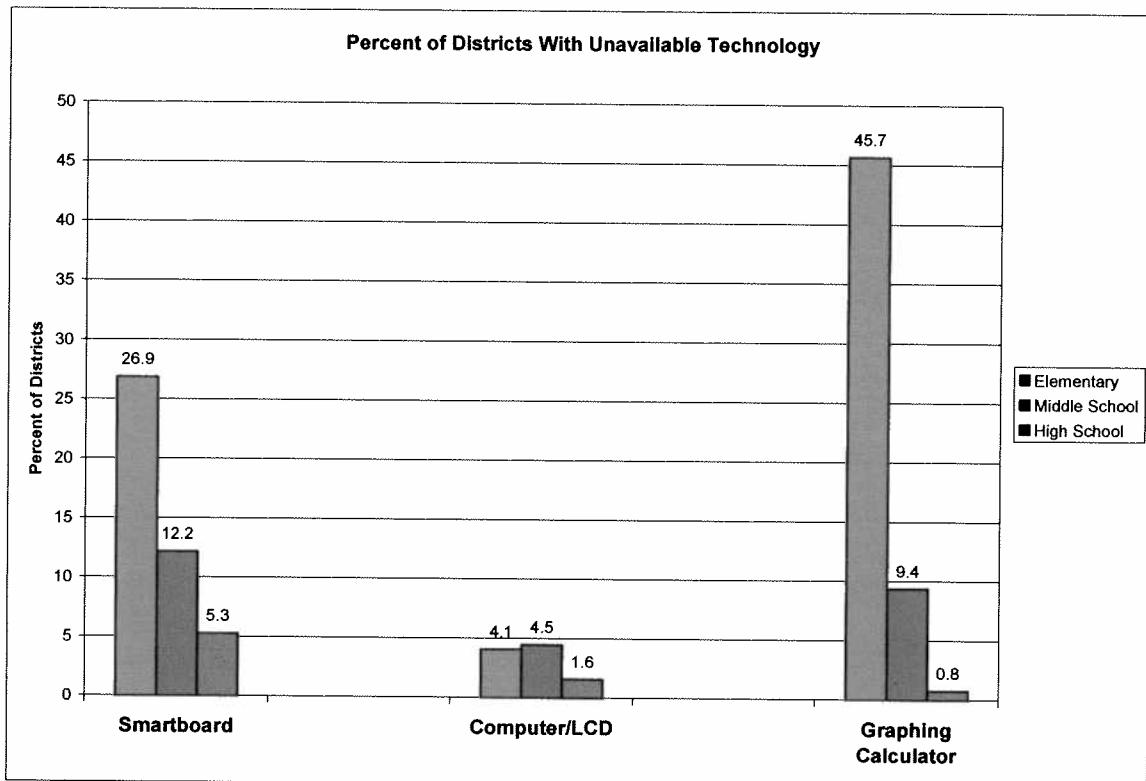
Chart 1.



District Survey

Superintendents were asked in the district survey to indicate the availability of the following technology in elementary, middle, and high schools: 1) Smartboards; 2) computers with LCD projectors; 3) overhead projectors; 4) graphing calculators; and 5) TVs, DVDs, etc. All districts had overhead projectors, TVs, and DVDs. Chart 2 reflects the percentage of districts lacking one of the three other types of technology.

Chart 2.



Responses from districts, on average, indicate that they have at least some access to the technology studied. However, there is considerable variability among districts in availability of certain types of technology, especially Smartboards. Graphing calculators are primarily used in middle or high schools.

Other Funding

In addition to the matrix funding for technology, school districts collectively received an additional \$125,000 in state funding for distance learning, according to the *Department of Education Grants Summarized by the Division of Legislative Audit for the year ended June 30, 2007*. School districts also received a total of \$3,284,566 in federal funding from the Enhancing Education Through Technology State Program. Those two sources totaled \$3,409,566 statewide, or \$7.45 per student. The ADE provides grants through the Qualified Zone Academy Bonds program which can be used for technology. A total of \$1,715,000 is available after the December 2007 allocation cycle. Site-visit interviews revealed that schools use state NSLA funding and federal Title I for technology. The E-Rate program is another source of technology funding.

One superintendent in a site visit stated that technology is the first thing to go when there are budget concerns. Even in his relatively wealthy district he would prefer that any additional technology funding be provided as restricted funds. Some school districts have taken the step of having a dedicated millage for school technology. These additional funding sources are important in assessing the adequacy of funding for technology needs. Additionally, the Department of Information Services recommended that schools' computers be purchased through a statewide volume pricing mechanism rather than by individual districts negotiating prices.

Technology Components

While there is substantial funding currently available for technology, technology costs need to be re-evaluated. Anticipated costs include updating computer hardware to handle VISTA — an updated operating system — and installing software designed to run on that operating package. The declining index utilized for the previous matrix focused on personal computers and printers. Information from the Department of Information Services report, *Education in Arkansas Technology Assessment, 2008* provided additional documentation of needs prior to the 2009 legislative session. The 2006 Picus report considered the following components in the recommendations for funding levels for technology: 1) computers and a replacement cycle for them; 2) operating system and other non-instructional software; 3) network equipment, printers, copiers, and instructional software; 4) additional hardware; and 5) a .5 FTE technology assistant in the instructional facilitators line item. The report also recommended 1 FTE technology coordinator in the central office line item. There is a detailed discussion in that report of the components of each of the categories.

Technology Usage

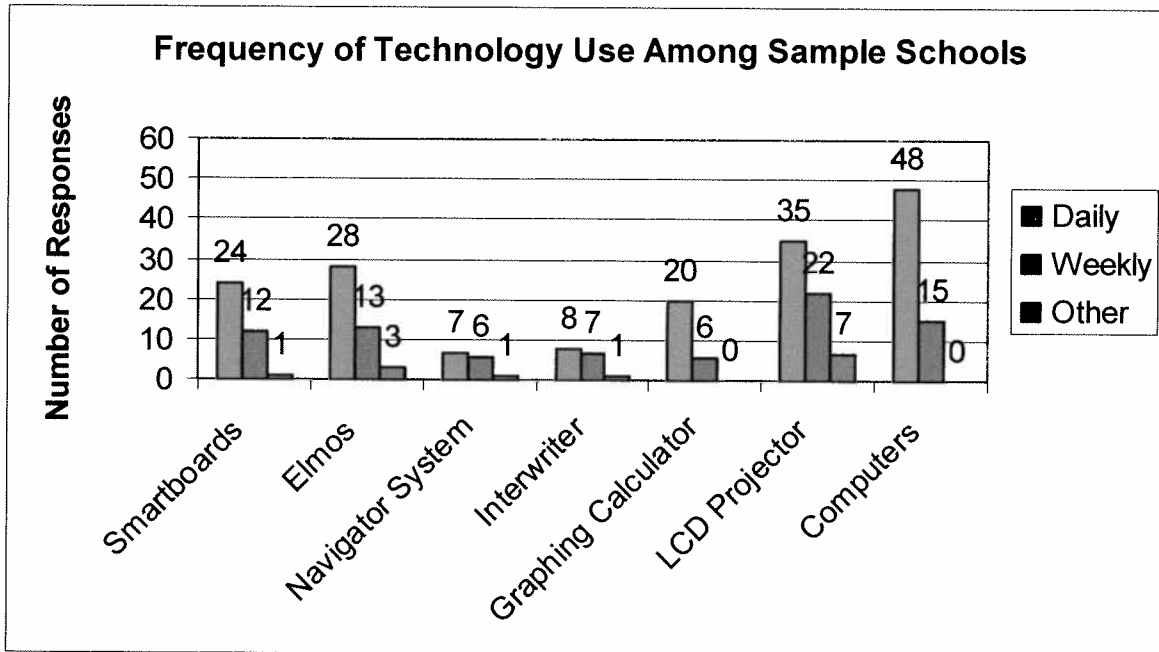
Table 15 shows the number of schools that reported using the listed type of technology equipment. Students and teachers use computers and graphing calculators. The other technology items listed are primarily used by teachers for the presentation of academic lessons.

Table 15.

Technology Usage			
Technology Item	Yes	No	No Response
Computers	72	0	0
ELMO Projector	51	21	1
Graphing Calculator	29	39	3
Interwriter Electronic Tablet	18	45	6
LCD Projector	71	1	2
Navigator System	14	49	7
Smartboard	42	28	3

Chart 3 shows how frequently schools use the technology items listed in Table 15. The data comes from information given by school officials during the school site visits.

Chart 3.



ACSIP

Schools describe a variety of technology improvement efforts in their Arkansas Consolidated School Improvement Plans (ACSIP). Some schools say they plan to purchase computers, software, hands-on manipulatives such as games and puzzles or other educational tools, such as Smartboards or ELMO projectors. Others say they will hire computer lab staff or extend the hours of the computer lab to allow more student use. Some schools plan to send low achieving students to a computer lab to use self-guided software for additional math and literacy instruction, instead of sending them to special education or allowing them to take an elective. At least one elementary school planned to purchase and install three cameras to prevent the use of drugs, alcohol and violence on campus.

In the ACSIP plans, most actions involving technology are fairly specific. For example, one school said it planned to use Title III funds "to purchase 4 computers as well as related materials and supplies associated with implementing the READ 180 program for ESL students." Others are less focused. For example, a school said all teachers "will be provided training designed to enhance their skills and competencies to provide effective

instruction to individuals and groups who have weaknesses preventing performance in Literacy."

It is also difficult to tell from the ACSIP plans how much money individual schools are spending on technology. Some technology funding is noted in a district's ACSIP plan, not the individual school's ACSIP plan. In a sample of six ACSIP plans, the amount of school funding dedicated to technology ranged from \$13,248 at one school to \$152,878 at another.

5. Instructional Materials

Current Setting

In 2007, schools statewide spent \$92.1 million on instructional materials. This equates to approximately \$201 per student. The matrix funded \$160 per student for instructional materials for FY 2007-08, which was a \$108 decrease from \$268 in 2006-07. The actual per student expenditure was 25% more than the 2006-07 matrix funding. The amount was increased to \$163.20 for FY 2008-09. The funding reduction was consistent with the 2006 Picus report's recommendation for instructional materials.

Table 16.

2006-07 Instructional Expenditures						
	Textbooks 66410	Library Books 66420	Periodicals 66430	Audiovisual Materials 66440	Total General Supplies & Materials	Total
Total Expenditures (in millions)	\$35.9	\$3.7	\$0.7	\$0.4	\$51.4	\$92.1
Exp. \$ Per Student	\$78	\$8	\$2	\$1	\$112	\$201

Picus Report

The 2003 Picus report stated, "Based on recommendations in other states, the Committee recommends that each school be provided with \$250 per pupil for instructional materials and supplies." (Odden, Picus, & Fermanich, 2003, p. 40). In 2006, Picus recommended \$160 per student for instructional materials, basing the reduced amount on pricing for these same materials in other states. Table 17, which is based on extensive research, shows how Picus calculated that line item (Odden, Picus, & Goetz, 2006, p. 44). (The 2006 calculation included \$25 for formative assessments, but that item was not included in the matrix and has been omitted from the table below.) The Picus recommendation significantly reduced the previous matrix funding for this line item. The recommendation consisted of three items. The funding for library collections, as shown in the table below, is above the national average. The textbook amount is based on an assumption that one textbook per student would be purchased each year under the current six-year adoption cycle. Finally, elementary schools included an additional \$20 per student to cover the costs of the elementary teacher fund. This fund provides \$500 for each elementary school teacher for the purchase of instructional materials.

Table 17.

Instructional Materials Expenditures			
	Elementary School	Middle School	High School
Library Materials	\$20	\$20	\$25
Textbooks & Consumables	\$120	\$120	\$150
Elementary Teacher Materials	\$20		
Total Instructional Materials	\$160	\$140	\$175

Textbooks

The requirements for purchasing textbooks are contained in A.C.A. 6-21-401 et. seq. Schools must provide all textbooks and other instructional materials to students in grades K-12 without cost. Districts may select their own textbooks, or they may select books from the state-approved list.

ADE reports that no district has been cited for violations concerning instructional materials in the last two years. The cost of textbooks has clearly increased over the last few years, but schools could curb those additional costs by investing in electronic materials. At one site visit, a superintendent suggested that costs could be reduced substantially if ADE would require schools to replace all or some textbooks with electronic media. He stated that such a state requirement would compel textbook manufacturers to adapt. Individual districts do not have the purchasing power to influence manufacturers. The State Board of Education has been charged in statute A.C.A. 6-21-404 (a)(3) to "Do whatever else may be necessary for the general welfare of the public school textbook and instructional materials system in order to acquire the items at the lowest possible cost."

Library Materials

State standards require a minimum of 3,000 volumes or eight books per student, whichever number is larger. ADE reports that no district has been cited for violations concerning libraries in the last two years.

Science Equipment and Supplies

Some elementary schools visited had no science lab or equipment. In past years, the lack of science equipment at that level was not a top concern for educators and policy makers. However, in 2007-08 school year, fifth grade students participated in benchmark testing in science for the first time. Additionally, new content standards require that "a minimum of 20% of instructional time must be spent in inquiry and conducting hands-on investigations."

Additional Instructional Materials

Along with textbooks, the instructional materials line item includes textbook costs, workbooks, worksheets, and teaching aides, such as math manipulatives and science supplies. The 2006 Picus report also included \$20 per pupil for elementary schools to ensure that each elementary teacher had \$500 for the purchase of instructional materials.

Formative Assessments

The 2006 Picus report also recommended funding \$25 per pupil for formative assessment in the instructional materials line item. A February 21, 2007, Governor's letter requested the removal of this item and read: "Since the original ALC/JBC recommendation was made, it has been determined that formative assessments need to be studied for another biennium prior to participation in the program." In the interim, ADE asked Dr. Margaret Heritage, a national expert, to study the issue. Dr. Heritage met with

the House and Senate Interim Committees on Education and then participated in a two-day workshop with district personnel, teachers and ADE staff. Her review emphasized that formative assessments are not just another product for schools to buy. Formative assessment is an educational technique or process for continuous evaluation of students. Dr. Heritage also stated that professional development programs should reflect the view that continuous assessment is a method of teaching, not an add-on.

The Arkansas Association of Educational Administrators (AAEA) in its written testimony presented to the committee on April 9, 2008, stated that the association members "recognize the amount presently spent on Formative Assessments does not reach the level recommended by the Odden/Picus study." The AAEA provided data showing that districts actually spend anywhere from \$6 per student to \$24 per student. The data also showed that some districts develop their own in-house assessments. The AAEA also indicated that "Section 11-E of the monitoring rubric is used to evaluate the Arkansas Consolidated School Improvement Plans that further requires school districts to have evidence of a Formative Assessment" (AAEA, 2008, p. 10). However, ADE stated in follow-up, "We don't require districts to have formative assessments, since it is not funded in the matrix. We don't have a requirement."

Site Visits

During the site visits the following needs were identified. Elementary schools said they needed Accelerated Readers and other leveled reading materials. Also, with the addition of the science benchmark exams, some schools said they need additional microscopes and updated science reading materials.

In middle schools through high schools, the needs for science materials, labs, and equipment become more pronounced and specific. One school indicated a need for water and gas lines in the science lab. Schools generally indicated they had adequate fiction materials for their libraries, but would like to update and expand their non-fiction materials and electronic databases and research materials.

During the site visits, schools answered questions about the frequency of formative testing. The responses are shown in Chart 4. Chart 5 shows the companies supplying formative testing materials to the sample schools. The companies reported by schools as making up the "Other" category include Saxon Assessments, Stanford Norm Referenced Tests, Iowa, ACTAAP, Benchmark Released Items, and Triand. Some schools did not respond to these survey questions, while others provided more than one response.

Chart 4.

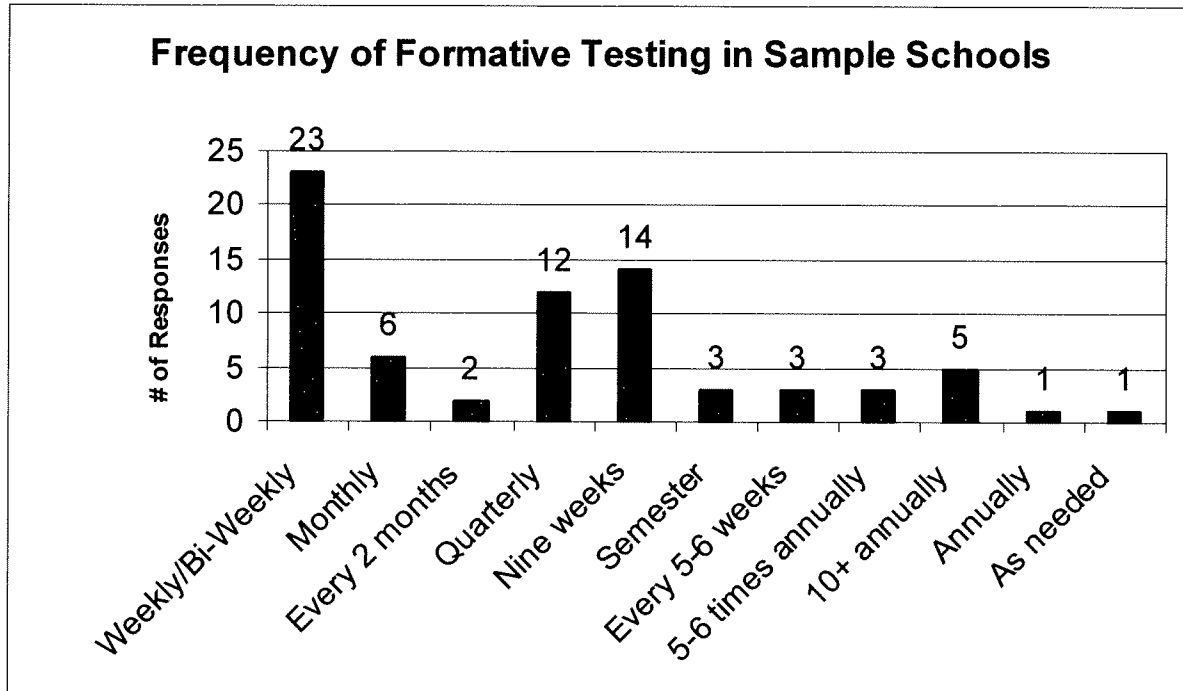
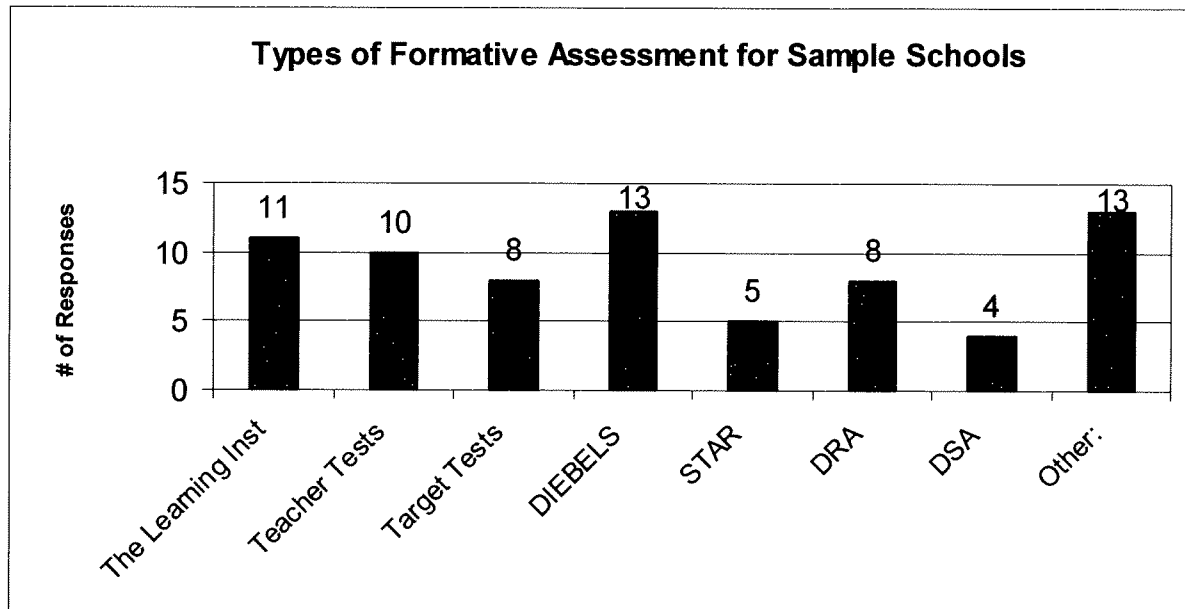


Chart 5.



6. Extra Duty Funds

Current Setting

Schools use extra duty funds to pay stipends for teachers who coach and who supervise after-school clubs or other extracurricular activities. In 2007, schools spent \$55.3 million statewide on extra duty pay. This equates to \$120.62 per student. The matrix provided

\$50 per student in extra duty funding for FY 2007-08, which was a \$47 decrease from \$97 in 2006-07. The amount was increased to \$51 for FY 2008-09.

The extra duty expenditure data is developed by ADE from a calculation that includes regular salaries, coaching salaries, coaching Full-Time Equivalencies (FTEs), and benefits that are not completely known. The districts' reported FTEs pertaining to extra duty pay is very inconsistent due to the part-time and varied nature of most extra-curricular assignments. However, the total statewide expenditures pertaining to extra duty pay and benefits, and therefore the per-student cost, appears more reliable. The extra duty salary data includes all pay to licensed personnel that is allocated to athletic and non-athletic extra-curricular job assignments. This pay normally is in the form of stipends and additional contract days but also would include extra-curricular assignments occurring during the school day and compensated in accordance with the teacher salary schedule.

Picus Report

The 2006 Picus report recommended \$100 per student, but that recommendation was based on an earlier miscalculation in the Bisbee matrix, which inflated the actual cost of extra duty pay. The calculation was corrected in 2007 by applying Picus's 2003 recommendation to the actual FY 2006 count of elementary, middle, and high schools. That calculation resulted in a per student cost of \$48.84, which was rounded to \$50 for 2007. The 2006 Picus report indicated that schools actually spent \$215 per student of extra duty pay in 2004-05, which included \$191 or 89% for athletics. The discrepancy between the \$215 figure and the \$100 recommended by Picus might be that the \$215 is a calculation of total athletic and extra-curricular expenditures, not just the extra-duty pay given licensed personnel. If so, some of that \$215 would be under supplies and materials, maintenance, transportation, etc.

Extra Duty Pay Level

Teachers' contracts contain pay for extra duty activities, which is included in average teacher salary calculations for the Annual Statistical Report (ASR) prepared by ADE. The teacher salary calculation used in the original Bisbee matrix was based on the ASR data at that time and therefore the matrix would have had extra duty pay in the teacher salary from that point forward. Does the matrix line item for extra duty pay duplicate funding already provided through the teacher salary calculations? Because the average teacher salary in the 2006-07 matrix is below the average teacher salary in the ASR for that same year, there should be no duplication at this time. If the matrix average teacher salary is raised in the future to the same level as the average teacher salary in the ASR, then the extra duty pay line items would be duplicative.

Another issue to review is the amount of benefit received from athletic expenditures compared with academic expenditures. Should sports coaches be reimbursed through the adequacy funding formula at the level of academic classroom teachers or two or three times that level, as some schools believe is necessary? One option would be to reimburse extra duty pay at the same level or at a reduced level from the average teacher salary and allow additional compensation for those duties from local mills (those above 25 mills), activity fees, gate receipts, etc.

7. Supervisory Aides

Current Setting

Supervisory aides include staff for bus duty, lunch, and recess supervision. Coding is being added for 2007-08 that will permit expenditures for this item to be identified. Therefore expenditure information on supervisory aides is not available for 2006-07. The

matrix provided \$49.35 per student to pay for supervisory aides for FY 2007-08, which was a \$12.35 (33%) increase over the \$37 provided in 2006-07. The amount was further increased to \$50.35 for FY 2008-09.

Picus Report

In its 2006 report, Picus recommended \$98.70 per student for supervisory aides. That amount was intended to cover the cost of two aides at a salary of \$24,676 each. However, when the matrix was developed that year, the General Assembly determined that one aide was sufficient and significantly increased funding for the supervisory aide over the 2005 matrix funding level for supervisory aides. The state standards do not require any aides.

8. Substitutes

Current Setting

In 2007, schools spent \$25.4 million statewide on substitutes. This equates to approximately \$55.39 per student. The matrix provided \$59 per student for substitute pay for FY 2006-07, 2007-08, and 2008-09. This results in a daily substitute pay of \$87.63 including benefits or \$71.83 without benefits. Table 18 shows the current expenditures.

Table 18.

2006-07 Substitute Expenditures							
	K	Elem. Schools	Middle Schools	High Schools	Athletics	Other Combined	Totals
Total Expenditures (in millions)	\$.9	\$10.7	\$4.9	\$7.2	\$.1	\$1.6	\$25.4
Exp. \$ Per Student	\$1.92	\$23.38	\$10.80	\$15.61	\$.26	\$3.41	\$55.39

Picus Report

The 2006 Picus report recommended paying substitutes \$100 per day, plus benefits, but Picus stated that the actual amount spent on substitute teachers was much less. The average daily pay for a substitute teacher was below the daily wage of a building custodian. The matrix calculation was based on an average of 10 days per teacher. It is not intended to cover substitutes for other school personnel.

Required Staffing

ADE rules and state law require a substitute who teaches more than 30 days to have a bachelor's degree or be licensed to teach. The only requirement for all other substitutes is a high school diploma or Graduate Equivalent Degree (GED).

The AAEA, in its written comments, requested funding to pay substitutes for school secretaries, custodians, and teaching aides. This is not a common practice in the governmental or business sectors, nor is it required by state standards.

District Survey

Districts reported that 82% of their substitutes are not licensed. The mean daily pay for was \$63.22 without benefits for licensed substitutes and \$51.80 for unlicensed substitutes. The range among districts was large, however, with at least one district reporting pay as high as \$185 for licensed substitutes.

Site Visits

Among the sample schools, 51% of substitutes were reported as non-degreed, 30% were reported degreed but unlicensed, and 19% were licensed. The sample schools paid an average of \$58.11 a day without benefits for licensed substitutes and \$51.94 for unlicensed substitutes. The range was also large among the 74 schools, with at least one school paying as much as \$203.47 for one or more licensed substitutes.

CARRY-FORWARD TRANSITION

The original Bisbee matrix had a line item called "carry-forward" that represented what might be best described as miscellaneous expenditures that are not otherwise identified in the matrix. Identifying and quantifying those expenditures more precisely was one of the primary purposes of the 2006 Picus report. Picus separated the carry-forward amount into three line items that included: operations and maintenance; central office expenses; and transportation expenses. In FY 2006-07 the matrix amount for the carry-forward was \$1,206. In 2007-08 the total amount for all three of the new line items was \$1,243. This calculates to a 3.1% increase in the first fiscal year of the biennium after one clerical position was relocated to the school-level staff. In 2008-09 that amount increased again to \$1,250.50.

9. Operations and Maintenance

Current Setting

In 2007, schools spent \$354.7 million statewide on operations and maintenance. This equates to approximately \$773 per student. Operations and maintenance was first established as a separate amount within the carry-forward in FY 2007-08. The matrix provided \$581 per student for operations and maintenance for FY 2007-08 and FY 2008-09.

Table 19.

2006-07 Operations and Maintenance Expenditures			
	Salaries & Benefits 61000 & 62000	Other -Combined-	Totals
Total Expenditures (in millions)	\$153.3	\$210.3	\$354.7
Exp. \$ Per Student	\$334	\$439	\$773

The matrix level for operations and maintenance is based on a requirement in A.C.A. 6-21-808 (d)(1)(A) stating, "Each school district shall dedicate nine percent (9%) of its foundation funding exclusively to payment of utilities and costs of custodial, maintenance, repair, and renovation activities, which include related personnel costs, for public school facilities."

The matrix level for operations and maintenance was set at 9% of an amount that exceeded the foundation funding. When the General Assembly had to establish the operations and maintenance funding, the final foundation funding level had not been finalized. The legislature used an amount they knew would exceed the final foundation level to make sure the operations and maintenance funding level would be adequate. The result is that the amount for 2007-08 is 10.2% of the total matrix for that year and 10% of the total matrix for 2008-09.

2006 Picus Report

In the 2006 Picus report, operations and maintenance consisted of school-level custodial functions and district-level maintenance and grounds-keeping functions. Also included are utilities and facilities insurance. Using its methodology for a prototypical school district of 1,820 students, Picus calculated \$594 per student as the cost for operations and maintenance. The legislature decided not to follow this methodology, choosing instead to adopt the Facilities Partnership Program requirement that schools spend 9% of expenditures on operations and maintenance.

Site Visits

Table 20 shows the staffing that the 74 sample schools used for operations and maintenance.

Table 20.

Operations and Maintenance Staffing Adjusted to 500 Students				
Staff	Average	Minimum	Maximum	Percent Schools Reporting Zero
Custodians	4.56	0	15	1.4%
Maintenance/ Building Engineer	0.93	0	8	43.2%
Security	0.41	0	7.3	68.9%

Cost Considerations

AAEA provided extensive data indicating increased expenditures for salaries related to operations and maintenance; water, sewer, and garbage costs; property insurance; and energy costs. It is not possible to tell from the data provided if the increased salary costs are due to additional personnel or higher salaries. It is also unclear whether other higher costs are the result of additional consumption of utilities, including energy, or higher utility costs. Recently implemented facilities statutes now require districts to carry the proper amounts of property insurance and more closely monitor those provisions. It cannot be determined from the data available whether the increase in insurance expenditures is the result of new levels of coverage or an increase in the cost of existing levels of coverage.

The state might benefit from the development of statewide cost containment strategies for district utilities, including energy. One idea could be to provide incentive awards to the districts that are the best innovators for these types of strategies. Districts might utilize students to help identify methods to conserve resources by reducing consumption and recycling. This option would have fiscal benefits as well as environmental benefits.

10. Central Office

Current Setting

In 2007, schools spent \$172.2 million statewide for central office administration. This equates to approximately \$376 per student. Central office administration was first established as a separate amount within the carry-forward in FY 2007-08. The matrix provided \$376 per student for operations and maintenance for FY 2007-08 and increased that to \$383.50 in FY 2008-09. Table 21 shows the current expenditures.

Table 21.

2006-07 Central Office Expenditures			
	Central Administration	General Administration-	Totals
Total Expenditures (in millions)	\$94.4	\$77.8	\$172.2
Exp.\$ Per Student	\$206	\$170	\$376

Picus Report

The 2007-08 matrix amount was derived by modifying the personnel levels recommended in the Picus report. The Picus recommendation was based on a prototypical district of 3,500 students, but in Arkansas only 26 of the districts, or 11%, have 3,500 or more students. The salary levels were also adjusted to more accurately reflect Arkansas salaries. The Picus report recommended \$591 per student. The personnel structure is included in Appendix C.

District Salary Strategies

In its written comments, AAEA asserts that matrix increases for cost of living have not been applied to central office salaries and some of those salaries are paid based on the teacher salary schedule. However, the state's minimum teacher salary schedule was not increased at the same rate as the matrix average teacher salary. For example, in 2007-08 the minimum teacher salary schedule was increased by only 1%, compared with the matrix average teacher salary increase of 2% cited in the AAEA comments. Another area of districts' salaries that may require attention is the superintendent salary. As documented in Legislative Audit reports, *Arkansas Public Schools - Disclosure of Annuities and Life Insurance Policies (2006)* and *Arkansas Public School Districts - Superintendent's Salaries (2006)*, superintendent salaries, benefits, and arrangements for additional benefits exceed those of the teacher salary schedule. It is a district decision to pay for one position at these increased levels.

11. Transportation

Current Setting

The current funding matrix provides \$286 per student to fund K-12 student transportation. Pursuant to a request by a member of the House of Representatives, transportation costs and funding options will be addressed in a separate analysis to be presented to the House and Senate Interim Committees on Education at a later date.

CATEGORICAL FUNDING

Unlike foundation funding, categorical funding was not intended to be distributed for the benefit of all students. Three of the four categorical funds are intended for student populations with higher needs than the majority of students. These special needs groups include students in poverty, students who are not proficient in the English language, and students who need the additional assistance of an alternative learning environment. The fourth categorical fund type benefits students through the provision of professional development training for teachers.

12. National School Lunch Act (NSLA)

NSLA is currently used as the name of the Arkansas categorical funding program for schools with high percentages of poor students. The federal National School Lunch Act

measures for determining eligibility for free and reduced price school lunches are used as the measure of poverty for the Arkansas categorical funding program.

Current Setting

In 2007, NSLA expenditures totaled \$143,233,415.77. For a listing of districts and expenditures see Volume 2. The matrix provides three levels of NSLA funding per student eligible for NSLA benefits. The levels are based on each school's concentration of NSLA eligible students: less than 70%, 70-90% and more than 90%. Increases were made in the amount of NSLA funding for each level in each year of the biennium. This increased per-student funding will result in an estimated \$4 million dollar increase for FY 2007-08 and \$4.7 million for FY 2008-09.

Table 22.

NSLA Categorical Funding				
NSLA Level	FY07	FY08	FY09	Increase For FY 08 & 09
> 90%	\$1,440	\$1,488	\$1,488	\$48
70% - 90%	\$ 960	\$ 992	\$ 992	\$32
< 70%	\$ 480	\$ 496	\$ 496	\$16

In FY 2007-08, per student foundation funding was \$5,719. When combined with NSLA funding, a district receives either \$6,215, \$6,711, or \$7,207 for every NSLA eligible student. In addition some districts qualify for NSLA growth funding.

Purpose of NSLA Funding

A.C.A. § 6-20-2305(b)(4)(C) lists the eligible uses of NSLA funding: 1) classroom teachers, under certain guidelines; 2) before-school academic programs and after-school academic programs, including transportation to and from the programs; 3) pre-kindergarten programs coordinated by the Department of Human Services; 4) tutors, teachers' aides, counselors, social workers, nurses, and curriculum specialists; 5) parent education; 6) summer programs; 7) early intervention programs; and 8) materials, supplies, and equipment, including technology used in approved programs or for approved purposes. Concerns related to the use of NSLA funding for "across the board" teacher salary increases and teacher bonuses have been discussed in other adequacy testimony. That issue is relevant to this study topic, but that research and discussion is not duplicated within this report.

Expenditure Analysis

The instructions for writing ACSIPs were modified to require schools to identify how they intended to use their NSLA funding. For the 2006-07 school year, \$143.2 million of NSLA funding was expended for the purposes shown in Table 23.

Table 23.

NSLA Expenditures By Purpose		
Coding	Purpose	Amount
001	Literacy Specialists, Coaches	\$28,021,882
002	Professional Development	\$3,212,907
003	Highly Qualified Classroom Teachers	\$32,426,727
004	Before- & After-School Academic Programs	\$3,554,692
005	Pre-K	\$4,475,398
006	Tutors	\$4,463,066
007	Teachers Aides	\$12,074,730
008	Student Support Specialists	\$14,946,477
009	Curriculum Specialists	\$5,762,954
010	Parent Education	\$1,066,244
011	Summer Programs	\$2,649,884
012	Early Intervention	\$1,614,946
013	School Improvement Plan	\$11,187,502
014	Other Activities Approved by ADE	\$17,173,139
Other	Primarily Local District Defined	\$602,867

District Survey

Schools frequently use NSLA funds to pay for after-school programs. The average number of after-school teachers reported was five per 500 students with one district reporting as many as 44 after-school teachers per 500 students. The percentage of schools reporting no after-school teachers was 21.2%. The districts reported an average of 2.19 licensed teachers serving as tutors (licensed tutors) per 500 students with one district reporting as many as 25.6. Fifty-two percent of the districts reported no licensed tutors. Districts reported an average of 1.29 unlicensed tutors per 500 students with 15.2 per 500 students being the largest number reported and 61.2% of districts reporting none. The wide range of responses could be the result of some confusion concerning how to classify extended learning time between after-school teachers and licensed tutors.

Site Visits

The sample schools reported an average number of 31.18 after-school students and 36.62 summer school students. A total of 2,214 students participated in the after-school programs of the 71 schools that responded to the after-school question. However, a large percentage (44.6%) reported no students. The 73 schools that responded to the summer school question reported a total of 2,673 students in summer school for 2007, but almost half of the schools (45.9%) indicated that they had no students in the summer.

Picus Report

The 2006 Picus report emphasized the importance of tutoring for at-risk students. The report states, "The most powerful and effective strategy to help struggling students meet state standards is individual one-to-one tutoring provided by licensed teachers (Shanahan, 1998; Shanahan & Barr, 1995; Wasik & Slavin, 1993)." (Odden et al., 2006, p 47). The report built an extensive case for this statement. Picus proposed additional funding, but its recommendation was based on all NSLA funding being used only for tutoring, additional ELL programs, extended-day programs and summer programs other than credit recovery programs. They also recommended that if such programs were implemented:

"... the state should monitor over time the use and effect of such programs. If such programs are implemented, we also recommend the state require districts to track the students participating in the programs, their pre- and post-program

test scores, and the specific nature of the after school and summer school programs provided, to develop a knowledge base about which after-school program structures have the most impact on student learning." (Odden et al., p. 58)

Additional Considerations

In testimony before the Adequacy Subcommittee, the Arkansas Education Association (AEA) said they thought NSLA should be used for its intended purpose (meaning not for district-wide teacher salary increases). The association also supported the compromise reached in Act 1590 of 2007 to reduce by 20% per year the amount of national school lunch state categorical funding that a school district is permitted to use for across-the-board teacher salaries.

Under a new transitional formula established under Act 272 of 2007, the NSLA funding provided a "smoothing" mechanism to ease the funding changes between established break points in the levels of eligibility for the funding. The transitioning formula triggered an increase in state categorical funding. The AAEA testified in support of the transitioning formula.

ACSIP

In their ACSIP plans, schools described using NSLA funds for a wide variety of efforts. Some say they plan to hire teachers, instructional facilitators, or instructional aides. Other anticipated NSLA expenditures include test study guide materials; instructional technology, such as ELMO projectors; and other educational resources. However, some schools did not include how they will spend NSLA funds in their school ACSIP plans. Department of Education staff indicate that anticipated NSLA expenditures are often detailed in the district's ACSIP plan, not the individual school's ACSIP plan. The ACSIP plans from six schools were reviewed in depth. Two of the six ACSIP plans examined did not note any anticipated NSLA expenditures. The other four schools planned to spend between \$60,378 to \$285,158.

13. Alternative Learning Environments (ALE)

Current Setting

In 2007, ALE expenditures totaled \$23 million. Only 204 districts reported expenditures. For a listing of districts and expenditures, see Volume 2. ALE categorical funding provided \$4,063 per FTE ALE student for FY 2007-08 and FY 2008-09. This is not expected to result in a need for increased funding in 2007-08. When ALE funding is added to the foundation funding for an ALE student, a school receives \$9,782 to provide services for that student.

FTE Changes

ADE has changed the way ALE students are counted by rule from a head count methodology to an FTE calculation. Also, the student-teacher ratio was lowered from 15 :1 to 12:1 for funding purposes. There is now a smaller ALE student count but a higher cost per ALE student. The result was that funding was held at a constant level between FY 2007-08 and FY 2008-09.

Additional Considerations

Some superintendents have indicated that they do not consider the \$5,719 foundation funding they receive for an ALE student to be available for that student's education but rather for an empty desk maintained for that student in "the regular program." In this case the money is not following the student, however it may be necessary for some portion of the \$9,782 to remain in the regular program for ALE students. AAEA believes that with ALE, the goal is to return the student at some point back to the regular

program, therefore, schools must maintain a slot (desk, seat, etc.) for that student in the regular program as well as in the ALE program. They further state that most of the effective ALE programs have separate counseling services, P.E., etc. This creates a greater cost beyond the \$4,063 categorical funding for ALE when a slot must be maintained in the regular program.

Site Visits

Only 44 of the 74 sample schools (59.5%) responded to the questions on Alternative Learning Education. Nine of the responding schools (20.5%) reported no ALE students during the current 2008-09 school year. Sixteen (36.4%) reported no ALE teachers, and 27 (61.4%) reported no ALE aides. Of those that responded, the average number of ALE students reported was 11.67 with a high of 58. The average number of ALE teachers was 1.25 with a high of 10. The average number of ALE aides was 0.51 with a high of four. Instead of having specialist ALE teachers, some schools have regular teachers who teach one section of their subject to ALE students.

During the site visits, nearly all elementary schools said they did not have ALE programs. Some middle and high schools said they did not have ALE programs because they did not have any ALE students. The variation in the programs that did exist was discussed in detail in a 2006 BLR report. ADE updated the subcommittee in April 2008, on the topic. Both reports identified several exemplary programs.

The recent site visits also revealed that there are still some differing opinions on what triggers a student's placement in an ALE program. ADE rules prohibit schools from placing a student in an ALE program based on "academic problems alone." The rules also prohibit schools from using the ALE program as punishment for disciplinary problems. Additional consideration of these issues is warranted.

Monitoring

ADE has enforcement capability related to ALE programs. Districts can be put on probation because of the statement in Standard XIV, 19.03 which states, "Each school district shall provide appropriate alternative program(s) for students who are identified as requiring such programs to continue their education." ADE can also withhold funding. Districts can meet the requirement by providing the program within the district or by participating in a program with other districts or the Educational Service Cooperative. ADE is to monitor, not less than every three years, to ensure that alternative learning environments have been established, are conducive to learning, and are providing intervention services designed to address individual needs of students.

14. English Language Learners (ELL)

Current Setting

In FY2006-07, ELL expenditures totaled \$9.9 million for 164 districts. For a listing of districts and expenditures see Volume 2. The FY 2006-07 ELL funding disbursed was \$4.6 million. The matrix provided \$293 per ELL student for FY 2007-08 and FY 2008-09. That amount was a 50% increase over the FY 2006-07 level of \$195. This increase is expected to result in an additional \$4 million in funding for FY 2007-08 and \$5.5 million in FY 2008-09.

Picus Report

In its 2006 report, Picus stated that "most ELL students are also included in the NSL counts." The Picus report also recommended that districts be encouraged "to use federal Title I resources for extra strategies not funded with state dollars." Depending on the concentration of students in poverty, schools can receive between \$6,508 and \$7,500 for each ELL student who is also NSLA eligible.

Site Visits

In the sample of 74 schools, there are 15 ELL teachers. Two-thirds of the schools reported having no ELL teachers. Another 17 schools (23%) reported a fraction of an ELL teacher, and only eight schools reported having one or more. Seventy schools (95%) reported no ELL aides, three reported one aide, and one school reported two aides.

Additional Considerations

AAEA stated that NSLA funding in addition to ELL funding is not adequate to meet the needs for these programs. However in some cases, districts have provided services to ELL students in a variety of innovative ways. The strategies these districts have used for exemplary programs could be developed into best practice recommendations and then an effort could be made to cost out some of these programs. Concerns regarding the difficulties in providing these services due to inefficiencies resulting from low numbers of ELL students could also be reviewed. One of the more unusual programs encountered during the site visits was in a large district where the majority of ELL students were assigned to one school regardless of their attendance zones. This strategy allowed the district to offer services more efficiently to those students. The role of Educational Service Cooperatives in supporting these programs could also be considered.

15. Professional Development (PD)

Current Setting

In 2007, PD expenditures totaled \$17,513,610.23 or \$38 per student, which was \$3.11 per student less than provided in the matrix in 2006-07. For a listing of districts and expenditures, see Volume 2. The matrix provided \$41.11 per student in FY 2006-07, FY 2007-08, and FY 2008-09. In 2005, the amount of PD funds per student was reduced from \$50 per student to the current level. The balance of that amount, \$8.89 per student, or about \$4 million, was set aside for ADE and AETN to use to develop statewide PD programs.

Additional Considerations

The rationale for providing funding to ADE for statewide PD development was that it would bring some efficiency to produce one-time training that all districts would be able to use. AAEA and many schools requested that the \$8.89 per student be returned to districts. The 2006 Picus report described PD as one of several necessary strategies for improving teacher quality. Picus also indicated that the quality of that training was essential to its benefit. Part of the original Picus recommendation of \$50 per student included funding for 10 additional student-free days for teachers to attend training. Those 10 days have been added into average teacher salaries in the current matrix. Picus also recommended that the state "have all districts align use of the federal Title 2 funds, which also are for professional development, with the district[s] and schools' overall professional development strategies." (Odden et al., 2006, p. 34) The 2006 adequacy report said, "fund balances for the professional development category are higher for the 2005-06 school year than for 2004-05," which also prompted the consideration to let ADE use a portion of the funding for statewide development of programs (Adequacy Subcommittee, 2007, p. 128).

Site Visits

The site-visit survey had several open-ended questions related to PD as well as some tables. Schools provided more feedback on this subject than on any other. However, the views ranged from one end of the spectrum to the other. The majority of the rankings for PD were satisfactory or above. Seven of the 74 schools ranked the PD they received below satisfactory, and three schools did not respond at all.

An area of concern for several schools was the funding that was allocated to ADE for the AETN statewide program. Only a small percentage of the sample schools said they use the AETN programs. Many reported problems with the technology and training style. However, some suggested that it is better this year. Others said they are using it for one

or two required training areas. Schools also indicated that they relied on it for teachers who were behind in completing their hours or who were on temporary leave, such as maternity leave. A few were complimentary of the programs.

Many schools seemed to think that the 60 hours was a sufficient number of hours to complete each year. A few schools felt there should be more than 60 hours required. Schools indicated a need for the district or school itself to determine the best level and type of PD for its teachers. Other suggestions included offering more PD in the summer to keep the teachers in the classroom during the year, removing the requirements of Parental Involvement and Arkansas History, and providing more money and opportunity for staff level input. Many schools requested more PD focused on specialty areas, allowing for time in the classroom to implement what they learned in workshops. One example that was offered was allowing 30 hours for workshops, then 30 hours in the classroom learning to utilize what they learned in workshops and conferences. A brief list of the remaining comments is provided below:

- Allow extra hours (if earned) to be carried over from one year to the next.
- Fund state/national conferences specific to grade level.
- Develop math programs similar to literacy programs.
- Provide funding for more technology resources.
- Stop legislating how to use state and federal dollars to fund PD.
- Provide flex days during the school year for PD.
- Remove restrictions on funding.
- Reduce the required number of hours and let the district decide what is best.
- Provide funding for Arkansas Ideas.
- PD needs to have more depth rather than offering only two hours on several topics that may not be relevant to a particular school.
- Provide funds for on-site staff development at each school.
- Continue the support for Arkansas Leadership Academy.
- Continue the support of standards-based PD for teachers, i.e., ELLA, ELF, Math Links, and Pathwise Mentoring program.
- Fund PD for teachers to attend national conferences.
- Provide funding for state mandated programs.
- Find funding for off-contract hours.
- Increase the number of co-ops to make them more accessible to rural districts.

PD activities take place in a number of venues. There are courses offered within the district, in-state, and out-of-state. Based on the responses to the BLR study, schools reported a slightly greater number of PD activities taking place in the state, but out of the district. Activities within the district were the second most common activity attended by teachers, followed by out-of-state activities.

ACSIP

Schools describe a variety of improvement efforts in their ACSIP plans. Some schools say they plan to send teachers to conferences, while others say they will hire instructional facilitators to provide in-house training. Some schools plan to provide

professional development through book studies or in professional learning communities. Others schools say they will purchase instructional materials.

The topics to be addressed through professional development also varied widely. ACSIP plans mentioned subjects ranging from how to develop a student Academic Improvement Plan, to how to use Accelerated Reader, to the basic concepts and strategies in the Comprehensive Literacy Program.

Most actions outlined in the ACSIP plans are fairly specific. For example, one school said it planned to use professional development funds "to cover the expenses of travel, meals, lodging, registration and substitutes for teachers to attend Literacy Lab training." Others are more vague. For example one ACSIP plan indicated that teachers and staff members "will be provided with training related to improving the achievement levels of students in grades K-12. Priority will be given to providing these persons with training in the requirements outlined by the law."

It is also difficult to tell from the ACSIP plans how much money is being spent on professional development. For some schools, the funding dedicated to professional development is noted in the district's ACSIP plan, not the individual school's plan. One school's ACSIP plan indicated that \$85,918 would be spent on professional development, while several schools did not indicate any funding dedicated to professional development.

Educational Strategies

The site-visit schools were also a representative sample of Adequate Yearly Progress (AYP) status. The chart on the next page shows that 38% of the site-visit schools were in school improvement, which equals the percentage of schools statewide in school improvement. To gather preliminary data, school officials were asked to provide information on the strategies they are using to improve their schools' achievement. The survey listed six strategies and contained a field for others to be listed. The results for the six strategies listed is provided below and a table with the additional strategies is contained in Appendix D. This is a small step forward to begin a more in-depth discussion on the use of resources that considers not just inputs and components but also outputs and the efficiency and effectiveness of the strategies by which they are achieved.

Table 24.

Educational Strategies	
Strategy	Number of Districts Using
Smaller Class Size	179
School Within a School	19
Comprehensive H.S. Redesign	26
High Schools That Work	50
America's Choice	21
Early College High School	52

Fund Balances and Athletics

A brief acknowledgement of two issues is made here for the sake of completeness since additional sources of funding for specific line items has been addressed. Most districts operate with what they consider to be prudent levels of fund balances. However, a standard percentage of fund balances for districts to maintain has not been established despite past efforts. The variance in the levels of fund balances carried by districts is large. The levels of those balances from the FY 2006-07 ASR are listed in Table 25.

2006-07 AYP School Improvement List
(Revised December 10, 2007)

School	Overall SI Status	Title I	School Title I Status	Combined Population Math	Combined Population Literacy	African American Math	African American Literacy	Hispanic Math	Hispanic Literacy	Caucasian Math	Caucasian Literacy	Economically Disadvantaged Math	Economically Disadvantaged Literacy	Limited English Proficient Math	Limited English Proficient Literacy	Students with Disabilities Math	Students with Disabilities Literacy	Met Standards Through Growth
MIDDLE SCHOOL	School Imp.: Year 2															✓	✓	
MIDDLE SCHOOL	School Imp.: Year 4															✓	✓	
HIGH SCHOOL	School Imp.: Year 4	✓	SWP	✓						✓		✓				✓		
HIGH SCHOOL	School Imp.: Year 2 MS	✓	SWP															
MIDDLE SCHOOL	School Imp.: Year 2 MS	✓	TAS			✓												
ELEMENTARY SCHOOL	School Imp.: Year 1	✓	SWP	✓			✓					✓						
MIDDLE SCHOOL	School Imp.: Year 1	✓	TAS													✓		
ELEMENTARY SCHOOL	School Imp.: Year 2	✓	SWP													✓		
HIGH SCHOOL	School Imp.: Year 3 MS	✓	TAS															
HIGH SCHOOL	School Imp.: Year 4			✓		✓		✓				✓						
ELEMENTARY SCHOOL	School Imp.: Year 4	✓	SWP	✓		✓	✓					✓						
HIGH SCHOOL	School Imp.: Year 4	✓	TAS	✓		✓	✓					✓						
HIGH SCHOOL	School Imp.: Year 4	✓	TAS	✓		✓	✓					✓						
ELEMENTARY SCHOOL	School Imp.: Year 3 MS	✓	SWP	✓			✓											
MIDDLE SCHOOL	School Imp.: Year 6	✓	SWP	✓		✓	✓					✓				✓		
ELEMENTARY SCHOOL	School Imp.: Year 4	✓	SWP	✓		✓	✓					✓						
JUNIOR HIGH	School Imp.: Year 3															✓		
ELEMENTARY SCHOOL	School Imp.: Year 4	✓	SWP															
HIGH SCHOOL	School Imp.: Year 2																	
ELEMENTARY SCHOOL	School Imp.: Year 1	✓	SWP				✓											
HIGH SCHOOL	School Imp.: Year 3	✓	TAS	✓		✓	✓					✓						
ELEMENTARY SCHOOL	School Imp.: Year 1	✓	SWP	✓		✓	✓					✓						

21 of the 74 (28%) sample schools are in School Improvement
 KEY: SWP = School Wide Program TAS=Targeted Assistance MS= Meets standards or
 (made adequate yearly progress) - school with remain at same year of school improvement
 29% of all Arkansas Schools are in School Improvement
 Data Provided by the Arkansas Department of Education

Table 25.

FY 2006-07 Fund Balances					
	Categorical Balance	Net Legal Balance	Building Fund Balance	Capital Outlay Fund Balance	Total Balances
Total District Balances (in millions)	\$36.2	\$563.1	\$420.9	\$32.8	\$1,053.0
Balances Per Student (in dollars)	\$78.7	\$1,224.5	\$915.3	\$71.3	\$2,289.7

The FY2006-07 4 Quarter average daily membership (ADM) was used for these calculations. In FY 2006-07, matrix per-student funding was \$5,662. The net legal fund balance of \$1,227 per student is 22%. The net legal fund balance ranges from \$31.05 or 0.55% per student to \$5817.6 or 102.75% per student. The district with 102.75% had a year's worth of foundation funding unspent. Additionally, some districts had large balances for other funds including a building fund balance of \$35.8 million and a large categorical fund balance of \$2.7 million. A listing by district is in Volume 2.

Additionally, COGNOS warehouse reports for investment income (codes 15000-15900) for 2006-07 reflect investment income of \$55.5 million statewide or \$120.94 per student. This amount varies widely among districts. The amount of funds invested to result in interest income at the highest levels would have to be quite large. For example, in Little Rock's 2006 audit, revenue of \$4.4 million is reported in interest. In Fort Smith's 2007 audit, revenue of \$1.6 million is reported in interest.

In written comments to the Adequacy Subcommittee, the AEA stated, "[T]he state must use the [fund balance] information to determine what policy decisions need to be made to ensure that districts are not growing fund balances at the expense of improving student achievement."

Another concern, that continues to arise is the level of spending on athletics. While most people agree that athletics and other extracurricular activities can have positive benefits for students, the level of spending for these students at the expense of academic expenditures has not been established. Universities have a cap on the amount of unrestricted education and general funds that they can spend on athletic programs (A.C.A. 6-62-803). No such cap exists in the K-12 environment. Another consideration for the spending of educational funds on athletics is that these programs do not benefit all students — only the students that make the team.

Summary and Options

The matrix is the basis for determining a level of foundation funding. It was not intended to reimburse schools for actual expenditures but rather to establish a level of funding that is adequate for Arkansas schools to meet standards and to provide a substantially equal opportunity for an adequate education to the state's public school students. Districts bear responsibility for operating in an efficient and effective manner that focuses first on adequate academic instruction for their students. The variety of needs for different districts and their student characteristics make it unlikely that all individual matrix line items will fit all schools equally well, which is why the matrix is not mandated. This study reviewed each line item of the matrix in an effort to identify how schools are

using these increased resources. Some of the most important results are summarized below.

Elective or PAM Teachers

School-level personnel salaries represent 69% of the FY 2008-09 matrix funding. The largest portion of those salaries are for core teachers and elective or PAM teachers. In 2006, Picus reported that 40% of school personnel were PAM teachers rather than 20% as Picus recommended and the matrix funded. Picus stated that a higher ratio of core teachers to elective or PAM teachers is needed to improve achievement scores. This BLR study found that 38% of school personnel are elective or PAM teachers. As can be seen in the detailed analysis found in Volume 2, 46% of middle school personnel and 40% of high school personnel are elective or PAM teachers.

Instructional Facilitators

The number of instructional facilitators has increased since the 2006 Picus report. In that report, Picus found that, on average, schools employed 0.45 of an instructional facilitator. This BLR study found that schools have, on average, 1.9 instructional facilitators, compared with the matrix funding for a minimum of 2. The numbers in the 2006 report may have been higher than reported due to confusion in the terminology for this position. This level of staffing for instructional facilitators is a positive step in school organizations. Picus recommended that it be pulled out of the matrix due to the apparent low number of instructional facilitators and the consultants' views about the importance of this strategy for improving achievement.

Carry-Forward

In 2007, the carry-forward for FY 2007-08 and 2008-09 was broken into three distinct funding components. A secretary position that was formerly in the carry-forward was taken out of that line item and added as its own line item in the school-level personnel section of the matrix. In addition to adding funding for that position in another area, the total funding for the remaining components of the three new line items was increased by 3.1%.

Fund Balances

The variance in the levels of fund balances carried by districts is large. For all districts, the net legal fund balance of \$1,227 per student is 22%. The net legal fund balance ranges from \$31.05, or 0.55% per student, to \$5,817.60, or 102.75% per student. The district with 102.75% had a year's worth of foundation funding unspent. Additionally, some districts had large balances for other funds including a building fund balance of \$35.8 million and a large categorical fund balance of \$2.7 million.

Education Funding Outside the Matrix

The matrix, which is the basis for the level of foundation funding, is not the only funding provided for an adequate education. It is not intended to cover all operational funding for schools. Other sources of funding available to schools are: state categorical funding, state growth funding, funding for declining enrollment, isolated funding, special needs isolated funding and other state grants from ADE; federal funding from a variety of federal programs; and in some cases, a portion of the local mills above state URT. Furthermore, some districts have substantial earnings from investment income and interest income on fund balances.

Options

The need for updating existing funding levels will not be addressed in this report. However, the Adequacy Subcommittee has several options for responding to concerns it may have related to the use of resources. The options are:

- Identify additional items (such as adding a secretary) to be included within a matrix line item.
- Move matrix line items outside the matrix to categorical to ensure that spending for those items is as intended.
- Mandate line item minimums for some components of the matrix such as technology.
- Mandate identified line items for only those schools with poor academic performance.
- Recommend incentives for certain expenditure reductions, such as reduced utility costs.
- Request additional review or study for an individual line item.

In closing, the state should assure itself that educational funding is being spent in efficient, innovative ways that promote the use of research-based educational strategies and does not continue to be spent on strategies that have not been confirmed by research.

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Appendix A

	Current FY07	FY08	FY09	Notes
Matrix Calculations				
School-Level Salaries				
Teacher Salary + Benefits	52,321	54,888	55,954	All teachers, secretaries, PAM teachers, librarians, instructional facilitators, special education teachers, counselors, etc., receive 2% increase each year.
Per Student Matrix Expenditure	3,516	3,695.6	3,767.4	
Principal Salary + Benefits	76,335	86,168	87,860	Principals receive 12.88% first year, then 2% second year.
Per Student Matrix Expenditure	153	172.3	175.7	
School-level secretary	0	34,751	35,415	One secretary added to school-level staff.
School-Level Salaries Per Student	3,669	3,937.4	4,013.9	Recalibration provides first-year increase in school-level salaries per student of 7.32%.
School-Level Resources				
Teacher Continuing Ed Pay (5 days)	96	0.0	0.0	Rolled into school-level salaries per student.
Technology	185	220	201	Declining index.
Instructional Materials	268	160	163.2	Accepts Picus recommendation less F.A.
Extra Duty Funds	97	50	51.0	Corrected weighted average.
Supervisory Aides	37	49.35	50.35	33% increase first year.
Substitutes	59	59	59	Kept flat due to site visit evidence.
School-Level Resources Per Student	742	538.4	524.6	Recalibration causes decrease.
Carry-Forward				
Operations & Maintenance	n/a	581	581	Includes school-level O&M personnel.
Central Office	n/a	376	383.5	
Transportation	n/a	286	286	Carry-forward now allocated to three components and first-year total increased 3.1% after moving secretary to school-level.
Carry-Forward Per Student	1,206	1,243.0	1,250.5	
Foundation Per Pupil Expenditures				
Retirement	5,620	5,719	5,789	One point of retirement benefit rolled into school-level salaries per student.
Matrix Foundation Per Student	42	0.0	0.0	
	5,662	5,719	5,789	Dollar increase per ADM.
		57	70	Per ADM % change in foundation
Incremental FY Cost in Millions				
		26.1	32.2	Assumes ADM of 457,900 & 460,400.
Collection Rate (98%) in millions				
		13.4	14.3	Corrects URT deficiencies.
Enhanced Funding in millions				
		23.3	16.6	Additional to adequacy.
Total				
		62.8	63.1	Incremental millions per fiscal year.

Appendix B

Random Sample Results

Congressional District	# in sample
1	20
2	13
3	20
4	21

<u>School</u>	<u>Statewide</u>	<u>Sample</u>
Elementary	53%	53%
Middle	19%	20%
High	28%	27%

Appendix C

Central Office

District ADM: 500
 Central Office ADM: 3500

<u>Superintendents Office</u>	<u>Positions</u>	<u>Costs</u>	<u>Per-Pupil</u>	<u>Associated Salary</u>
Superintendent	0.14	\$16,964	\$34	118,748
Asst. Superintendent	0.14	\$15,788	\$32	110,516
Senior Secretary	0.14	\$4,964	\$10	34,751
Senior Secretary	0.14	\$4,964	\$10	34,751
 <u>Business Office</u>				
Business Manager	0.14	\$7,848	\$16	54,940
Human Resources Manager	0.14	\$15,788	\$32	110,516
Senior Secretary	0.14	\$4,964	\$10	34,751
Payroll Clerk	0.14	\$4,964	\$10	34,751
Accounts Payable Clerk	0.14	\$4,964	\$10	34,751
 <u>Curriculum and Support</u>				
Director of Pupil Services	0.14	\$15,788	\$32	110,516
Director of SPED	0.14	\$15,788	\$32	110,516
Senior Secretary	0.14	\$4,964	\$10	34,751
Senior Secretary	0.14	\$4,964	\$10	34,751
Secretary	0.14	\$4,964	\$10	34,751
 <u>Technology</u>				
Director of Technology	0.14	\$15,788	\$32	110,516
 <u>Operations and Maintenance</u>				
Director of M&O	0.14	\$15,788	\$32	110,516
Secretary	0.14	\$4,964	\$10	<u>34,751</u>
			sum	1,149,543
Misc Per-Pupil Expenses		\$131,500	\$263	
Total Central Office		\$295,719	\$591	

Appendix D

Additional Educational Strategies from the Web Survey

- 21 Century Grant using Sylvan Model
- Seven college courses via Distance Learning
- Eight period days in Middle School and High School
- ALA School Support Group
- AR First Reading Interventions
- Arkansas Leadership Academy School Support
- Class Reduction through Title II-A and NSLA
- Effective Literacy and Reading First
- ELLA
- Everyday Math
- Breaking Ranks Training
- Technology-Based Strategies
- AR Comprehensive Literacy Program
- Reading Recovery
- Team Teaching with regular education/special education teacher
- Wall to Wall Academies and Charter Schools
- Professional Learning Communities
- Student Intervention Teams
- JEDI
- PBSS - Stop and Think
- Mastery Math
- Write Tools
- Reading First
- Early Literacy
- Secondary Vocational Center
- Good to Great
- Comprehensive Balanced Literacy K-5