



Research Report

The Relationship Between NSLA Funding and Expenditures, and Measures of Student Performance

December 10, 2012

Prepared for the
Senate and House Interim
Committees on Education



CONTENTS

Introduction	1
Background	1
Brief Orientation to Study Methods	4
Methodology	5
Data	5
Analyses.....	5
Findings	6
Table 1. Frequencies of 2011 NSLA %	6
Table 2. Differences in Mean Percentages Proficient or > ACTAAP Exams Between NSLA Funding Levels.....	7
Correlation Between NSLA Percentage and Student Performance	7
Table 3. Correlations Between Student Performance and NSLA % for 2006 and 2011	8
Linear Relationship Between NSLA Percentages and Student Performance	9
Chart 1. Linear Relationship Between 2011 NSLA % and % Proficient or > in Literacy (District Population)	10
Chart 2. Linear Relationship Between 2006 NSLA % and % Proficient or > in Literacy (District Population)	10
Chart 3. Linear Relationship Between 2011 NSLA % and % Proficient or > in Literacy (Low Income).....	11
Chart 4. Linear Relationship Between 2006 & 2011 NSLA % and % Proficient or > (Low Income).....	12
Chart 5. Linear Relationship Between 2006 & 2011 NSLA % and % Proficient or > (District Population)	12
Tests of Mean Differences in Student Performance for Low Income Students and for District Populations	13
Table 4. % Proficient or > for District Low Income in 2006 & 2011	13
Table 5. % Proficient or > for District Populations in 2006 & 2011	14
Table 6. Change in % Proficient or > Between 2006 & 2011 Low Income	14
Table 7. Change in % Proficient or > Between 2006 & 2011 District Populations	15
Summary of Changes and Gaps in Student Performance Between 2006 and 2011	15
Table 8. Changes in % Proficient or > from 2006 to 2011 and Gaps Between District Population and Low Income	15
Tests of Mean Differences in Performance for 4th and 8th Grade Students	16
Table 9. % Proficient or > for 4 th and 8 th Grade District Populations	16
Table 10. Change in % Proficient or > Between 2007 & 2010 in 4 th and 8 th Grade District Populations Literacy and Math	17
Student Performance According to Per ADM and per Low Income Student Count Total 2011 NSLA Expenditures	17
Table 11. Comparison of Mean % Proficient or > According to Per ADM Total 2011 NSLA Expenditures	18

Table 12. Comparison of Mean % Proficient or > Per Low Income Student 2011 NSLA Expenditures	19
Correlations Between NSLA Expenditures and Student Performance.....	19
2011 NSLA Expenditures	20
Table 13. Frequencies and Descriptive Statistics of NSLA Program Expenditures	22
Table 14. Frequencies and Descriptive Statistics of NSLA Program Expenditures	22
Correlations Between NSLA Program Expenditures and Student Performance	23
Comparison of Predictors of Student Performance	23
NSLA Fund Balances.....	24
Discussion and Conclusions.....	25
References.....	26
Appendix A. Correlations	27
Table A1. Correlations Between 2006 & 2011 Performance, Changes, Gaps, and NSLA Expenditures Funding	27
Table A2. Correlations Between Performance and NSLA Program	28
Table A3. Correlations Between Performance and NSLA Program	29
Table A4. Correlations Between Performance and NSLA Program	30
Appendix B. Correlations	31
Table B1. Correlations Between 2006 & 2011 Performance, Changes, Gaps, and Primary Demographics	31
Table B2. Correlations Between 2006 & 2011 Performance, Changes, Gaps, and Expenditures	32
Table B3. Correlations Between 2006 & 2011 Performance, Changes, Gaps, and Title 1 Expenditure Revenue	33
Appendix C. 2011-12 Fund Balances	34
Appendix D. NSLA Certification	39

INTRODUCTION

This study was initiated by a request from the House and Senate Interim Committees on Education. On October 8, 2012, the Committees passed a motion requesting the Arkansas Department of Education (ADE)

“...work with Dr. Brent Benda, Senior Research Specialist, Research Staff, Bureau of Legislative Research, to explore the use of a methodology for evaluating the impact of various NSLA funded interventions and to furnish a report to the House and Senate Interim Committees on Education by November 30, 2012. This report should also include a chart showing the NSLA fund balances for school districts as of June 30, 2012.”

About a week later, Dr. Benda and other Bureau of Legislative Research (BLR) staff met with Education Commissioner Dr. Tom Kimbrell and other Arkansas Department of Education (ADE) staff members to discuss potential approaches to a study that could be completed within the specified timeframe. This report, which examines the relationship between National School Lunch Act (NSLA) funding and expenditures on student achievement, is the result of those efforts. This report should be considered initial findings that can help guide further review.

BACKGROUND

National research has repeatedly shown a link between poverty and lower student achievement (e.g., Payne, 2005). To address this issue, most states provide additional funding to school districts with higher concentrations of poverty. During the Second Extraordinary Session of 2003, the Arkansas General Assembly introduced NSLA state categorical funding, with the first appropriation for the 2004-05 school year. That first year NSLA funding was provided to each district with less than 70% NSLA students at a rate of \$480 for each NSLA student. Districts with at least 70% of NSLA students, but less than 90%, received \$960 per NSLA student, and those with 90% or above received \$1,440 per NSLA student.

The new funding was based on recommendations made by Lawrence O. Picus and Associates, the education finance consulting firm the General Assembly hired in 2003 to help devise a new funding formula for the state's education system. The consultants made recommendations in 2003 (Odden & Picus, 2003) and again in 2006 (Odden, Picus, & Goetz, 2006), when the state rehired them to recalibrate the funding formula.

Picus and Associates argued that districts with high concentrations of poverty need additional resources and, in both 2003 and 2006, they recommended the state provide additional funding for two purposes: teacher tutors and pupil support personnel

In 2003, Picus and Associates noted that, for struggling students, “the most powerful and effective strategy is individual one-to-one tutoring provided by licensed teachers” (Odden & Picus, 2003, p. 25). The consultants recommended that Arkansas fund one fully licensed teacher tutor for every 100 NSLA students, with a minimum of one for every school.

Picus and Associates also noted that schools need a strategy for student support and family outreach, and that strategy should be based on the district's level of poverty. The general standard, they said, is one licensed professional for every 20-25% of the student body that is low income. The consultants pointed to research indicating that “school-sponsored activities that impact achievement address what parents can do to help their children learn.” The consultants combined this recommendation with their recommendations for three school guidance counselors, suggesting a total of four pupil support staff.

In total, the consultants recommended 2 FTE positions for every 100 NSLA students—one teacher tutor and one pupil support services FTE.

The Legislature then enacted Act 59 of the Second Extraordinary Session of 2003. Instead of funding one teacher tutor and one pupil support services FTE for every 100 NSLA students, as recommended by the consultants, the Legislature turned the staffing level into a dollar amount that essentially funded 1 FTE position for districts with NSLA concentrations below 70%, two for districts with NSLA concentrations between 70% and less than 90% and three positions for districts with NSLA concentrations at 90% and above.

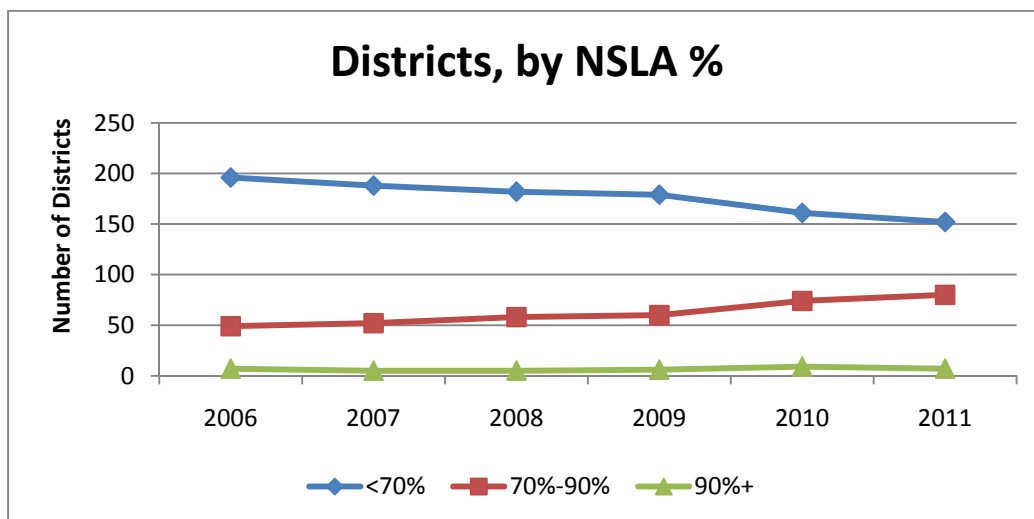
In its 2006 report, Picus and Associates again recommended Arkansas enhance its NSLA funding to provide one pupil support services FTE and one teacher tutor for every 100 NSLA student students. However, the consultants also recognized the NSLA funding distribution system the General Assembly had established in 2004, and they offered an “alternative” recommendation for adjusting the existing system. They devised a calculation that would allow districts to more smoothly move from one funding level to the next.

Regardless of the level of resources Arkansas chose to provide, the consultants were unequivocal in their opinion about how NSLA funding should be spent. They urged the state to use NSLA categorical funds only for tutors (while also funding pupil support staff through the matrix). They also suggested funding extended day and summer school programs as secondary measures. They recommended funding such programs through the matrix if the state found its tutoring strategy was not fully sufficient.

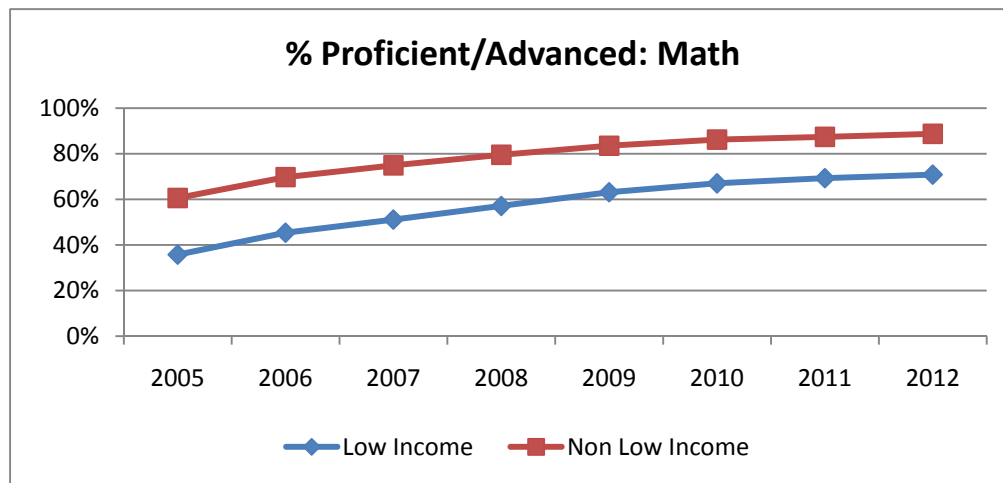
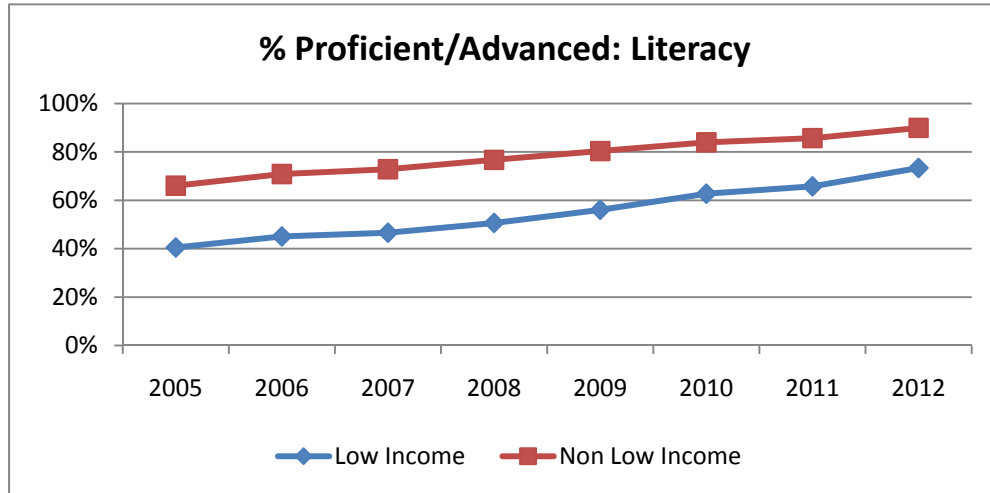
Today, districts may use NSLA funds for tutoring, before- and after-school programs, summer school programs and a variety of other approved activities. (See page 20 for more information about allowable uses.) The General Assembly also adopted a process for smoothing districts’ transition from one funding level to another but chose not to alter the basic structure of the funding program. The following chart shows the amount of NSLA funding districts have received over the last nine years, depending on their concentrations of NSLA students. The blue shading indicates the years in which NSLA funding levels were increased.

NSLA %	2005	2006	2007	2008	2009	2010	2011	2012	2013
<70%	\$480	\$480	\$480	\$496	\$496	\$496	\$496	\$506	\$517
70%-<90%	\$960	\$960	\$960	\$992	\$992	\$992	\$992	\$1,012	\$1,033
90%+	\$1,440	\$1,440	\$1,440	\$1,488	\$1,488	\$1,488	\$1,488	\$1,518	\$1,549

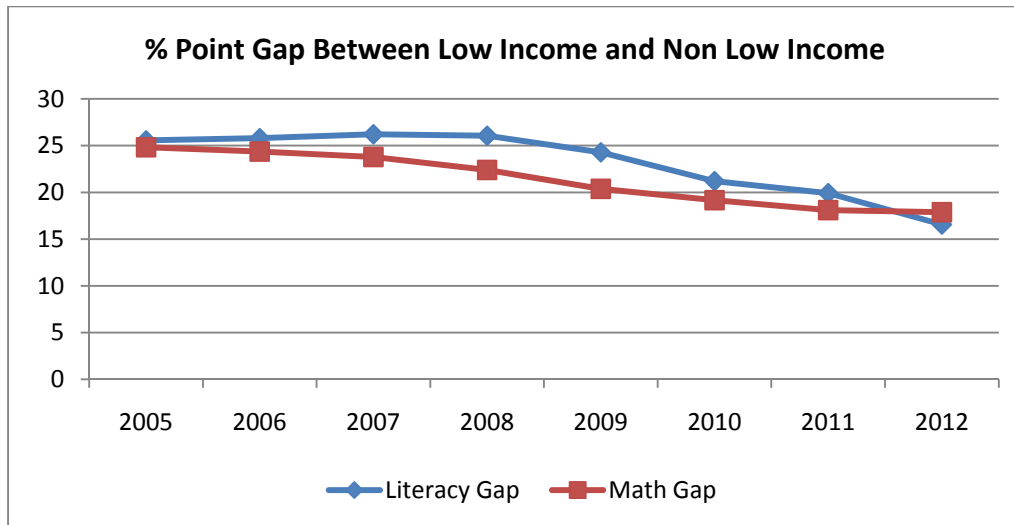
The following chart shows the number of districts that received NSLA funding at each level.



Student achievement among NSLA students has increased since the funding began. The following charts show the percentage of students who took a state benchmark or end of course exam and scored proficient (i.e., on grade level) or advanced. (Students in some grades, such as second grade, do not take benchmark or end of course exams.) The charts compare the percentage of NSLA students (low income) who tested proficient or advanced with the percentage of non low income (all non NSLA students) who were proficient or advanced.



Although low income students, as a group, continue to score below their more affluent counterparts, the data suggests the achievement gap is narrowing. The following chart shows the percentage point gap between low income students and non low income students. For example, in 2005, the percentage of non low income students who scored proficient or advanced in literacy was more than 25 points higher than the percentage of low income students who scored at that level. By 2012, that gap had narrowed to just 16.5 points. This suggests that while both student groups are making gains, the NSLA students are making gains more rapidly.



This report examines these data in greater detail to determine what relationships exist between student achievement and districts' NSLA percentages, funding and expenditures.

BRIEF ORIENTATION TO STUDY METHODS

There are several different study methods used to gather and analyze data to answer questions such as the impact of NSLA funding on student achievement. The purpose of this very brief orientation to three primary methods is to discuss the strengths and limitations of each strategy, and to provide a context for understanding the current study.

The ideal, or gold standard, research method is a double-blind experimental design, where the researcher and experimenter are both unaware of which group is receiving the intervention and which one is the control group (no intervention). While this design is applicable in certain medical studies, it is not strategically or politically possible to implement it in the current study. It is a strong design because it eliminates the biases of researchers and experimenters.

It is also a desirable design because it has the strength of the second major study method known as the classical experimental design, where people are randomly assigned to the intervention and control (or no intervention) groups. Random assignment has the highly desirable feature of randomly distributing any factors (e.g., poverty, individual characteristics) that might be alternative "causes" (or explanations) of an outcome (e.g., gains in student performance). Being able to rule out alternative "causes" and having control over who gets the intervention provide the bases for testing "cause" and "effect" linkages. Stronger inferences can be made about causality with experimental designs than with survey methods used in the current study.

However, the lack of an experimental design does not mean that there are no other methodological approaches to studying the relationships between interventions (e.g., NSLA funding) and outcomes like student performance. Survey research is commonly conducted to examine statistical relationships between interventions, other factors, and outcomes (Babbie, 2010). Statistical procedures (or mathematics) are used to control for alternative "causes" instead of randomly assigning them. In fact, whole fields of study (e.g., demography, epidemiology) have emerged out of survey research methods. Survey research is typically used when experimental designs are not attainable or politically feasible, and it is often viewed as exploratory investigation that provides valuable information for future experimental research.

While survey methods do not test for “causes,” they can provide evidence to support or disconfirm conventional thinking regarding the effects of interventions. For example, if the relationship between NSLA funding and student performance remains unchanged over a period of years, there is no empirical support for the argument that NSLA funding is contributing to student achievement gains. Failure to predict achievement provides evidence that NSLA funding is not a significant contributor to enhanced academic performance.

METHODOLOGY

DATA

The following statistical analyses are based on the 239 school districts that existed in 2011. The school year 2005-06 was selected as a baseline for the cohort analyses of changes in performance over a 5-year period. The NSLA funding levels and dollar amounts in 2011 were: < 70% (\$496), < 90% (\$992), and 90% or > (\$1,488).

This state poverty funding program should not be confused with the federal school lunch program. The federal National School Lunch Act program is used as the measure of poverty for the Arkansas categorical funding program. The amount of funding received by each district is determined by the number of students eligible for the free and reduced price lunch program divided by district’s total enrolled students (Arkansas Department of Education, 2009). Children from families with incomes below 130 percent of the poverty level are eligible for free meals. Those with incomes between 130 percent and 185 percent of the poverty level are eligible for reduced-price meals. (Arkansas Division of Child Care and Early Childhood Education, 2012).

Data on NSLA funding and expenditures were obtained from the Arkansas Public School Computer Network (APSCN) Division of the Arkansas Department of Education (ADE). Demographic data on community, district, school personnel, and student characteristics also came from APSCN and the most recent Bureau of Legislative Research's ([BLR], 2012) efficiency study.

The focus of the analyses in this study is on student performance, which is measured by Arkansas Comprehensive Testing, Assessment and Accountability Program (ACTAAP) testing, or what is commonly referred to as state Benchmark exams. Student achievement data came from the National Office for Research, Measurement and Evaluation Systems (NORMES) at the University of Arkansas in Fayetteville. The average percentage of district students who scored proficient or above (advanced) on the Benchmark exams is analyzed with statistical procedures.

ANALYSES

The statistical procedures used are uniquely suited to the purposes of the study, including examining the size and type of relationships (correlations) between districts’ NSLA percentages and student performance, the changes in these relationships (regression) between 2006 and 2011, and the differences in achievement (Anova) within NSLA funding and expenditure levels (Bailey, 2008; Freund & Wilson, 2006).

Before conducting statistical analyses, data were examined for skew and kurtosis, and for multicollinearity (or redundancy) in multiple regression analyses and homogeneity of variance in Anova and Ancova procedures (Freund & Wilson, 2006, Bailey, 2008). These data diagnostics were performed to ensure the assumptions of statistical procedures were met.

Measures examined in the statistical analyses include mean (or average) percentages proficient or above in literacy and in math for each school district in Arkansas. Analyses were done

separately in math and literacy, in 2006 and 2011, and among low income students and the district population (or all students). Ancova and multiple regression (ordinary least squares) were used to test for alternative influences on student achievement found in Tables 1 and 2 in Appendix B.

FINDINGS

Table 1 shows the frequency (or number) of school districts that are in each of the NSLA funding levels for 2011. The most noteworthy observation is the fact that only seven school districts are in the highest funding level of 90% NSLA or above.

TABLE 1. FREQUENCIES OF 2011 NSLA %

NSLA Funding Levels	NSLA %	Number of Districts	Percent	Valid Percent	Cumulative Percent
\$496	< 70%	152	63.60	63.60	63.60
\$992	70%-89%	80	33.50	33.50	97.10
\$1488	90% or >	7	2.90	2.90	100.00
Total		239	100.00	100.00	

Table 2, on the next page, indicates the differences in mean (or average) percentages proficient or above on the state ACTAAP exams between the 2011 NSLA funding levels. The differences in means are not subjected to statistical analyses because of the very small number districts at the highest NSLA funding level. This small number and the huge discrepancies in size of groups violate the assumptions of conventional statistical procedures. Seven districts are too few for any type of generalizations or comparisons.

However, visual comparisons of means reveal all measures of student performance in 2011 (% proficient or above) decline as 2011 NSLA funding levels increase. This inverse relationship between performance and NSLA funding levels holds true for math and literacy and for low income students and for the population of students (or all students) in the school districts.

Examining the achievement gap between low income students and the district populations indicates a different pattern of results. The percentage point gap actually becomes less as the NSLA level increases. NSLA funding levels might be contributing to this narrowing of the achievement gap, or the narrowing of the gap may be the result of influences that lie outside the current study. A more rigorous study design is needed to identify the specific factors responsible for the narrowing of the achievement gap. A decrease in the achievement gap in districts with higher concentrations of poverty may also result from increasing proportions of students being compared in both groups. For example, in a 95% NSLA district, the students in the low income group are nearly the same students as those in the total district population group.

NORMES' 2012 state-level data shows that the gap has narrowed even further between low income and other students. Unfortunately, these latter data were not available to the BLR in time for analyses in this study.

TABLE 2. DIFFERENCES IN MEAN PERCENTAGES PROFICIENT OR > ACTAAP EXAMS BETWEEN NSLA FUNDING LEVELS

Benchmark	2011 NSLA %	Number of Districts	Mean %	Standard Deviation
2011 Literacy % Low Income	< 70%	152	70.29	7.75
	70%-89%	80	64.81	9.23
	90% or >	7	59.64	10.63
	Total	239	68.14	8.83
2011 Math % Low Income	< 70%	152	75.10	8.10
	70%-89%	80	68.71	9.07
	90% or >	7	59.03	6.25
	Total	239	72.49	9.18
2011 Literacy % Population	< 70%	152	76.33	7.43
	70%-89%	80	68.04	9.33
	90% or >	7	61.20	11.07
	Total	239	73.11	9.30
2011 Math % Population	< 70%	152	80.12	7.68
	70%-89%	80	71.73	9.17
	90% or >	7	61.36	8.67
	Total	239	76.76	9.48
Gap 2011 Literacy Low Income & Population	< 70%	152	6.05	2.57
	70%-89%	80	3.23	2.35
	90% or >	7	1.56	3.32
	Total	239	4.97	2.90
Gap 2011 Math Low Income & Population	< 70%	152	5.03	2.52
	70%-89%	80	3.02	2.24
	90% or >	7	2.33	2.65
	Total	239	4.27	2.63

Note: Differences in mean percentages proficient or above on state ACTAAP tests are shown according to 2011 NSLA funding levels.

CORRELATION BETWEEN NSLA PERCENTAGE AND STUDENT PERFORMANCE

Another approach to examining the relationships between NSLA funding and student performance is the use of correlations shown in Table 3 on the next page. The bottom two rows (shaded in light blue) show the correlations between 2006 and 2011 district NSLA percentages and various measures of performance. These measures of performance include (reading left to right across the top of the table) 2006 literacy and math for low income students and for the district population and the 2011 performances for the same groups. Changes in literacy and math performance from 2006 to 2011 for low income are also included (only low income changes are shown because they are the targeted group for NSLA funds). Comparison of these changes in performance between low income students and the district population is presented in the next section of this report.

The correlations displayed in Table 3 are negative and moderate in terms of size (the red print indicates that they are statistically significant at $p < 0.05$). Additionally, this study found no significant correlation between NSLA percentage and the change in low income students' performance between 2006 and 2011. Across the board, there is a moderately-sized inverse (or negative) correlation between district NSLA percentages and measures of student performance.

TABLE 3. CORRELATIONS BETWEEN STUDENT PERFORMANCE AND NSLA % FOR 2006 AND 2011

		2006 Literacy Low Income	2006 Math Low Income	2006 Literacy Pop.	2006 Math Pop.	2011 Literacy Low Income	2011 Math Low Income	2011 Literacy Pop.	2011 Math Pop.	Literacy*** Change 2006 to 2011	Math*** Change 2006 to 2011	NSLA 2006	NSLA 2011
2006 Literacy Low Income	Correlation Significant												
2006 Math Low Income	Correlation Significant	.634** .000											
2006 Literacy Population	Correlation Significant	.912** .000	.806** .000										
2006 Math Population	Correlation Significant	.806** .000	.890** .000	.905** .000									
2011 Literacy Low Income	Correlation Significant	.699** .000	.640** .000	.759** .000	.738** .000								
2011 Math Low Income	Correlation Significant	.624** .000	.710** .000	.746** .000	.786** .000	.835** .000							
2011 Literacy Population	Correlation Significant	.773** .000	.691** .000	.836** .000	.811** .000	.950** .000	.836** .000						
2011 Math Population	Correlation Significant	.703** .000	.731** .000	.812** .000	.835** .000	.827** .000	.961** .000	.893** .000					
Literacy Change 2006 to 2011	Correlation Significant	-.330** .000	-.326** .000	-.389** .000	-.284** .000	.153* .018	-.001 .989	.113 .081	.007 .915				
Math Change 2006 to 2011	Correlation Significant	-.361** .000	-.459** .000	-.361** .000	-.484** .000	-.128* .049	.039 .547	-.118 .070	.014 .826	.549** .000			
NSLA 2006	Correlation Significant	-.512** .000	-.435** .000	-.569** .000	-.539** .000	-.353** .000	-.410** .000	-.516** .000	-.531** .000	.075 .252	.047 .476		
NSLA 2011	Correlation Significant	-.528** .000	-.404** .000	-.567** .000	-.522** .000	-.385** .000	-.432** .000	-.551** .000	-.557** .000	.052 .426	.014 .824	.920** .000	

Note: *indicates correlations is significant $p < 0.05$; **indicates correlation is significant $p < 0.01$. ***literacy and math change for low-income
Cells shaded in light blue show correlations between NSLA percentages and student performance outcomes.

LINEAR RELATIONSHIP BETWEEN NSLA PERCENTAGES AND STUDENT PERFORMANCE

To examine any change in the nature of the relationship between NSLA % and student performance between 2006 and 2011, regression procedures are used (Freund & Wilson, 2006). The regression formula (shown in Charts 1-3) draws a line through data points (green dots) that represent each of the state's 239 school districts. Each data point indicates the intersection of each district's NSLA percentage (horizontal axis) and its percentage proficient or above (vertical axis) on ACTAAP exams. The line drawn by regression represents the predicted levels of student performance based on the assumption that there is a linear relationship between NSLA percentage and student achievement. The assumption behind NSLA funding was that additional funding would contribute to increases in student performance (i.e., an assumption of linearity).

This policy assumption is tested with regression statistical procedures designed to examine linearity. The linear relationship between district NSLA percentages and student performance in 2011 is shown in Chart 1. The slope (or slant) of the regression line indicates the negative (or inverse) relationship between NSLA percentage and student performance percentages. The slope of the line provides a vivid visual representation of the decline in student performance in literacy with each corresponding increase in NSLA percentage.

Although Chart 1 is based on literacy performance among district populations, the same pattern of relationship is exhibited for math and for low income students. The vertical blue (70% NSLA) and light red (90% NSLA) lines indicate the cut points where NSLA funding levels increase, and they provide a reference for visualizing how districts are performing at each NSLA level.

Furthermore, Chart 2 shows the data points representing the intersection of NSLA percentage of the same districts and their population literacy performance in 2006. The regression line drawn by the formula in Chart 2 clearly indicates a negative relationship similar to the one seen in Chart 1 for 2011. In fact, a statistical test of the slope (or Beta) of the lines in Charts 1 and 2 reveals no significant differences. Succinctly stated, the negative relationship between NSLA percentages and student performance has not changed over the five years included in the study.

Chart 3 also shows a similar negative relationship between NSLA percentages and low-income student performance in 2011. If NSLA funding was having an appreciable effect on student performance, the slope (slant) of the regression line would move upward toward a flat horizontal line.

CHART 1. LINEAR RELATIONSHIP BETWEEN 2011 NSLA % AND % PROFICIENT OR > IN LITERACY (DISTRICT POPULATION)

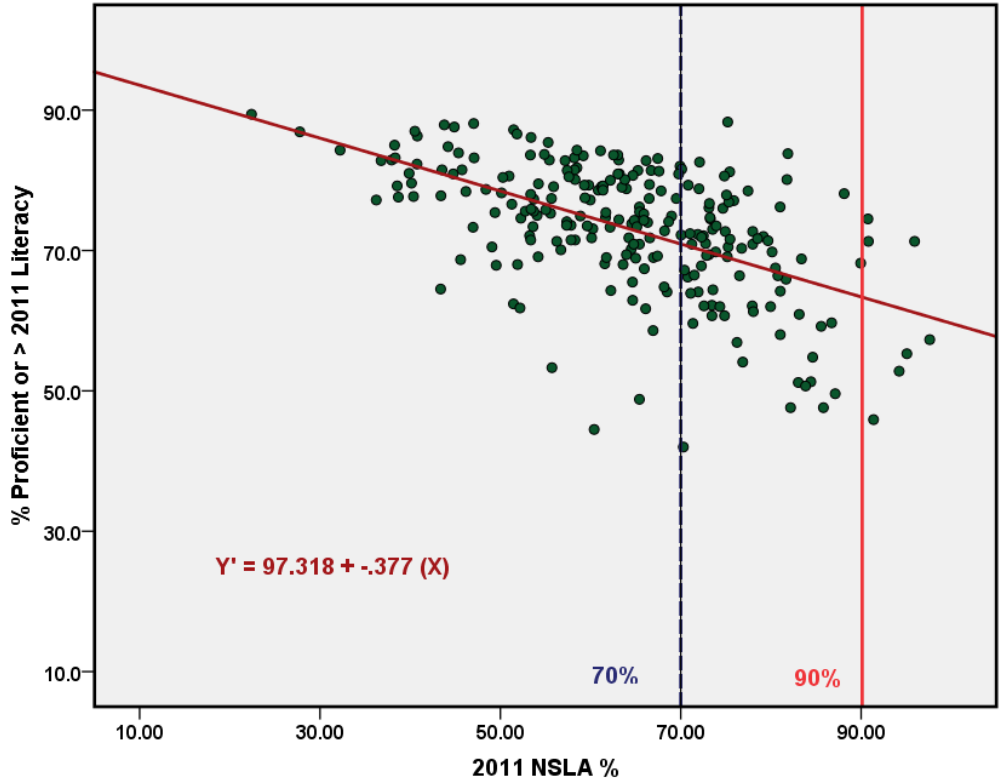


CHART 2. LINEAR RELATIONSHIP BETWEEN 2006 NSLA % AND % PROFICIENT OR > IN LITERACY (DISTRICT POPULATION)

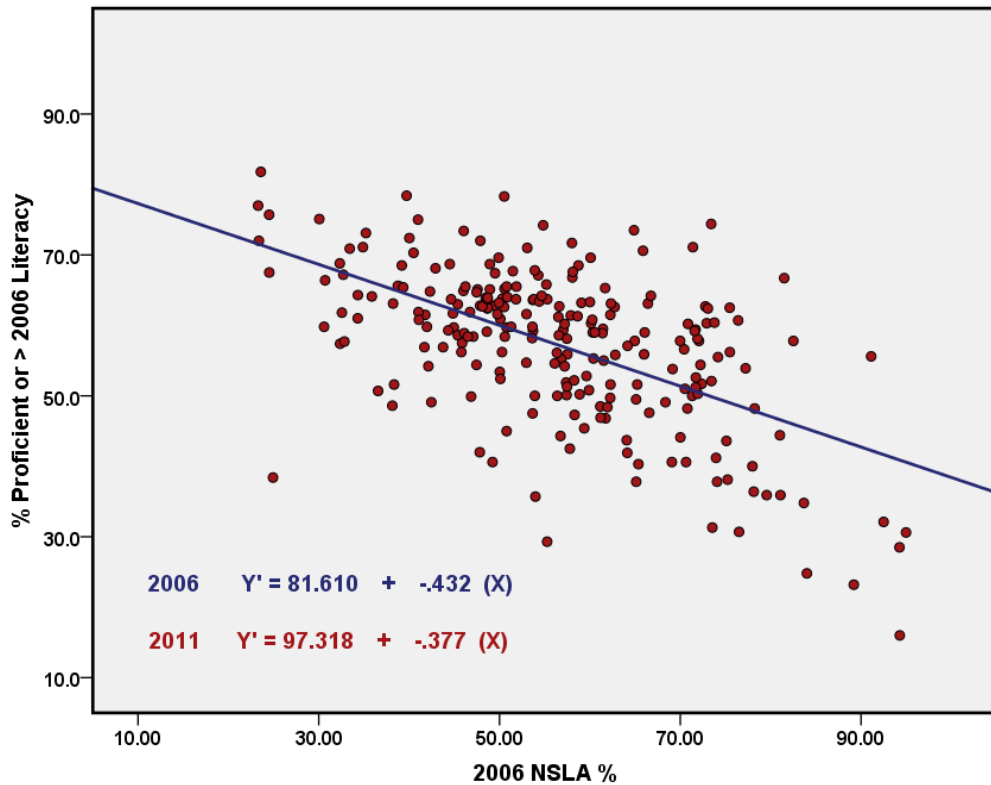
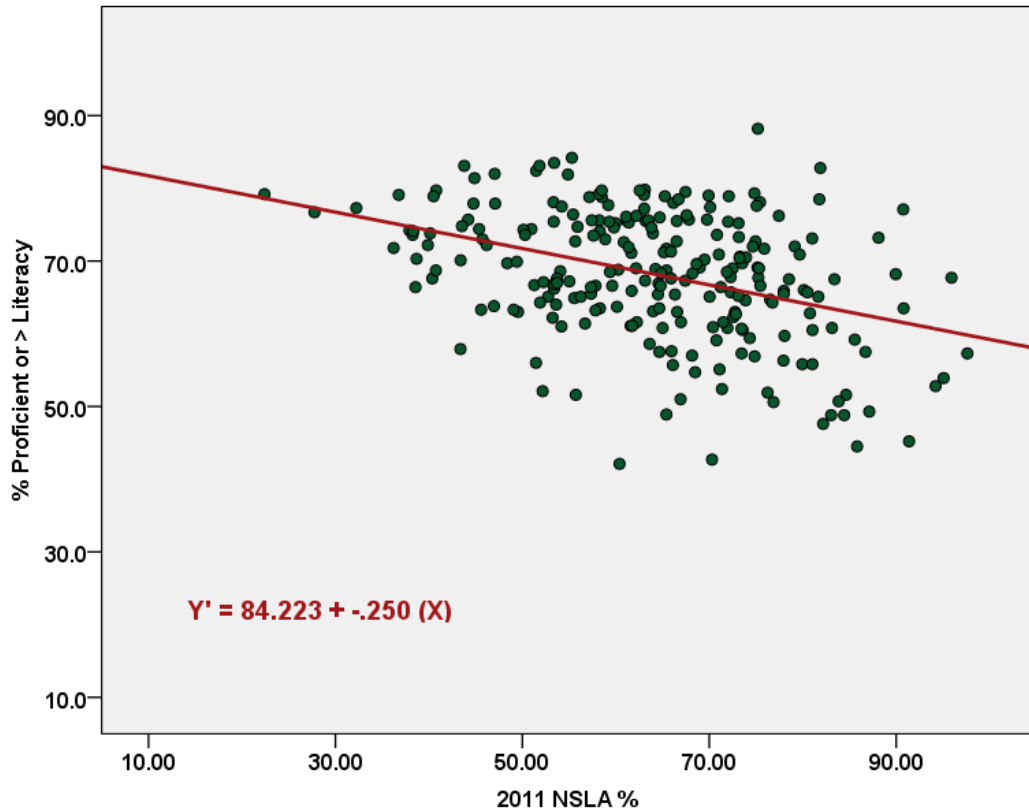


CHART 3. LINEAR RELATIONSHIP BETWEEN 2011 NSLA % AND % PROFICIENT OR > IN LITERACY (LOW INCOME)



Charts 4 and 5 on the following page show that the constellation of student performance data has shifted upward between 2006 and 2011, indicating a general increase in achievement during those years. However, the slope of the regression lines in these charts shows that the negative relationship between percentages proficient or above in literacy and NSLA percentages has not changed during these 5 years. This lack of change in relationship indicates that NSLA funding levels are not associated with achievement gains.

CHART 4. LINEAR RELATIONSHIP BETWEEN 2006 & 2011 NSLA % AND % PROFICIENT OR > (LOW INCOME)

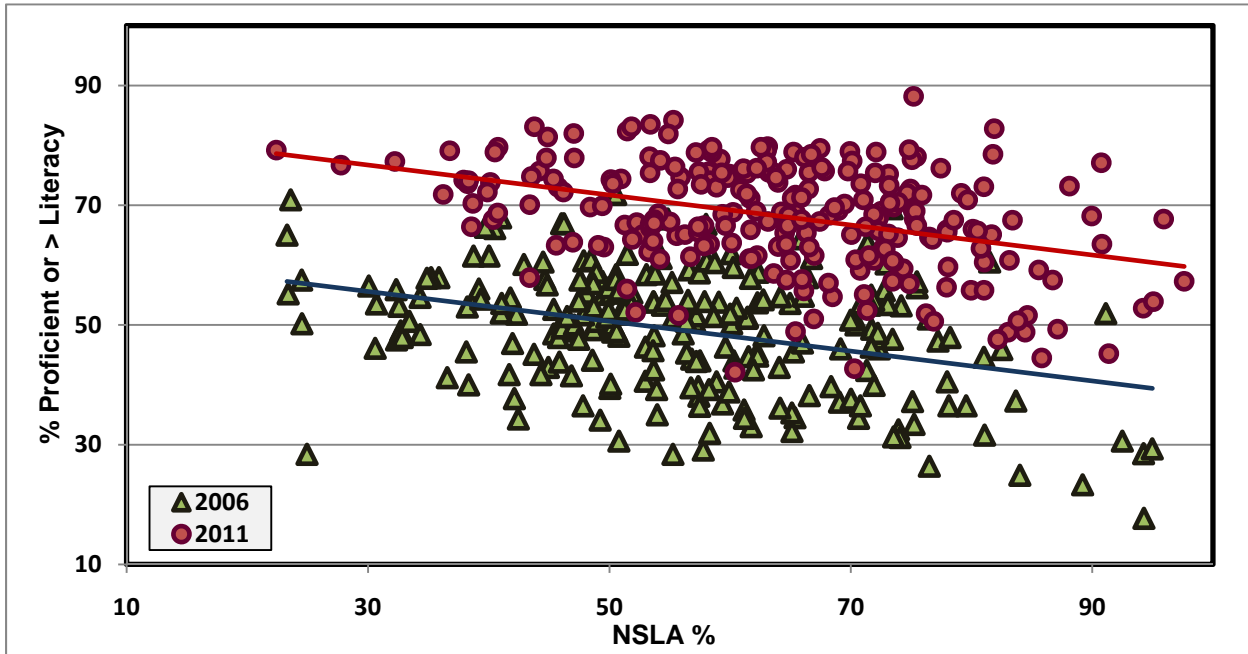
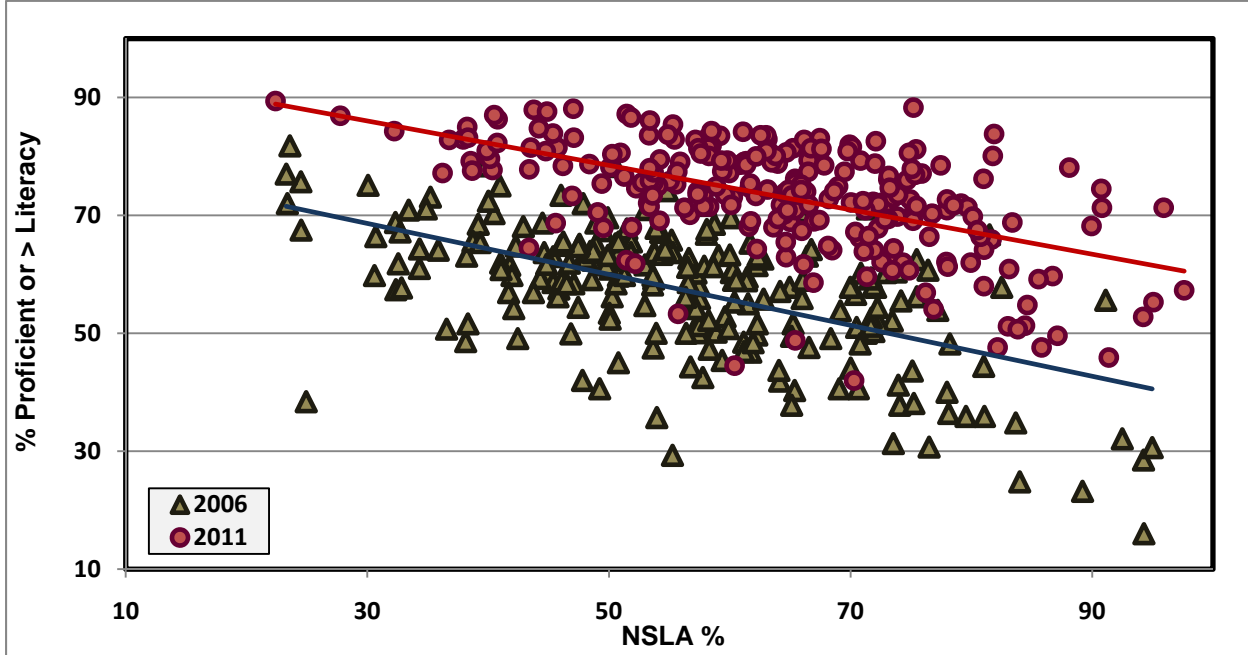
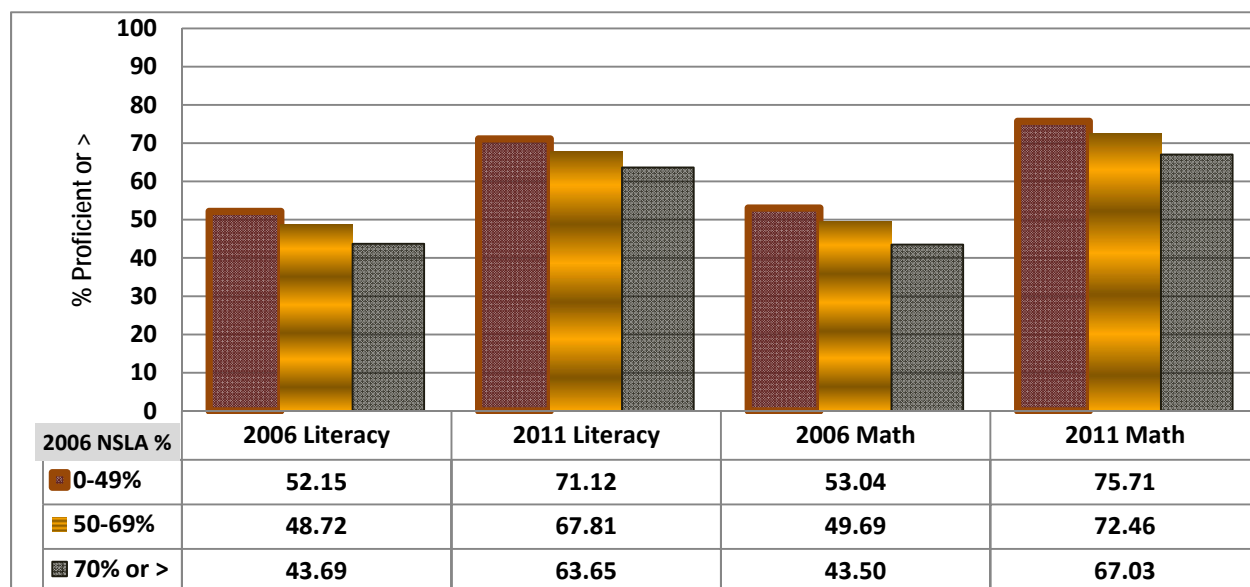


CHART 5. LINEAR RELATIONSHIP BETWEEN 2006 & 2011 NSLA % AND % PROFICIENT OR > (DISTRICT POPULATION)



TESTS OF MEAN DIFFERENCES IN STUDENT PERFORMANCE FOR LOW INCOME STUDENTS AND FOR DISTRICT POPULATIONS

TABLE 4. % PROFICIENT OR > FOR DISTRICT LOW INCOME IN 2006 & 2011



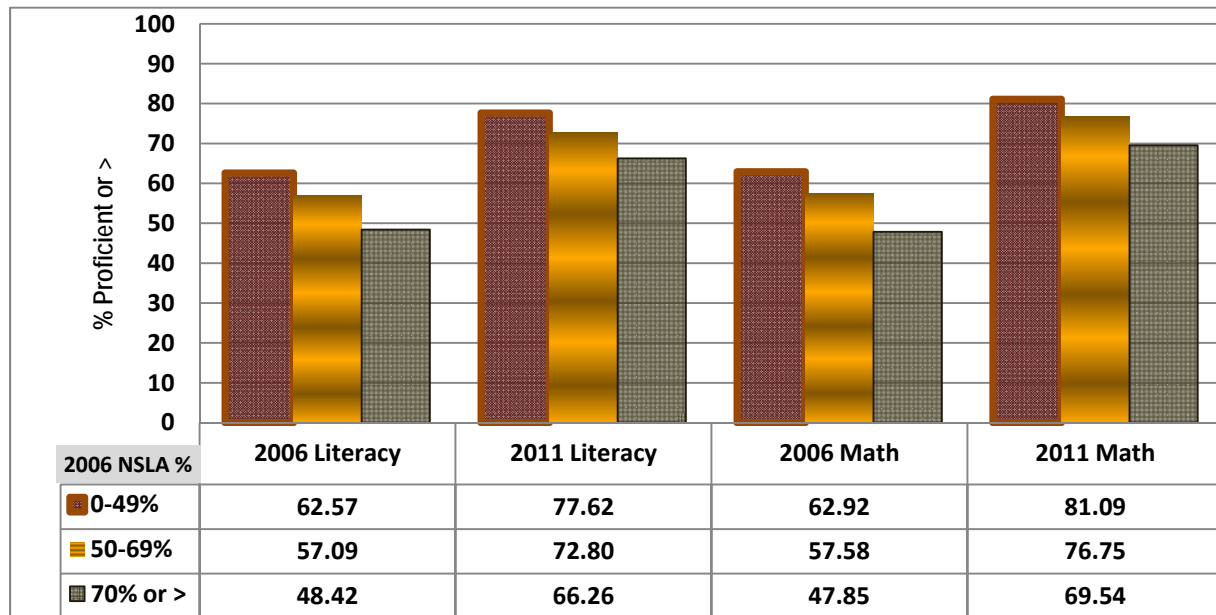
Note: The only comparison in the table that was not statistically significant ($p < 0.05$) was between Group 1 (%NSLA 0 to 49) and Group 2 (%NSLA 50 to 69) in 2006 literacy.

Table 4 shows differences in mean percentages proficient or above in literacy and math among low income students for 2006 and 2011. The three groups in each comparison were based on 2006 NSLA percentages: Group 1 (0 to 49%), Group 2 (50% to 69%), and Group 3 (70% or above). Group 1 contains about a third of the 239 districts in the current study. The other cutoff (70% NSLA) represents the point at which per-student NSLA funding is doubled. Another increase in funding occurs at 90%, but, of the districts that currently exist, only five districts at that level were in operation in 2006, and only seven in 2011. Conventional statistics cannot be conducted with a group as small as seven. The only comparison in Table 4 that was statistically insignificant was the difference between Group 1 and Group 2 in 2006 literacy. The comparisons were examined with Anova and Bronferroni post hoc tests (Miller, 1998). The 2006 NSLA percentage was used so a prospective cohort analyses could be performed (i.e., examining changes within districts going forward five years).

Using the same groups, Table 5 shows all of these comparisons in the district populations are statistically significant. The differences in Tables 4 and 5 indicate that the average percentage proficient or above declines as NSLA percentages are increased. This pattern of results is observed for low income students as well as for district populations.

The results of these comparisons of performance are in complete accord with the findings using correlations. These results are further buttressed by Ancova (Miller, 1998) tests of covariates using the demographic and instructional expenditures shown in Tables 1 and 2 in Appendix B. In short, even when other factors related to performance, such as race or teacher salaries are considered as covariates, the differences in student performance remain statistically significant. These covariate (or multivariate) analyses indicate that the differences observed are not the product of other factors examined.

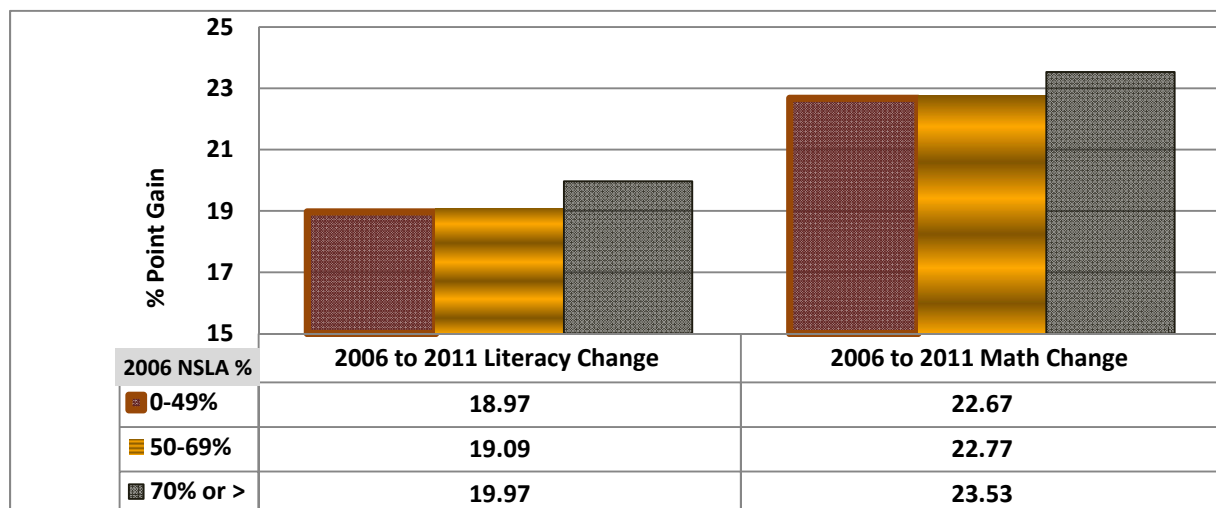
TABLE 5. % PROFICIENT OR > FOR DISTRICT POPULATIONS IN 2006 & 2011



Note: All of the comparisons in Table 5 are statistically significant ($p < 0.05$). Groups are based on 2006 NSLA%.

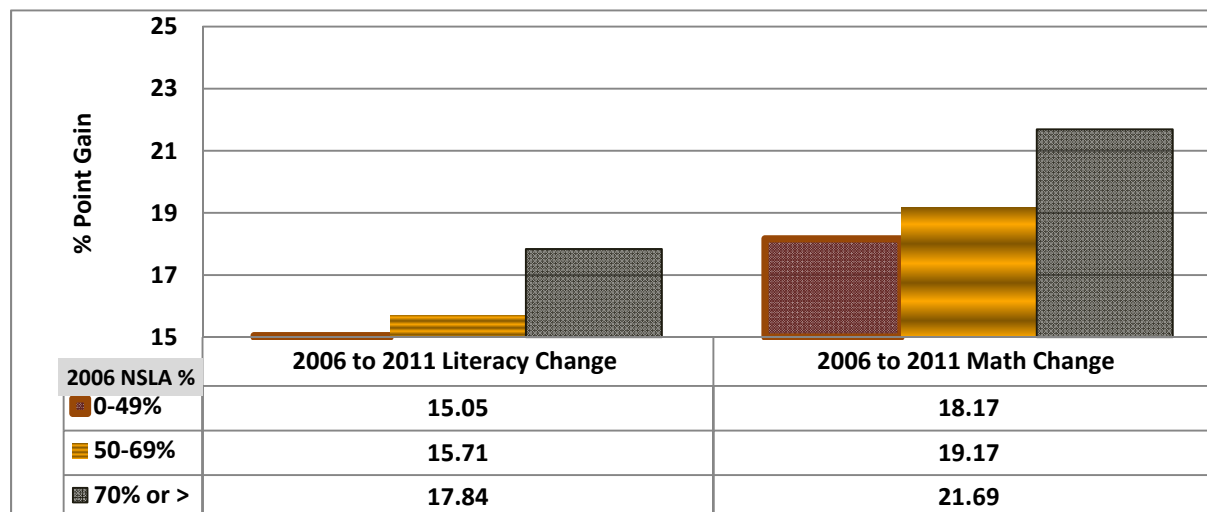
Table 6 shows the comparisons of mean changes in student performance from 2006 to 2011 in the same 2006 NSLA levels (or cohorts). Statistical analyses indicate that none of the comparisons shown in Table 6 are significant. In other words, there are no noteworthy differences among the low income groups in student achievement gains in literacy or math. It should be clear that these are changes between cohorts (or groups of students) and not longitudinal changes within the same cohorts. Longitudinal changes refer to following the same cohort (or group) of students across time.

TABLE 6. CHANGE IN % PROFICIENT OR > BETWEEN 2006 & 2011 LOW INCOME



Note: None of the comparisons of changes in % proficient or > between 2006 and 2011 are statistically significant ($p < 0.05$) for low income students. Groups are based on 2006 NSLA%.

TABLE 7. CHANGE IN % PROFICIENT OR > BETWEEN 2006 & 2011 DISTRICT POPULATIONS



Note: There are statistically significant differences between Group 1 (NSLA < 50%) and Group 3 (NSLA 70% or >) for both literacy and math. There are greater changes in the NSLA group where funding is appreciably increased (70% or > NSLA).

In contrast, Table 7 shows there are statistically significant differences between Group 1 (NSLA < 50%) and Group 3 (NSLA 70% or >) for both literacy and math in the district populations. Furthermore, the mean percentage change in performance shows that there were greater changes in the NSLA group where funding is appreciably increased (70% or > NSLA).

SUMMARY OF CHANGES AND GAPS IN STUDENT PERFORMANCE BETWEEN 2006 AND 2011

Table 8 shows a summary of the percentage change in student performance between 2006 and 2011, and the gaps in performance between low income students and the population in 2006 and 2011.

TABLE 8. CHANGES IN % PROFICIENT OR > FROM 2006 TO 2011 AND GAPS BETWEEN DISTRICT POPULATION AND LOW INCOME

Statistics	Change from 2006 to 2011				Gaps (Population minus Low Income)			
	Literacy Low Income	Literacy Population	Math Low Income	Math Population	Literacy 2011	Literacy 2006	Math 2011	Math 2006
Mean	19.12	15.87	22.76	19.30	4.97	8.25	4.27	7.75
Median	19.00	15.80	22.90	18.60	4.80	7.90	4.30	7.65
Standard Deviation	6.33	6.01	7.45	8.77	2.90	4.49	2.63	4.39
Minimum	4.40	2.40	-3.20	-2.60	-2.60	-2.50	-1.90	-3.70
Maximum	59.40	58.50	48.20	53.10	13.60	20.30	14.00	20.20
20th Percentile	13.40	10.80	16.20	13.86	2.50	4.88	2.10	3.90
40th Percentile	17.50	13.70	20.60	17.40	4.00	6.76	3.00	6.70
60th Percentile	20.50	17.04	24.90	20.40	5.80	9.70	4.90	8.70
80th Percentile	24.40	20.42	28.90	25.20	7.60	12.30	6.40	11.32

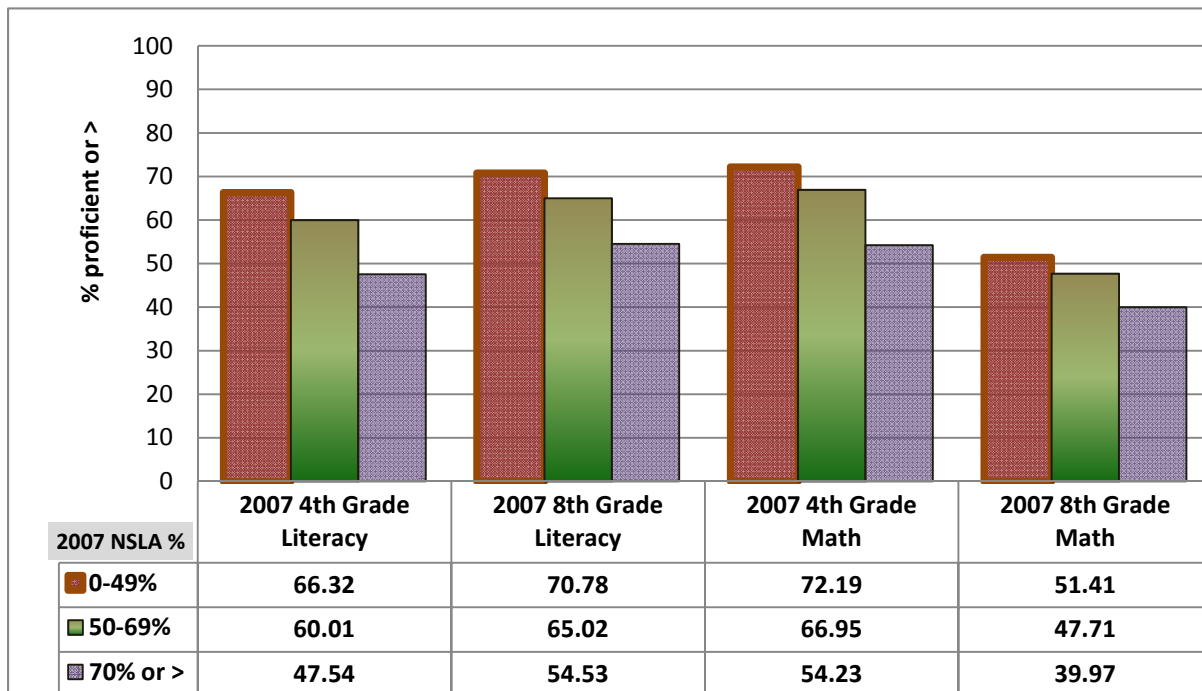
TESTS OF MEAN DIFFERENCES IN PERFORMANCE FOR 4TH AND 8TH GRADE STUDENTS

To examine whether these differences and changes in student performance hold true for grade-level performance in different years, data used in the Bureau of Legislative Research's (2012) recent efficiency study were analyzed for 4th grade and 8th grade in 2007 and 2010. The data collection procedures in the efficiency study were the same as in the current study. Table 9 shows district mean percentages proficient or above in 4th and 8th grade literacy and math on Arkansas Benchmark exams according to 2007 NSLA funding levels.

Comparisons of district mean performance percentages in 4th grade and 8th grade gave the same pattern of results as district averages for low income students and the district population reported in the previous section. In both 4th and 8th grades, student performance declined as NSLA percentages increased (Table 9).

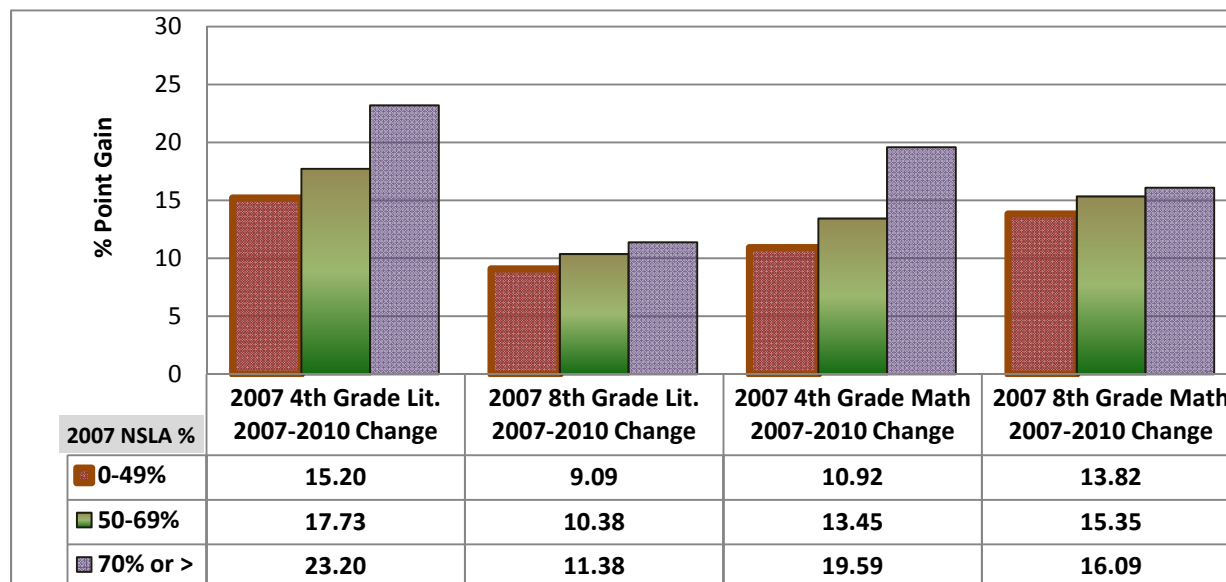
However, when changes in percentages proficient or above between 2007 and 2010 were examined, the statistically significant differences indicate greater change in districts with high NSLA only in 4th grade (Table 10). In 4th grade, the only insignificant comparison was between Group 1 (< 50% NSLA) and Group 2 (50% to 69% NSLA) in literacy. None of the differences in 8th grade were statistically significant. The explanation for this discrepancy in results between 4th and 8th grade lies beyond the scope of this study, but it may be related to factors identified in prior research, such as lack of mastery in subject areas among teachers in middle school (Southern Regional Education Board, 2003).

TABLE 9. % PROFICIENT OR > FOR 4TH AND 8TH GRADE DISTRICT POPULATIONS



Note: All of the comparisons in Table 9 are statistically significant ($p < 0.05$). Groups are based on 2007 NSLA%.

TABLE 10. CHANGE IN % PROFICIENT OR > BETWEEN 2007 & 2010 IN 4TH AND 8TH GRADE DISTRICT POPULATIONS LITERACY AND MATH



Note: All 4th grade comparison are statistically significant ($p < 0.05$) except between Group 1 (0-49% NSLA) and Group 2 (50-69% NSLA) for literacy. None of the 8th grade comparisons are statistically significant. All comparisons are based on 2007 NSLA%.

STUDENT PERFORMANCE ACCORDING TO PER ADM AND PER LOW INCOME STUDENT COUNT TOTAL 2011 NSLA EXPENDITURES

Table 11 shows the differences in district mean percentages proficient or above according to 2011 NSLA expenditures per ADM. Per ADM expenditure levels (groups) were determined by dividing the 239 school districts into three equal groups (i.e., cutoffs that identify the three groups represent the dollar amount at one third and two thirds of the districts).

The per ADM expenditure analyses reveal a pattern of results identical to the findings observed with funding levels. The percentages of low income students and the district population who are proficient or above on state ACTAAP exams declines as NSLA expenditures are increased. Even the gap comparisons are the same, with the gap between low income students and the population becoming less as expenditures increase. These findings suggest the possibility that NSLA expenditures may contribute to narrowing the gap between low income students and the general population. However, other factors may play a larger role than NSLA expenditures. A decrease in the achievement gap in districts with higher concentrations of poverty may result from increasing proportions of students being compared in both groups. For example, in a 95% NSLA district, the students in the low income group are nearly the same students as those in the total district population group.

Table 12 shows the differences in district mean percentages proficient or above according to per low income student count 2011 NSLA expenditures. The original intent of NSLA funding was primarily to increase the performance of low income students.

The findings in Table 12 are similar to those discussed in Table 11, with three notable exceptions. In addition to the insignificant differences in low income literacy performance between the two lower levels of expenditures, there are insignificant differences between the same levels of expenditures in math for the district populations.

TABLE 11. COMPARISON OF MEAN % PROFICIENT OR > ACCORDING TO PER ADM TOTAL 2011 NSLA EXPENDITURES

Benchmarks	2011 NSLA Expenses/ADM*	Mean
2011 Literacy % Low Income	< 261	71.45
	261-362	68.44
	> 362	64.74
	Total	68.14
2011 Math % Low Income	< 261	76.26
	261-362	72.91
	> 362	68.47
	Total	72.47
2011 Literacy % Population	< 261	78.13
	261-362	73.82
	> 362	67.63
	Total	73.11
2011 Math % Population	< 261	81.84
	261-362	77.58
	> 362	71.12
	Total	76.76
Gap** 2011 Literacy	< 261	6.76
	261-362	5.38
	> 362	2.86
	Total	4.97
Gap** 2011 Math	< 261	5.59
	261-362	4.67
	> 362	2.62
	Total	4.27

Note: Differences in mean % proficient or > or mean gap differences are shown in the table according to total 2011 NSLA expenditure groups/ADM. *The three NSLA groups are equally divided into 1/3 of the 239 school districts. **Gaps are between district populations and low income students. All differences between means are statistically significant ($p < 0.05$) except the comparison of Group 1 (< 261) and Group 2 (261 – 362) for low income literacy. Non-significant differences in means are highlighted in light blue.

The difference in the gap between low income students and the district populations is not significant for these lower levels of expenditures in literacy and math. These insignificant differences are designated in Tables 11 and 12 with light blue shading.

TABLE 12. COMPARISON OF MEAN % PROFICIENT OR > PER LOW INCOME STUDENT 2011 NSLA EXPENDITURES

Benchmarks	NSLA Expenses/ Low Income Count*	Mean
2011 Literacy % Low Income	< 473	70.45
	473-579	69.14
	> 579	65.13
	Total	68.14
2011 Math % Low Income	< 473	75.20
	473-579	74.08
	> 579	68.49
	Total	72.47
2011 Literacy % Population	< 473	76.30
	473-579	75.30
	> 579	68.17
	Total	73.11
2011 Math % Population	< 473	80.30
	473-579	79.07
	> 579	71.38
	Total	76.76
Gap** 2011 Literacy	< 473	5.92
	473-579	6.13
	> 579	3.03
	Total	4.97
Gap** 2011 Math	< 473	5.09
	473-579	4.96
	> 579	2.89
	Total	4.27

Note: Differences in mean % proficient or > or mean gap differences are shown in the table according to total 2011 NSLA expenditure groups/low income student count. *The three NSLA groups are equally divided into 1/3 of the 239 school districts. **Gaps are between district populations and low income students. All differences between means are statistically significant ($p < 0.05$) except the comparisons of Groups 1 (< 473) and Groups 2 (473-579) for low income literacy and math, district population math, and the gaps for literacy and math. Non-significant differences in means are highlighted in light blue.

CORRELATIONS BETWEEN NSLA EXPENDITURES AND STUDENT PERFORMANCE

Correlations between 2011 expenditures and student performance measures are shown in Table 1 of Appendix A. Total NSLA expenditures, total expenditures divided by low income student count, total NSLA funding divided by total NSLA expenditures, and total NSLA funding divided by low income student count are examined with correlations. All correlations are either insignificant, or they are low-to-moderate negative correlations. These negative correlations indicate that lower performance corresponds with higher NSLA expenditures.

2011 NSLA EXPENDITURES

In 2010-11, districts received nearly \$170.1 million in NSLA funding in 2010-11, and collectively they spent about \$154.3 million. (Districts' net transfers from NSLA funds totaled \$15.4 million.) A.C.A. § 6-20-2305(b)(4)(C) requires the State Board of Education to establish by rule a list of approved uses of NSLA funds. The statute also provides a list of eligible uses for which districts may expend funding, but it notes that approved uses are not limited to those included in Code.

The following chart lists the allowable uses specified in statute and the year in which the allowable use was adopted. It also lists the allowable uses spelled out in ADE's Rules Governing the Distribution of Student Special Needs Funding. The uses recommended by Picus and Associates — tutors and pupil support services — are shaded in light blue. (The consultants also recommended before- and after-school programs and summer school if tutoring was insufficient.)

Year Added to Code	Arkansas Code	ADE Rules	% of NSLA Exp.
2003	Classroom teachers, provided the district meets the minimum salary schedule without using NSLA funds	Highly qualified classroom teachers in K-12	11.04%
		Instructional facilitators or literacy, mathematics, or science specialists/coaches that meet specified requirements	19.85%
2003	Curriculum specialists	Curriculum specialists	5.04%
		Research-based professional development in the areas of literacy, mathematics, or science in K-12	1.88%
2003	Before-school academic programs and after-school academic programs, including transportation to and from the programs	Research-based before and after-school academic programs, including transportation to and from the programs	2.39%
2003	Pre-kindergarten programs coordinated by the Department of Human Services	Research-based pre-kindergarten programs that meet the program standards as outlined in the Rules Governing the Arkansas Better Chance program.	4.35%
2003	Tutors	Tutors	1.9%
2003	Teachers' aides	Teacher's aides	9.63
2003	Counselors, social workers, and nurses	Licensed counselors and nurses above the mandates of the Standards for Accreditation; human service workers, licensed mental health counselors, licensed certified social workers or licensed social workers	10.32
		Coordinated school health coordinator	
2003	Parent education	Parent education that addresses the whole child	0.57%
2003	Summer programs	Summer programs that implement research-based methods and strategies targeted at closing the achievement gap	1.33%
2003	Early intervention programs	Early intervention programs	1.56%
		School Resource Officers whose job duties include research-based methods and strategies tied to improving achievement of students at risk	
		Experience-based field trips	
2003	Materials, supplies, and equipment, including technology used in approved programs or for approved purposes	Materials, supplies, and equipment, including technology, used in approved instructional programs or for approved purposes in support of the local educational agency's ACSIP	
2011	Federal child nutrition program free meals under the Provision 2 program	Expenses of federal child nutrition programs to the extent necessary to provide school meals without charge to all students under the United States Department of Agriculture Special Assistance	NA

Year Added to Code	Arkansas Code	ADE Rules	% of NSLA Exp.
		Alternative "Provision 2"	
2011	Federal child nutrition program free meals for reduced-price students	Expenses of federal child nutrition programs to the extent necessary to provide school meals without charge to students otherwise eligible for reduced-price meals	NA
2011	Expenses directly related to a longer school day	Expenses directly related to funding a longer school day	NA
2011	Expenses directly related to a longer school year	Expenses directly related to funding a longer school year	NA
2011	Remediation programs partnering with higher education institutions	Partnering with local institutions of higher education to remediate students while those students are still in high school so that the students are college and career ready upon graduation from high school	NA
2011	Teach For America professional development	Teach For America professional development	NA
2011	The Arkansas Advanced Initiative for Math and Science	Implementing components of the Arkansas Advanced Initiative for Math and Science	NA
2011	College and career coaches.	College and career coaches, as defined by the Department of Career Education	NA
		Operating or supporting a postsecondary preparatory program	
		A chronically underperforming school's ACSIP shall provide for the use of national school lunch state categorical funding to fund without limitation the following: <ul style="list-style-type: none"> • Use of an Arkansas Scholastic Audit. • Use of disaggregated school data to set academic targets in reading, writing, mathematics, and science. • Use of improvement targets to define professional development needs related to content, instruction, differentiation, and best practices in educating student subgroups as identified in need. • Development of interim building-level assessments to monitor student progress toward proficiency on the state benchmark assessments. • Development of a plan to immediately address gaps in learning. • Examination and realignment, as needed, of school scheduling, academic support systems, and assignment of personnel to improve student achievement. • Design of a plan for increasing parental knowledge and skill to support academic objectives. • Evaluation of the impact of the before-mentioned educational strategies on student achievement. 	10.43%
		Paying for students in grade eleven (11) to take the ACT Assessment, pursuant to the Voluntary Universal ACT Assessment Program.	.08%
		Developing and implementing interim building-level assessments to monitor student progress toward proficiency on the state benchmark assessments.	
		Other activities approved by the ADE. Such activities include, but are not limited to, research-based activities and activities directed at chronically underperforming schools	15.44%
		Bonuses or supplements to salaries above the minimum salary schedule	3.10%

The expenditures above do not include about 1.1% that is spent on locally defined special education needs.

The 2011 NSLA expenditures for programs or interventions indicated vast differences in how districts spent NSLA funds. The descriptive statistics in Tables 13 and 14 capture some of the diversity in spending. Many districts had no expenditures for several programs (these are shaded in light blue).

TABLE 13. FREQUENCIES AND DESCRIPTIVE STATISTICS OF NSLA PROGRAM EXPENDITURES

	Coaches	Teacher PD	High Quality Teachers	Before/After School	Pre K	Tutors	Aides
# of Districts	164	67	122	97	44	77	148
Districts with No Expenditures	75	172	117	142	195	162	91
Mean	\$186,743.08	\$43,376.13	\$139,623.80	\$38,033.09	\$152,636.19	\$38,151.16	\$100,349.39
Standard Deviation	\$337,658.00	\$62,970.54	\$162,243.81	\$71,377.17	\$472,508.42	\$47,492.09	\$206,936.76
Minimum	\$156	\$182	\$115	\$65	\$381	\$61	\$605
Maximum	\$2,457,995	\$304,876	\$1,050,231	\$450,206	\$3,105,644	\$208,424	\$2,204,973
Percentiles							
20	\$31,941.99	\$4,017.65	\$30,453.40	\$5,304.76	\$12,214.91	\$4,394.80	\$18,930.76
40	\$60,842.62	\$12,405.51	\$61,305.59	\$11,099.53	\$34,983.73	\$15,389.13	\$37,479.85
60	\$105,500.66	\$23,383.02	\$116,754.18	\$22,701.99	\$56,634.87	\$34,484.35	\$69,741.49
80	\$214,356.69	\$76,898.83	\$219,386.12	\$38,429.10	\$96,896.11	\$60,620.20	\$129,509.86

Note: No expenditures indicates that none were reported.

TABLE 14. FREQUENCIES AND DESCRIPTIVE STATISTICS OF NSLA PROGRAM EXPENDITURES

	Student Services	Curriculum Specialist	Parent Education	Summer School	Early Intervention	School Improvement	Other
# of Districts	175	92	67	75	39	103	159
Districts with No Expenditures	64	147	172	164	200	136	80
Mean	\$90,991.16	\$84,538.71	\$13,197.28	\$27,417.31	\$61,538.91	\$156,307.55	\$149,823.67
Standard Deviation	\$178,311.20	\$81,117.98	\$15,235.65	\$32,028.26	\$88,430.93	\$299,097.13	\$196,500.03
Minimum	\$137	\$1,217	\$20	\$511	\$70	\$36	\$507
Maximum	\$1,697,298	\$669,567	\$63,244	\$140,392	\$468,493	\$2,410,294	\$1,247,750
Percentiles							
20	\$25,328.97	\$42,721.85	\$1,277.52	\$3,893.31	\$9,862.82	\$14,131.43	\$33,495.64
40	\$36,340.01	\$59,381.13	\$4,377.87	\$8,444.35	\$33,163.48	\$36,169.27	\$70,429.28
60	\$56,894.39	\$81,195.77	\$12,112.32	\$21,014.12	\$50,433.69	\$85,285.71	\$110,663.81
80	\$103,303.21	\$105,940.82	\$23,112.82	\$54,029.35	\$65,029.27	\$210,255.03	\$206,835.85

Note: No expenditures indicates that none were reported.

The vast differences in minimum and maximum amounts spent on programs, as well as the standard (or average) deviation (or differences) between districts, also indicate the large inconsistencies in spending NSLA funds across districts. Observations concerning the data suggest that districts may have flexibility in assigning program intent codes.

CORRELATIONS BETWEEN NSLA PROGRAM EXPENDITURES AND STUDENT PERFORMANCE

The percentage of the total NSLA expenditures spent on each program in districts was correlated with the student performance measures seen in Tables 2, 3, and 4 in Appendix A. Correlations between NSLA programs and student performance are highlighted in these tables with a light blue shading, and statistically significant correlations ($p < 0.05$) are identified in red print (the significance level of all correlations can be found underneath the correlation coefficient in the same cell). Caution must be exercised in interpreting the results of these correlations, however, because there is an undetermined amount of inconsistencies in coding data between districts.

The vast majority of the correlations found in Tables 2 – 4 indicate that, with few isolated exceptions, these program expenditures are not related to student performance. The isolated exceptions are very modest correlations (e.g., .21 between expenditures for high quality teachers and low income math performance, .23 between expenditures for teachers' aides and low income literacy performance).

COMPARISON OF PREDICTORS OF STUDENT PERFORMANCE

To examine the relative strength of the relationship between NSLA funding and student performance, stepwise multiple regression (ordinary least squares) procedures were used to enter other established predictors of performance in the same equations with NSLA percentages (see factors shaded in light blue in Tables 1 – 3 in Appendix B). In conducting these regression analyses, multi-collinearity diagnostics were run with tolerance tests and variance inflation factors to check for redundancy in measures (Freund & Wilson, 2006). Collinear factors were removed from analyses.

As a brief summary, NSLA percentages account for 30% of the variance (or differences) in percentages proficient or above in literacy and math. This is a respectable amount of explained variance for a single factor. To examine whether other established predictors might mediate (or reduce to insignificance) the relationship between NSLA percentages and student performance, other established predictors (shown in Tables 1 – 3 in Appendix B) were examined simultaneously in the same regression equations. Specifically, stepwise regression analyses were performed in sets of factors, eliminating factors that were collinear or statistically insignificant.

These analyses clearly indicated that the negative relationship between NSLA percentages and student performance is not mediated by other established predictors. In fact, these analyses indicated that the strongest prediction model for student performance is the combination of race and NSLA percentages. Together, these two factors account for about 36% of the variance in student performance in literacy and math. Unlike some prior research, no problems with multi-collinearity were observed between race and NSLA.

NSLA FUND BALANCES

The significant NSLA fund balances that some districts have developed have become a concern for some legislators, and the Education Committees requested further study of these balances. At the end of 2010-11, 213 districts had NSLA fund balances. Collectively districts had \$26.65 million in NSLA fund balances, or \$113.26 per NSLA student.

Ending Fund Balance	Districts
\$0	26
1-\$50,000	114
\$50,001-\$100,000	41
\$100,001-\$500,000	44
\$500,001-\$1,000,000	11
More than \$1,000,000	3

Statistical analysis was used to determine whether there was any correlation between districts' NSLA fund balances and their achievement among NSLA students. Districts' 2011 fund balances were calculated to a per-NSLA-student amount and analyzed with their percentage of NSLA students who were proficient or advanced. The modest (-.265 and -.251) negative correlations indicate that lower student achievement is associated with increases in fund balances per student.

Act 1220 of the 2011 Regular Session (A.C.A. §6-20-2305) requires school districts with large NSLA fund balances to begin reducing them. The law calls for districts to spend at least 85% of the NSLA allocation they receive each year. Districts with NSLA fund balances above 15% of their current year allocation are required to reduce their balance by at least 10% each year. If a district fails to comply, ADE may withhold a portion of that district's NSLA funding in the following year. The law also allows ADE to redistribute to other districts any funding it withholds. The law was applied for the first time to NSLA fund balances as of June 30, 2012, requiring any resulting fund balance reductions to apply in the 2012-13 school year.

At the end of 2012, 212 districts had NSLA fund balances. Collectively districts had \$21,675,320 in NSLA fund balances, or \$78.41 per NSLA student. The majority of districts had a fund balance under \$100,000, but 12 had a fund balance above \$500,000, and two of those (Fort Smith and Dollarway) had a fund balance above \$1 million.

Ending Fund Balance	Districts
\$0	27
1-\$50,000	124
\$50,001-\$100,000	39
\$100,001-\$500,000	37
\$500,001-\$1,000,000	10
More than \$1,000,000	2

Additionally, 53 districts had ending NSLA fund balances that exceeded 15% of their NSLA allocations for the year. The overages ranged from \$1,111,861 (Fort Smith) to \$136 (Gurdon). On average, the districts required to reduce their NSLA fund balances, were over the 15% level by \$160,435. (For a full list of districts' 2012 fund balances, see Appendix C.)

DISCUSSION AND CONCLUSIONS

In statistical comparisons of means, correlations, and regression analyses a negative (or inverse) relationship was found between NSLA funding levels and expenditures and student performance measures. The negative relationships indicate that lower student achievement is associated with higher NSLA funding and expenditure levels. A negative relationship between NSLA percentages and student performance also was observed in the regression analyses for 2006 and 2011. A formal test of the negative linear relationships observed for 2006 and 2011 in the regression analyses indicated that there was no significant difference. This lack of appreciable change in the linear relationship suggests that overall NSLA percentages have relatively limited impact on student achievement.

However, a comparison of performance averages shows that the performance gap between low income students and the district populations decreases as NSLA funding and expenditure levels increase. Analyses also showed greater achievement gains between 2006 and 2011 for districts that have higher NSLA funding levels (70% or >) than for districts that are below 50% NSLA. These comparison analyses suggest that NSLA funding may contribute to better academic performance among students that were initially targeted for additional funding. According to the original Adequacy Report (Odden & Picus, 2003), the purpose of NSLA funds is to raise achievement for low-income students through the provision of enhanced services such as tutoring.

While the findings of this survey study provide some preliminary evidence that suggests that NSLA funding may be contributing to some noteworthy student achievement gains, the limitations of the study must be considered in any interpretation of these results or implications drawn from them. The design of this study does not permit the testing of “the “effects” (or impact) of interventions such as NSLA funding. The significantly higher achievement gains noted for targeted districts (i.e., 70% or > NSLA) is a noteworthy finding that should not be summarily dismissed because of the inability to test “cause” and “effect” relationship in this study. A rigorous level of significance ($p < 0.05$) was required for differences and relationships in a study with population data (not a sample) before identifying them as meaningful. The multivariate analyses also suggest that the findings are not merely specious.

At the same time, it is possible that other factors outside this study are responsible for the narrowing of gaps and achievement gains. The decided advantage of experimental designs over survey research is the random assignment of these other factors (Babbie, 2010).

In the course of this study, BLR researchers made preliminary observations that NSLA funds appear to be spread across many different functions, including matrix (or foundation funded) items. Discussions with ADE officials indicate that these preliminary observations are valid. It is possible that NSLA funding may be spread so thinly across many different functions (activities, interventions) that any potential benefits are completely diluted.

In conclusion, this study provides the bases for further investigation. Preliminary observations regarding how NSLA funds are used suggest that a more detailed investigation is needed that not only examines the distribution of state NSLA funding, but also includes the broader context of all funding (local, state, and federal). Without this larger financial context, a complete examination and understanding of the impact of state NSLA funding is not attainable. A more complete analysis of funding would provide a more comprehensive assessment of the benefits of additional funding for high-priority students.

The current study also provides valuable clues for further research. For example, there is evidence that the achievement gap between low-income students and other students has decreased. An investigation of what factors are associated with that narrowing of the achievement gap would be useful for program planning.

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APPENDIX A. CORRELATIONS

TABLE A1. CORRELATIONS BETWEEN 2006 & 2011 PERFORMANCE, CHANGES, GAPS, AND NSLA EXPENDITURES FUNDING

		2006 Literacy Low Income	2006 Math Low Income	2011 Literacy Low Income	2011 Math Low Income	Literacy Change 2006 to 2011	Math Change 2006 to 2011	2006*** Literacy Gap	2006*** Math Gap	Total NSLA Expenses	Total NSLA Expenses/ Low Income Count	Total NSLA Funding Expenses	Total NSLA Funding/ Low Income Count
2006 Literacy Low Income	Correlation Significant												
2006 Math Low Income	Correlation Significant	.874** .000											
2011 Literacy Low Income	Correlation Significant	.783** .000	.742** .000										
2011 Math Low Income	Correlation Significant	.734** .000	.767** .000	.835** .000									
Literacy Change 2006 to 2011	Correlation Significant	-.495** .000	-.352** .000	.153* .018	.000 .995								
Math Change 2006 to 2011	Correlation Significant	-.457** .000	-.612** .000	-.127* .049	.038 .562	.548** .000							
2006*** Literacy Gap	Correlation Significant	-.013 .843	.050 .439	.097 .136	.176** .006	.156* .016	.139* .032						
2006*** Math Gap	Correlation Significant	-.011 .865	-.045 .493	.091 .163	.163* .012	.145* .026	.271** .000	.865** .000					
Total NSLA Expenses	Correlation Significant	-.232** .000	-.235** .000	-.179** .005	-.249** .000	.118 .068	.058 .373	.043 .508	.040 .542				
Total NSLA Expenses/ Low Income Count	Correlation Significant	-.384** .000	-.400** .000	-.302** .000	-.393** .000	.187** .004	.138* .033	-.527** .000	-.488** .000	.196** .002			
Total NSLA Funding/ Total Expenses	Correlation Significant	-.097 .133	-.127* .050	-.076 .240	-.051 .435	.048 .458	.135* .037	-.101 .118	-.116 .075	-.061 .345	.353** .000		
Total NSLA Funding/ Low Income Count	Correlation Significant	-.359** .000	-.345** .000	-.285** .000	-.389** .000	.172** .008	.057 .382	-.505** .000	-.467** .000	.234** .000	.887** .000	-.082 .204	

Note: * indicates correlations is significant $p < 0.05$; ** indicates correlation is significant $p < 0.01$; *** is the gap between low income students and all students in a district. Cells shaded in light blue show correlations between NSLA program expenses and performance outcomes.

TABLE A2. CORRELATIONS BETWEEN PERFORMANCE AND NSLA PROGRAM

		2011 Literacy Low Income	2011 Math Low Income	Change Literacy 2006 to 2011 Low Income	Change Math 2006 to 2011 Low Income	2011*** Gap Literacy Low Income & Population	2011*** Gap Math Low Income & Population	Coaches/ Total NSLA Expenses	PD/ Total NSLA Expenses	High Quality Teachers/ Total NSLA Expenses	Before-After/ Total NSLA Expenses
2011 Literacy Low Income	Correlation Significant										
2011 Math Low Income	Correlation Significant	.835** .000									
Change Literacy 2006 to 2011 Low Income	Correlation Significant	.153* .018	-.001 .989								
Change Math 2006 to 2011 Low Income	Correlation Significant	-.128* .049	.039 .547	.549** .000							
2011*** Gap Literacy Low Income & Pop.	Correlation Significant	.000 .997	.133* .041	-.100 .124	.014 .825						
2011*** Gap Math Low Income & Pop.	Correlation Significant	.066 .311	-.026 .688	.032 .621	-.082 .205	.785** .000					
Coaches/Total NSLA Expenses	Correlation Significant	.101 .202	.159* .043	.037 .637	.092 .244	.110 .161	.023 .768				
PD/Total NSLA Expenses	Correlation Significant	.002 .985	.053 .672	.070 .576	.169 .172	.024 .846	-.013 .916	.180 .189			
High Quality Teachers/ Total NSLA Expenses	Correlation Significant	.151 .096	.208* .021	-.013 .885	-.040 .659	.113 .216	.050 .588	-.350** .001	-.054 .766		
Before-After/Total NSLA Expenses	Correlation Significant	.109 .288	.170 .098	.022 .835	.102 .325	.156 .127	.083 .417	.243* .040	-.067 .678	-.078 .597	

Note: * indicates correlations is significant p <0.05; **indicates correlation is significant p <0.01; *** is the gap between low income students and all students in a district. Cells shaded in light blue show correlations between NSLA program expenses and performance outcomes.

TABLE A3. CORRELATIONS BETWEEN PERFORMANCE AND NSLA PROGRAM

		2011 Literacy Low Income	2011 Math Low Income	Change Literacy 2006 to 2011 Low Income	Change Math 2006 to 2011 Low Income	2011*** Gap Literacy Low Income & Population	2011*** Gap Math Low Income & Population	Pre-K/ Total NSLA Expenses	Tutors/ Total NSLA Expenses	Aides/ Total NSLA Expenses	Student Services/ Total NSLA Expenses
2011 Literacy Low Income	Correlation Significant										
2011 Math Low Income	Correlation Significant	.835** .000									
Change Literacy 2006 to 2011 Low Income	Correlation Significant	.153* .018	-.001 .989								
Change Math 2006 to 2011 Low Income	Correlation Significant	-.128* .049	.039 .547	.549** .000							
2011*** Gap Literacy Low Income & Pop.	Correlation Significant	.000 .997	.133* .041	-.100 .124	.014 .825						
2011*** Gap Math Low Income & Pop.	Correlation Significant	.066 .311	-.026 .688	.032 .621	-.082 .205	.785** .000					
PreK/Total NSLA Expenses	Correlation Significant	-.036 .818	-.002 .990	-.094 .545	.091 .558	.018 .905	.050 .746				
Tutors/Total NSLA Expenses	Correlation Significant	.041 .726	.033 .774	-.116 .319	-.085 .465	.127 .271	.159 .168	.015 .958			
Aides/Total NSLA Expenses	Correlation Significant	.231** .005	.219** .008	-.062 .459	-.062 .457	.067 .421	.035 .671	-.039 .849	-.043 .762		
Student Services/Total NSLA Expenses	Correlation Significant	.081 .286	.073 .337	-.081 .288	-.069 .366	.033 .665	.091 .229	.084 .637	.202 .125	-.079 .399	

Note: * indicates correlations is significant $p < 0.05$; ** indicates correlation is significant $p < 0.01$; *** is the gap between low income students and all students in a district. Cells shaded in light blue show correlations between NSLA program expenses and performance outcomes.

TABLE A4. CORRELATIONS BETWEEN PERFORMANCE AND NSLA PROGRAM

		2011 Literacy Low Income	2011 Math Low Income	Change Literacy 2006 to 2011 Low Income	Change Math 2006 to 2011 Low Income	2011*** Gap Literacy Low Income & Population	2011*** Gap Math Low Income & Population	Parent Education/ Total NSLA Expenses	Summer School/ Total NSLA Expenses	Early Intervention/ Total NSLA Expenses	School Improvement/ Total NSLA Expenses	Other/ Total NSLA Expenses
2011 Literacy Low Income	Correlation Significant											
2011 Math Low Income	Correlation Significant	.835** .000										
Change Literacy 2006 to 2011 Low Income	Correlation Significant	.153* .018	-.001 .989									
Change Math 2006 to 2011 Low Income	Correlation Significant	-.128* .049	.039 .547	.549** .000								
2011*** Gap Literacy Low Income & Pop.	Correlation Significant	.000 .997	.133* .041	-.100 .124	.014 .825							
2011*** Gap Math Low Income & Pop.	Correlation Significant	.066 .311	-.026 .688	.032 .621	-.082 .205	.785** .000						
Parent Education/ Total NSLA Expenses	Correlation Significant	.002 .988	.061 .628	-.186 .134	.000 .999	.071 .567	.084 .500					
Summer School/Total NSLA Expenses	Correlation Significant	.039 .745	.122 .301	-.166 .158	-.049 .681	.232* .045	.196 .092	.037 .831				
Early Intervention/ Total NSLA Expenses	Correlation Significant	.080 .633	.057 .733	.164 .326	.082 .626	.021 .899	-.009 .955	.002 .996	-.151 .538			
School Improvement/ Total NSLA Expenses	Correlation Significant	-.116 .247	-.085 .398	-.092 .356	-.009 .928	.063 .530	-.041 .680	.062 .702	.197 .199	-.402 .088		
Other/Total NSLA Expenses	Correlation Significant	.148 .063	.055 .494	-.045 .574	-.028 .730	-.125 .116	-.056 .486	.224 .143	.115 .391	.151 .436	-.213 .109	

Note: * indicates correlations is significant $p < 0.05$; ** indicates correlation is significant $p < 0.01$; *** is the gap between low income students and all students in a district. Cells shaded in light blue show correlations between NSLA program expenses and performance outcomes. All program expenditures are summed and divided by the total NSLA expenditures.

APPENDIX B. CORRELATIONS

TABLE B1. CORRELATIONS BETWEEN 2006 & 2011 PERFORMANCE, CHANGES, GAPS, AND PRIMARY DEMOGRAPHICS

		2006 Literacy Low Income	2006 Math Low Income	2011 Literacy Low Income	2011 Math Low Income	Literacy Change 2006 to 2011	Math Change 2006 to 2011	2006*** Literacy Gap	2006*** Math Gap	Female Household Head	3 rd Quarter ADM	Beginning Teacher Salary	Avg. Teacher Salary	% White	Wealth Index
2006 Literacy Low Income	Correlation Significant														
2006 Math Low Income	Correlation Significant	.874** .000													
2011 Literacy Low Income	Correlation Significant	.783** .000	.742** .000												
2011 Math Low Income	Correlation Significant	.734** .000	.767** .000	.835** .000											
Literacy Change 2006 to 2011	Correlation Significant	-.495** .000	-.352** .000	.153* .018	.000 .995										
Math Change 2006 to 2011	Correlation Significant	-.457** .000	-.612** .000	-.127* .049	.038 .562	.548** .000									
2006*** Literacy Gap	Correlation Significant	.062 .340	.096 .137	.000 .999	.133* .039	-.099 .129	.014 .827								
2006*** Math Gap	Correlation Significant	.042 .519	.034 .605	.064 .326	-.027 .680	.023 .728	-.086 .188	.785** .000							
Female Household Head	Correlation Significant	-.479** .000	-.483** .000	-.452** .000	-.475** .000	.129* .049	.166* .011	-.042 .518	.024 .714						
3 rd Quarter ADM	Correlation Significant	-.046 .482	-.042 .522	-.005 .934	-.047 .474	.065 .316	.008 .908	.336** .000	.328** .000	.114 .082					
Beginning Teacher Salary	Correlation Significant	.089 .168	.093 .151	.173** .007	.138* .033	.100 .123	.025 .705	.329** .000	.303** .000	.025 .706	.557** .000				
Average Teacher Salary	Correlation Significant	-.005 .944	.007 .911	.092 .157	.040 .542	.135* .036	.038 .563	.188** .004	.178** .006	.089 .173	.288** .000	.624** .000			
% White	Correlation Significant	.560** .000	.551** .000	.473** .000	.562** .000	-.229** .000	-.165* .010	.121 .061	.034 .606	-.725** .000	-.273** .000	-.173** .008	-.144* .026		
Wealth Index	Correlation Significant	-.004 .945	-.007 .911	-.011 .866	.012 .859	-.008 .899	.026 .694	-.141* .030	-.154* .017	.137* .035	-.245** .000	-.093 .151	-.041 .532	.061 .351	

Note: * indicates correlations is significant $p < 0.05$; ** indicates correlation is significant $p < 0.01$; *** is the gap between low income students and all students in a district. Cells shaded in light blue show correlations between district demographics and performance outcomes.

TABLE B2. CORRELATIONS BETWEEN 2006 & 2011 PERFORMANCE, CHANGES, GAPS, AND EXPENDITURES

		2006 Literacy Low Income	2006 Math Low Income	2011 Literacy Low Income	2011 Math Low Income	Literacy Change 2006 to 2011	Math Change 2006 to 2011	2006*** Literacy Gap	2006*** Math Gap	2011 Per Pupil Expenses	Total Instruction Expenses/ ADM	Student Services Expenses/ ADM	Instruction Staff Expenses/ ADM
2006 Literacy Low Income	Correlation Significant												
2006 Math Low Income	Correlation Significant	.876** .000											
2011 Literacy Low Income	Correlation Significant	.783** .000	.743** .000										
2011 Math Low Income	Correlation Significant	.735** .000	.767** .000	.835** .000									
Literacy Change 2006 to 2011	Correlation Significant	-.495** .000	-.353** .000	.153* .018	-.001 .989								
Math Change 2006 to 2011	Correlation Significant	-.458** .000	-.611** .000	-.128* .049	.039 .547	.549** .000							
2006*** Literacy Gap	Correlation Significant	.063 .336	.096 .140	.000 .997	.133* .041	-.100 .124	.014 .825						
2006*** Math Gap	Correlation Significant	.038 .563	.032 .621	.066 .311	-.026 .688	.032 .621	-.082 .205	.785** .000					
2011 Per Pupil Expenses	Correlation Significant	-.466** .000	-.482** .000	-.406** .000	-.501** .000	.172** .008	.133* .039	-.359** .000	-.285** .000				
Total Instruction Expenses/ADM	Correlation Significant	-.344** .000	-.364** .000	-.273** .000	-.370** .000	.165* .011	.110 .090	-.274** .000	-.197** .002	.773** .000	1		
Student Services Expenses/ADM	Correlation Significant	-.066 .308	-.059 .361	-.020 .756	-.055 .397	.077 .236	.025 .705	.332** .000	.312** .000	.437** .000	.032 .628	1	
Instruction Staff Expenses/ADM	Correlation Significant	-.487** .000	-.515** .000	-.387** .000	-.456** .000	.234** .000	.239** .000	-.305** .000	-.235** .000	.702** .000	.471** .000	.056 .389	1

Note: * indicates correlations is significant p <0.05; **indicates correlation is significant p <0.01; *** is the gap between low income students and all students in a district. Cells shaded in light blue show correlations between NSLA program expenses and performance outcomes.

TABLE B3. CORRELATIONS BETWEEN 2006 & 2011 PERFORMANCE, CHANGES, GAPS, AND TITLE 1 EXPENDITURE REVENUE

		2006 Literacy Low Income	2006 Math Low Income	2011 Literacy Low Income	2011 Math Low Income	Literacy Change 2006 to 2011	Math Change 2006 to 2011	2006*** Literacy Gap	2006*** Math Gap	Total Title 1 2011 Expenses	Total Title 1 Expenses/ Count Low Income	Total Title 1 Expenses/ ADM	Title 1 Revenue/ Count Low Income
2006 Literacy Low Income	Correlation Significant												
2006 Math Low Income	Correlation Significant	.874** .000											
2011 Literacy Low Income	Correlation Significant	.783** .000	.742** .000										
2011 Math Low Income	Correlation Significant	.734** .000	.767** .000	.835** .000									
Literacy Change 2006 to 2011	Correlation Significant	-.495** .000	-.352** .000	.153* .018	.000 .995								
Math Change 2006 to 2011	Correlation Significant	-.457** .000	-.612** .000	-.127* .049	.038 .562	.548** .000							
2006*** Literacy Gap	Correlation Significant	-.013 .843	.050 .439	.097 .136	.176** .006	.156* .016	.139* .032						
2006*** Math Gap	Correlation Significant	-.011 .865	-.045 .493	.091 .163	.163* .012	.145* .026	.271** .000	.865** .000					
Total Title 1 2011 Expenses	Correlation Significant	-.204** .002	-.209** .001	-.172** .008	-.234** .000	.084 .195	.037 .573	.168** .009	.155* .017				
Total Title 1 Expenses/ Count Low Income	Correlation Significant	-.293** .000	-.349** .000	-.293** .000	-.365** .000	.057 .380	.095 .144	-.244** .000	-.232** .000	.241** .000			
Total Title 1 Expenses/ ADM	Correlation Significant	-.394** .000	-.425** .000	-.383** .000	-.457** .000	.092 .157	.099 .127	-.384** .000	-.364** .000	.229** .000	.938** .000		
Total Title 1 Revenue/ Count Low Income	Correlation Significant	-.288** .000	-.347** .000	-.277** .000	-.359** .000	.071 .273	.097 .133	-.234** .000	-.218** .001	.260** .000	.979** .000	.922** .000	

Note: * indicates correlations is significant p <0.05; **indicates correlation is significant p <0.01; *** is the gap between low income students and all students in a district. Cells shaded in light blue show correlations between NSLA program expenses and performance outcomes.

APPENDIX C. 2011-12 FUND BALANCES

Act 1220 of the 2011 Regular Session (A.C.A. §6-20-2305) requires school districts with large NSLA fund balances to begin reducing them. The law calls for districts to spend at least 85% of the NSLA allocation they receive each year. Districts with NSLA fund balances above 15% of their current year allocation are required to reduce their balance in the coming years. The following table shows each district's 2012 NSLA funding allocation and ending balance. Those districts with a negative value (shown in red) in the column labeled "15% of FY12 Funding Minus 2012 Ending Balance" are the districts with fund balances exceeding the 15% level.

LEA	District	2012 Total NSLA Funding	15% of FY12 NSLA Funding	2012 NSLA Ending Balance	15% of FY12 Funding Minus 2012 Ending Balance
1701000	ALMA	\$882,464.00	\$132,369.60	\$0.00	\$132,369.60
501000	ALPENA	\$167,992.00	\$25,198.80	\$8,002.14	\$17,196.66
1002000	ARKADELPHIA	\$528,770.00	\$79,315.50	\$39,710.47	\$39,605.03
4701000	ARMOREL	\$102,212.00	\$15,331.80	\$24,885.86	-\$9,554.06
4101000	ASHDOWN	\$449,328.00	\$67,399.20	\$2,363.82	\$65,035.38
5801000	ATKINS	\$294,492.00	\$44,173.80	\$27,552.88	\$16,620.92
7401000	AUGUSTA	\$420,992.00	\$63,148.80	\$9,939.41	\$53,209.39
7301000	BALD KNOB	\$413,402.00	\$62,010.30	\$20,348.87	\$41,661.43
5401000	BARTON-LEXA	\$369,719.00	\$55,457.85	\$106,809.93	-\$51,352.08
3201000	BATESVILLE	\$829,334.00	\$124,400.10	\$3,141.34	\$121,258.76
6301000	BAUXITE	\$308,063.00	\$46,209.45	\$34,212.73	\$11,996.72
1601000	BAY	\$154,836.00	\$23,225.40	\$64,096.64	-\$40,871.24
5201000	BEARDEN	\$395,692.00	\$59,353.80	\$105,053.88	-\$45,700.08
7302000	BEEBE	\$789,866.00	\$118,479.90	\$1,714.24	\$116,765.66
6302000	BENTON	\$898,656.00	\$134,798.40	\$2,716.13	\$132,082.27
401000	BENTONVILLE	\$1,960,055.00	\$294,008.25	\$19,424.68	\$274,583.57
502000	BERGMAN	\$248,446.00	\$37,266.90	\$1,673.70	\$35,593.20
801000	BERRYVILLE	\$535,854.00	\$80,378.10	\$66,274.27	\$14,103.83
3001000	BISMARCK	\$292,974.00	\$43,946.10	\$0.00	\$43,946.10
2901000	BLEVINS	\$476,652.00	\$71,497.80	\$0.00	\$71,497.80
4702000	BLYTHERVILLE	\$2,424,752.00	\$363,712.80	\$159,584.50	\$204,128.30
4201000	BOONEVILLE	\$446,292.00	\$66,943.80	\$76,751.72	-\$9,807.92
7303000	BRADFORD	\$239,508.00	\$35,926.20	\$4,148.15	\$31,778.05
3701000	BRADLEY	\$315,744.00	\$47,361.60	\$0.00	\$47,361.60
4801000	BRINKLEY	\$499,928.00	\$74,989.20	\$75.37	\$74,913.83
1603000	BROOKLAND	\$324,865.00	\$48,729.75	\$0.00	\$48,729.75
6303000	BRYANT	\$1,458,646.00	\$218,796.90	\$69,138.34	\$149,658.56
1605000	BUFFALO ISLAND CENTRAL	\$280,324.00	\$42,048.60	\$93,108.93	-\$51,060.33
4304000	CABOT	\$1,783,960.00	\$267,594.00	\$99,064.12	\$168,529.88
4901000	CADDO HILLS	\$462,484.00	\$69,372.60	\$50,724.25	\$18,648.35
3301000	CALICO ROCK	\$124,476.00	\$18,671.40	\$6,543.95	\$12,127.45
5204000	CAMDEN-FAIRVIEW	\$1,837,792.00	\$275,668.80	\$257,108.11	\$18,560.69
4303000	CARLISLE	\$200,376.00	\$30,056.40	\$6,232.13	\$23,824.27
6802000	CAVE CITY	\$470,580.00	\$70,587.00	\$64,667.78	\$5,919.22
3212000	CEDAR RIDGE	\$270,710.00	\$40,606.50	\$44,394.86	-\$3,788.36
1702000	CEDARVILLE	\$684,112.00	\$102,616.80	\$27,269.46	\$75,347.34
5502000	CENTERPOINT	\$358,754.00	\$53,813.10	\$38,492.07	\$15,321.03
2402000	CHARLESTON	\$181,654.00	\$27,248.10	\$5,164.30	\$22,083.80
4802000	CLARENDON	\$482,724.00	\$72,408.60	\$21,620.24	\$50,788.36
3601000	CLARKSVILLE	\$854,128.00	\$128,119.20	\$15,221.89	\$112,897.31
1305000	CLEVELAND COUNTY	\$240,350.00	\$36,052.50	\$47,643.07	-\$11,590.57

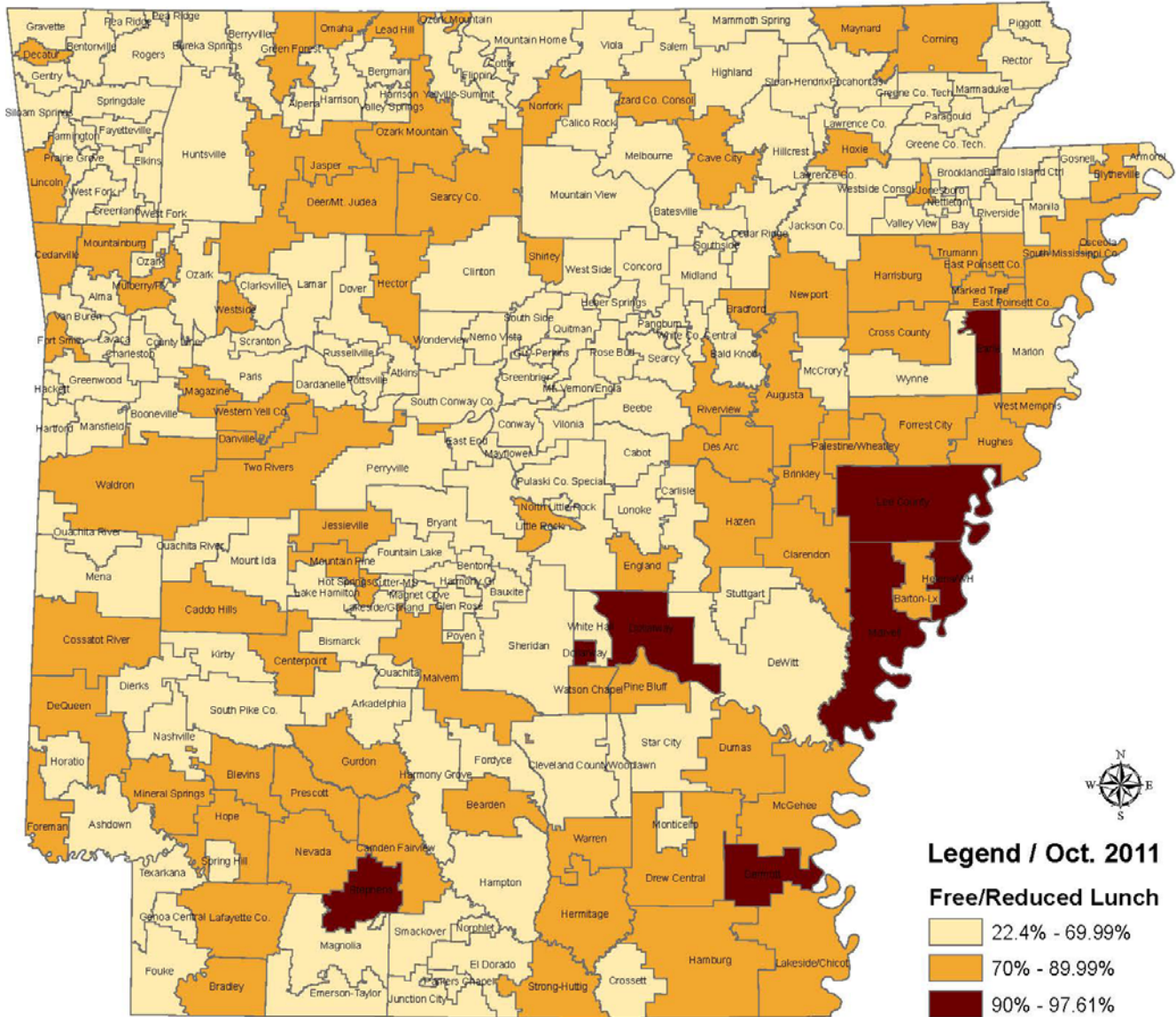
LEA	District	2012 Total NSLA Funding	15% of FY12 NSLA Funding	2012 NSLA Ending Balance	15% of FY12 Funding Minus 2012 Ending Balance
7102000	CLINTON	\$801,173.00	\$120,175.95	\$148,972.13	-\$28,796.18
1201000	CONCORD	\$135,102.00	\$20,265.30	\$10,610.18	\$9,655.12
2301000	CONWAY	\$2,060,938.00	\$309,140.70	\$167,442.90	\$141,697.80
1101000	CORNING	\$614,795.00	\$92,219.25	\$24,179.19	\$68,040.06
5707000	COSSATOT RIVER	\$841,984.00	\$126,297.60	\$316,458.64	-\$190,161.04
302000	COTTER	\$231,748.00	\$34,762.20	\$21,213.95	\$13,548.25
2403000	COUNTY LINE	\$138,644.00	\$20,796.60	\$49.87	\$20,746.73
1901000	CROSS COUNTY	\$464,508.00	\$69,676.20	\$65,675.29	\$4,000.91
201000	CROSSETT	\$547,998.00	\$82,199.70	\$23,000.93	\$59,198.77
2601000	CUTTER-MORNING STAR	\$199,870.00	\$29,980.50	\$33,333.14	-\$3,352.64
7503000	DANVILLE	\$673,992.00	\$101,098.80	\$110,494.32	-\$9,395.52
7504000	DARDANELLE	\$669,438.00	\$100,415.70	\$19,482.52	\$80,933.18
402000	DECATUR	\$392,656.00	\$58,898.40	\$42,673.62	\$16,224.78
5106000	DEER/MT. JUDEA	\$283,360.00	\$42,504.00	\$24,153.59	\$18,350.41
6701000	DEQUEEN	\$1,807,432.00	\$271,114.80	\$874,672.40	-\$603,557.60
901000	DERMOTT	\$598,092.00	\$89,713.80	\$8,178.05	\$81,535.75
5901000	DES ARC	\$190,256.00	\$28,538.40	\$35,678.16	-\$7,139.76
101000	DEWITT	\$411,378.00	\$61,706.70	\$4,657.72	\$57,048.98
3102000	DIERKS	\$151,800.00	\$22,770.00	\$4,915.93	\$17,854.07
3502000	DOLLARWAY	\$2,132,790.00	\$319,918.50	\$1,100,241.79	-\$780,323.29
5802000	DOVER	\$403,788.00	\$60,568.20	\$54,712.24	\$5,855.96
2202000	DREW CENTRAL	\$710,424.00	\$106,563.60	\$0.00	\$106,563.60
2104000	DUMAS	\$1,176,956.00	\$176,543.40	\$15,668.59	\$160,874.81
1802000	EARLE	\$1,012,506.00	\$151,875.90	\$0.00	\$151,875.90
5301000	EAST END	\$187,220.00	\$28,083.00	\$23,467.68	\$4,615.32
5608000	EAST POINSETT COUNTY	\$537,372.00	\$80,605.80	\$1,971.63	\$78,634.17
7001000	EL DORADO	\$1,426,920.00	\$214,038.00	\$15,259.20	\$198,778.80
7201000	ELKINS	\$278,806.00	\$41,820.90	\$0.00	\$41,820.90
1408000	EMERSON-TAYLOR	\$135,102.00	\$20,265.30	\$11,876.54	\$8,388.76
4302000	ENGLAND	\$484,921.00	\$72,738.15	\$50,403.38	\$22,334.77
802000	EUREKA SPRINGS	\$200,376.00	\$30,056.40	\$17,460.76	\$12,595.64
7202000	FARMINGTON	\$417,956.00	\$62,693.40	\$19,913.13	\$42,780.27
7203000	FAYETTEVILLE	\$1,784,156.00	\$267,623.40	\$623,511.89	-\$355,888.49
4501000	FLIPPIN	\$264,132.00	\$39,619.80	\$0.00	\$39,619.80
2002000	FORDYCE	\$321,310.00	\$48,196.50	\$21,175.53	\$27,020.97
4102000	FOREMAN	\$187,726.00	\$28,158.90	\$11.48	\$28,147.42
6201000	FORREST CITY	\$2,609,948.00	\$391,492.20	\$114,156.23	\$277,335.97
6601000	FORT SMITH	\$4,837,360.00	\$725,604.00	\$1,837,465.19	-\$1,111,861.19
4603000	FOUKE	\$331,936.00	\$49,790.40	\$34,182.62	\$15,607.78
2602000	FOUNTAIN LAKE	\$306,636.00	\$45,995.40	\$21,169.17	\$24,826.23
4602000	GENOA CENTRAL	\$214,038.00	\$32,105.70	\$17,417.11	\$14,688.59
403000	GENTRY	\$460,966.00	\$69,144.90	\$98.61	\$69,046.29
3002000	GLEN ROSE	\$247,434.00	\$37,115.10	\$3,884.49	\$33,230.61
4708000	GOSNELL	\$477,158.00	\$71,573.70	\$23,789.20	\$47,784.50
404000	GRAVETTE	\$449,328.00	\$67,399.20	\$130,994.07	-\$63,594.87
803000	GREEN FOREST	\$978,604.00	\$146,790.60	\$144,479.13	\$2,311.47
2303000	GREENBRIER	\$589,490.00	\$88,423.50	\$10,321.81	\$78,101.69
2807000	GREENE COUNTY TECH	\$913,330.00	\$136,999.50	\$66,941.69	\$70,057.81
7204000	GREENLAND	\$238,832.00	\$35,824.80	\$12,508.38	\$23,316.42
6602000	GREENWOOD	\$594,550.00	\$89,182.50	\$6,011.31	\$83,171.19
1003000	GURDON	\$543,444.00	\$81,516.60	\$81,653.01	-\$136.41
2304000	GUY-PERKINS	\$140,668.00	\$21,100.20	\$10,929.52	\$10,170.68

LEA	District	2012 Total NSLA Funding	15% of FY12 NSLA Funding	2012 NSLA Ending Balance	15% of FY12 Funding Minus 2012 Ending Balance
6603000	HACKETT	\$166,980.00	\$25,047.00	\$3,519.94	\$21,527.06
203000	HAMBURG	\$1,447,160.00	\$217,074.00	\$88,693.78	\$128,380.22
701000	HAMPTON	\$181,148.00	\$27,172.20	\$1,010.78	\$26,161.42
5205000	HARMONY GROVE	\$265,144.00	\$39,771.60	\$28,574.88	\$11,196.72
6304000	HARMONY GROVE	\$267,117.00	\$40,067.55	\$51,225.94	-\$11,158.39
5602000	HARRISBURG	\$1,009,976.00	\$151,496.40	\$153,819.52	-\$2,323.12
503000	HARRISON	\$724,086.00	\$108,612.90	\$41,987.03	\$66,625.87
6604000	HARTFORD	\$116,886.00	\$17,532.90	\$7,012.96	\$10,519.94
5903000	HAZEN	\$310,348.00	\$46,552.20	\$22,853.58	\$23,698.62
1202000	HEBER SPRINGS	\$468,556.00	\$70,283.40	\$20,494.03	\$49,789.37
5803000	HECTOR	\$457,424.00	\$68,613.60	\$17,608.74	\$51,004.86
5403000	HELENA-W HELENA	\$3,146,814.00	\$472,022.10	\$879,470.66	-\$407,448.56
601000	HERMITAGE	\$355,212.00	\$53,281.80	\$823.34	\$52,458.46
6804000	HIGHLAND	\$529,276.00	\$79,391.40	\$97,761.19	-\$18,369.79
3809000	HILLCREST	\$236,132.00	\$35,419.80	\$105,366.17	-\$69,946.37
2903000	HOPE	\$2,015,904.00	\$302,385.60	\$19,028.89	\$283,356.71
6703000	HORATIO	\$304,106.00	\$45,615.90	\$11,002.43	\$34,613.47
2603000	HOT SPRINGS	\$2,872,056.00	\$430,808.40	\$71,854.22	\$358,954.18
3804000	HOXIE	\$715,484.00	\$107,322.60	\$40,847.45	\$66,475.15
6202000	HUGHES	\$357,236.00	\$53,585.40	\$0.00	\$53,585.40
4401000	HUNTSVILLE	\$697,774.00	\$104,666.10	\$100,652.03	\$4,014.07
3306000	IZARD COUNTY CONSOLIDATED	\$369,380.00	\$55,407.00	\$3,207.11	\$52,199.89
3405000	JACKSON COUNTY	\$267,674.00	\$40,151.10	\$16,109.78	\$24,041.32
5102000	JASPER	\$431,114.00	\$64,667.10	\$35,538.14	\$29,128.96
2604000	JESSIEVILLE	\$268,686.00	\$40,302.90	\$0.00	\$40,302.90
1608000	JONESBORO	\$2,704,725.00	\$405,708.75	\$563,756.12	-\$158,047.37
7003000	JUNCTION CITY	\$168,498.00	\$25,274.70	\$5,915.21	\$19,359.49
5503000	KIRBY	\$131,560.00	\$19,734.00	\$0.16	\$19,733.84
3704000	LAFAYETTE COUNTY	\$649,704.00	\$97,455.60	\$97,383.25	\$72.35
2605000	LAKE HAMILTON	\$1,160,258.00	\$174,038.70	\$141,091.99	\$32,946.71
903000	LAKESIDE	\$973,544.00	\$146,031.60	\$836,547.23	-\$690,515.63
2606000	LAKESIDE	\$604,164.00	\$90,624.60	\$7,882.25	\$82,742.35
3604000	LAMAR	\$326,876.00	\$49,031.40	\$21,179.59	\$27,851.81
6605000	LAVACA	\$210,496.00	\$31,574.40	\$0.00	\$31,574.40
3810000	LAWRENCE COUNTY S.D.	\$341,044.00	\$51,156.60	\$84,240.19	-\$33,083.59
506000	LEAD HILL	\$281,336.00	\$42,200.40	\$26,417.59	\$15,782.81
3904000	LEE COUNTY	\$1,363,164.00	\$204,474.60	\$226,670.18	-\$22,195.58
7205000	LINCOLN CONSOLIDATED	\$775,873.00	\$116,380.95	\$0.00	\$116,380.95
6001000	LITTLE ROCK	\$14,273,530.00	\$2,141,029.50	\$0.00	\$2,141,029.50
4301000	LONOKE	\$521,686.00	\$78,252.90	\$17,161.19	\$61,091.71
4202000	MAGAZINE	\$406,824.00	\$61,023.60	\$34,591.77	\$26,431.83
3003000	MAGNET COVE	\$168,498.00	\$25,274.70	\$7,659.04	\$17,615.66
1402000	MAGNOLIA	\$961,400.00	\$144,210.00	\$94,359.14	\$49,850.86
3004000	MALVERN	\$1,020,101.00	\$153,015.15	\$82,930.82	\$70,084.33
2501000	MAMMOTH SPRING	\$151,294.00	\$22,694.10	\$47,612.06	-\$24,917.96
4712000	MANILA	\$313,214.00	\$46,982.10	\$18,346.04	\$28,636.06
6606000	MANSFIELD	\$280,324.00	\$42,048.60	\$14,683.67	\$27,364.93
1804000	MARION	\$1,262,976.00	\$189,446.40	\$153,157.84	\$36,288.56
5604000	MARKED TREE	\$478,676.00	\$71,801.40	\$153,109.97	-\$81,308.57
2803000	MARMADUKE	\$230,736.00	\$34,610.40	\$14,309.58	\$20,300.82
5404000	MARVELL	\$667,920.00	\$100,188.00	\$0.00	\$100,188.00
2305000	MAYFLOWER	\$287,914.00	\$43,187.10	\$48,417.06	-\$5,229.96

LEA	District	2012 Total NSLA Funding	15% of FY12 NSLA Funding	2012 NSLA Ending Balance	15% of FY12 Funding Minus 2012 Ending Balance
6102000	MAYNARD	\$383,548.00	\$57,532.20	\$145,153.55	-\$87,621.35
7403000	MCCRORY	\$224,158.00	\$33,623.70	\$82,188.54	-\$48,564.84
2105000	MCGEHEE	\$871,332.00	\$130,699.80	\$298,223.18	-\$167,523.38
3302000	MELBOURNE	\$259,072.00	\$38,860.80	\$27,069.05	\$11,791.75
5703000	MENA	\$623,392.00	\$93,508.80	\$69,087.15	\$24,421.65
3211000	MIDLAND	\$175,582.00	\$26,337.30	\$2,032.14	\$24,305.16
3104000	MINERAL SPRINGS	\$515,953.00	\$77,392.95	\$86,565.23	-\$9,172.28
2203000	MONTICELLO	\$584,936.00	\$87,740.40	\$24,479.27	\$63,261.13
4902000	MOUNT IDA	\$156,354.00	\$23,453.10	\$1,875.97	\$21,577.13
2306000	MOUNT VERNON/ENOLA	\$144,716.00	\$21,707.40	\$6,535.36	\$15,172.04
303000	MOUNTAIN HOME	\$1,086,382.00	\$162,957.30	\$26,185.01	\$136,772.29
2607000	MOUNTAIN PINE	\$466,532.00	\$69,979.80	\$59,675.08	\$10,304.72
6901000	MOUNTAIN VIEW	\$524,216.00	\$78,632.40	\$67,877.53	\$10,754.87
1703000	MOUNTAINBURG	\$433,477.00	\$65,021.55	\$18,328.66	\$46,692.89
1704000	MULBERRY/PLEASANT VIEW BI-COUNTY	\$314,732.00	\$47,209.80	\$4,920.65	\$42,289.15
6002000	N LITTLE ROCK	\$3,954,916.00	\$593,237.40	\$301,403.64	\$291,833.76
3105000	NASHVILLE	\$630,982.00	\$94,647.30	\$0.00	\$94,647.30
1503000	NEMO VISTA	\$154,330.00	\$23,149.50	\$4,098.90	\$19,050.60
1611000	NETTLETON	\$925,980.00	\$138,897.00	\$154.84	\$138,742.16
5008000	NEVADA	\$301,576.00	\$45,236.40	\$17,553.79	\$27,682.61
3403000	NEWPORT	\$1,060,576.00	\$159,086.40	\$402,793.43	-\$243,707.03
304000	NORFORK	\$382,536.00	\$57,380.40	\$55,603.10	\$1,777.30
7006000	NORPHLET	\$104,236.00	\$15,635.40	\$0.00	\$15,635.40
504000	OMAHA	\$301,576.00	\$45,236.40	\$143,624.44	-\$98,388.04
4713000	OSCEOLA	\$1,259,940.00	\$188,991.00	\$619,670.13	-\$430,679.13
3005000	OUACHITA	\$111,826.00	\$16,773.90	\$0.00	\$16,773.90
5706000	OUACHITA RIVER	\$526,240.00	\$78,936.00	\$8,856.39	\$70,079.61
2404000	OZARK	\$503,470.00	\$75,520.50	\$33,970.66	\$41,549.84
6505000	OZARK MOUNTAIN	\$523,204.00	\$78,480.60	\$54,054.04	\$24,426.56
6205000	PALESTINE-WHEATLEY	\$608,873.00	\$91,330.95	\$682,202.12	-\$590,871.17
7309000	PANGBURN	\$219,098.00	\$32,864.70	\$18,387.73	\$14,476.97
2808000	PARAGOULD	\$941,160.00	\$141,174.00	\$793,473.43	-\$652,299.43
4203000	PARIS	\$340,032.00	\$51,004.80	\$3,630.96	\$47,373.84
7007000	PARKERS CHAPEL	\$95,128.00	\$14,269.20	\$0.00	\$14,269.20
407000	PEA RIDGE	\$388,190.00	\$58,228.50	\$29,646.76	\$28,581.74
5303000	PERRYVILLE	\$253,506.00	\$38,025.90	\$78,107.34	-\$40,081.44
1104000	PIGGOTT	\$274,758.00	\$41,213.70	\$185,972.25	-\$144,758.55
3505000	PINE BLUFF	\$3,809,168.00	\$571,375.20	\$0.00	\$571,375.20
6103000	POCAHONTAS	\$571,780.00	\$85,767.00	\$51,281.01	\$34,485.99
5804000	POTTSVILLE	\$336,490.00	\$50,473.50	\$24,044.59	\$26,428.91
2703000	POYEN	\$158,378.00	\$23,756.70	\$9,951.78	\$13,804.92
7206000	PRAIRIE GROVE	\$404,800.00	\$60,720.00	\$16,667.99	\$44,052.01
5006000	PRESCOTT	\$804,540.00	\$120,681.00	\$156,207.09	-\$35,526.09
6003000	PULASKI COUNTY	\$4,159,826.00	\$623,973.90	\$535,490.69	\$88,483.21
1203000	QUITMAN	\$166,980.00	\$25,047.00	\$1,426.68	\$23,620.32
1106000	RECTOR	\$171,534.00	\$25,730.10	\$0.00	\$25,730.10
1613000	RIVERSIDE	\$259,578.00	\$38,936.70	\$104,951.72	-\$66,015.02
7307000	RIVERVIEW	\$933,064.00	\$139,959.60	\$27,738.22	\$112,221.38
405000	ROGERS	\$4,154,766.00	\$623,214.90	\$197,465.42	\$425,749.48
7310000	ROSE BUD	\$222,134.00	\$33,320.10	\$5,963.58	\$27,356.52
5805000	RUSSELLVILLE	\$1,467,906.00	\$220,185.90	\$77,217.64	\$142,968.26

LEA	District	2012 Total NSLA Funding	15% of FY12 NSLA Funding	2012 NSLA Ending Balance	15% of FY12 Funding Minus 2012 Ending Balance
2502000	SALEM	\$229,724.00	\$34,458.60	\$5,787.42	\$28,671.18
4204000	SCRANTON	\$104,236.00	\$15,635.40	\$255.13	\$15,380.27
7311000	SEARCY	\$902,704.00	\$135,405.60	\$382,401.83	-\$246,996.23
6502000	SEARCY COUNTY	\$681,076.00	\$102,161.40	\$84,086.89	\$18,074.51
2705000	SHERIDAN	\$953,304.00	\$142,995.60	\$0.00	\$142,995.60
7104000	SHIRLEY	\$359,260.00	\$53,889.00	\$75,268.35	-\$21,379.35
406000	SILOAM SPRINGS	\$1,082,729.00	\$162,409.35	\$151,867.24	\$10,542.11
3806000	SLOAN-HENDRIX	\$214,038.00	\$32,105.70	\$297,856.83	-\$265,751.13
7008000	SMACKOVER	\$217,580.00	\$32,637.00	\$5,344.83	\$27,292.17
1507000	SO CONWAY COUNTY	\$705,364.00	\$105,804.60	\$88,259.72	\$17,544.88
4706000	SO MISSISSIPPI COUNTY	\$1,014,024.00	\$152,103.60	\$172,371.77	-\$20,268.17
5504000	SOUTH PIKE COUNTY	\$244,904.00	\$36,735.60	\$8,223.15	\$28,512.45
7105000	SOUTH SIDE	\$138,644.00	\$20,796.60	\$19,419.73	\$1,376.87
3209000	SOUTHSIDE	\$459,954.00	\$68,993.10	\$42,646.75	\$26,346.35
2906000	SPRING HILL	\$125,994.00	\$18,899.10	\$1,700.50	\$17,198.60
7207000	SPRINGDALE	\$6,309,570.00	\$946,435.50	\$171,415.82	\$775,019.68
4003000	STAR CITY	\$502,964.00	\$75,444.60	\$9,966.08	\$65,478.52
5206000	STEPHENS	\$380,176.00	\$57,026.40	\$110,446.06	-\$53,419.66
7009000	STRONG-HUTTIG	\$374,440.00	\$56,166.00	\$53,937.19	\$2,228.81
104000	STUTT GART	\$562,166.00	\$84,324.90	\$66,195.56	\$18,129.34
4605000	TEXARKANA	\$1,463,352.00	\$219,502.80	\$110,937.70	\$108,565.10
5605000	TRUMANN	\$920,927.00	\$138,139.05	\$68,969.86	\$69,169.19
7510000	TWO RIVERS	\$694,232.00	\$104,134.80	\$293,388.90	-\$189,254.10
505000	VALLEY SPRINGS	\$236,808.00	\$35,521.20	\$3,125.80	\$32,395.40
1612000	VALLEY VIEW	\$285,467.00	\$42,820.05	\$11,535.18	\$31,284.87
1705000	VAN BUREN	\$1,671,824.00	\$250,773.60	\$62,573.64	\$188,199.96
2307000	VILONIA	\$579,370.00	\$86,905.50	\$0.00	\$86,905.50
2503000	VIOLA	\$128,018.00	\$19,202.70	\$46,920.03	-\$27,717.33
6401000	WALDRON	\$767,100.00	\$115,065.00	\$0.00	\$115,065.00
602000	WARREN	\$1,134,452.00	\$170,167.80	\$151,740.85	\$18,426.95
3509000	WATSON CHAPEL	\$1,091,948.00	\$163,792.20	\$309,951.05	-\$146,158.85
7208000	WEST FORK	\$324,346.00	\$48,651.90	\$5,486.29	\$43,165.61
1803000	WEST MEMPHIS	\$4,570,192.00	\$685,528.80	\$557,841.49	\$127,687.31
1204000	WEST SIDE	\$149,776.00	\$22,466.40	\$5,135.70	\$17,330.70
7509000	WESTERN YELL COUNTY	\$374,440.00	\$56,166.00	\$70,604.26	-\$14,438.26
3606000	WESTSIDE	\$466,532.00	\$69,979.80	\$8,078.69	\$61,901.11
1602000	WESTSIDE CONSOLIDATED	\$446,292.00	\$66,943.80	\$36,319.68	\$30,624.12
7304000	WHITE COUNTY CENTRAL	\$216,568.00	\$32,485.20	\$16,068.54	\$16,416.66
3510000	WHITE HALL	\$580,888.00	\$87,133.20	\$0.00	\$87,133.20
1505000	WONDERVIEW	\$106,260.00	\$15,939.00	\$0.00	\$15,939.00
1304000	WOODLAWN	\$105,754.00	\$15,863.10	\$8,702.01	\$7,161.09
1905000	WYNNE	\$852,610.00	\$127,891.50	\$46,736.27	\$81,155.23
4502000	YELLVILLE-SUMMIT	\$275,264.00	\$41,289.60	\$3,670.19	\$37,619.41
Grand Total 239 Districts		\$181,224,043.00	\$27,183,606.45	\$21,675,320.38	\$5,508,286.07

APPENDIX D. NSLA CERTIFICATION



Map Prepared by the Bureau of Legislative Research, Policy Analysis & Research Section
 School District Boundaries from the Arkansas Geographical Informational Office