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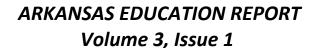
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SUPERINTENDENTS SPEAK OUT:

A SURVEY OF SUPERINTENDENTS' OPINIONS REGARDING RECENT SCHOOL REFORMS IN ARKANSAS

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INTRODUCTION

In an effort to improve educational opportunities for all students, Arkansas policymakers have made education reforms in many areas since 2003, such as increasing school funding by nearly 30 percent, consolidating both districts with enrollments below 350 students and inefficient schools, and strengthening accountability measures designed to raise academic achievement. However, there is little empirical evidence about how any of these reforms have impacted districts, schools, and students across the state, so policymakers have no way of knowing whether such reforms have the potential to improve student achievement and help close the achievement gap between disadvantaged students and their more privileged peers.

In fall 2005, the authors distributed a confidential survey to all 254 superintendents across the state to ascertain what kinds of successes districts are having as a result of recent school funding increases and what challenges they still face. We also asked superintendents about teacher quality and supply issues in their districts, particularly in light of the federal No Child Left Behind (NCLB) legislation's requirement that all schools be staffed with "highly-qualified teachers." While responses to some questions (such as which subject areas face teacher shortages) confirmed our beliefs based on evidence from other states, other responses proved more surprising.

BACKGROUND

Recent Legislative Reforms

For the past half century, Arkansas has spent far less on education than most other states, and the state also has a long history of school funding battles in the courts (Ritter & Barnett, 2004; Ritter, 2005). The first battle began in 1983, when the Arkansas Supreme Court initially found the state's school funding system unconstitutional under the equal protection clause of the state constitution, in *Dupree v. Alma School District No. 30, 651 S.W.2d 90*. The court found "no legitimate state purpose" and "no rational relationship to educational needs" in the state's method of financing public schools.

Flash forward to 2001, when an Arkansas trial court then declared the state's education funding system to be inadequate as well as inequitable and required the state to conduct an adequacy study to determine an appropriate spending level (*Lake View School District, No. 25 v. Huckabee, No. 1992-5318*). In November 2002, the state Supreme Court affirmed the lower court's finding and set a deadline of January 1, 2004, for the state to improve the system (*Lake View School District , No. 25 of Phillips County, et al. v. Mike Huckabee, Governor of the State of Arkansas, et al. No 01-836*).

ABSTRACT

OEP distributed a confidential survey to all 254 school district superintendents in Arkansas to gauge the results of the recent school reforms and to see what challenges superintendents still face in improving teacher quality and educational opportunities for all students. The authors found that despite real increases in perpupil expenditures and categorical funding for lowincome students, most superintendents surveyed (67%) believe that their district does not have adequate funding to attract enough highly-qualified teachers to meet their needs, or to provide an adequate education to all students (70%). Paradoxically, the vast majority (86%) of superintendents claim that nearly all of the teachers who have applied to their district over the past three years were, in fact, highly qualified.

In order to address the Court's mandate, Governor Mike Huckabee convened a special legislative session in late 2003, which continued through the spring of 2004. Legislators passed a number of school reforms during this session, from consolidating districts with enrollments below 350 students in order to increase efficiency of operations, to adding several new testing and accountability requirements for students and schools (Office for Education Policy, 2005a). In addition, the legislature agreed to increase the total state appropriation for elementary and secondary education by approximately \$450 million for 2004-05—nearly a 30% increase over the previous year. The legislature also approved a new school funding formula through Act 59, which provides a base, or foundation, level funding for essential needs and supplemental funding for specialized needs, based on a school's average daily membership during the previous school year. For the 2004-05 fiscal year, the funding formula would include \$5,400 per student in foundation funding for each district, plus supplementary funding for specialized needs, including:

- \$3,250 per student for alternative learning programs and secondary vocational area centers:
- \$195 per student for each English Language Learner (ELL);
- \$480 per student in districts where less than 70% of students qualify for the federal free-and reduced-price lunch (FRL) program;
- \$960 per student in districts where 70% to 90% of students qualify for FRL;
- \$1,440 per student in districts where more than 90% of students qualify for FRL;
- \$50 per student for professional development; and
- Special appropriations to specific districts for general facilities, debt service, student growth, catastrophic occurrences, and for designated isolated districts.

Although this foundation funding increase was clearly an improvement over previous years, it still left Arkansas ranked 39th in the nation for average per-pupil expenditures in 2005, when adjusted for regional cost-differences (*Education Week*, 2006). Furthermore, while the legislature also increased base teacher salaries to \$27,500 for a bachelor's

degree and no experience and \$31,625 for a master's degree and no experience (Act 74), these salaries still lag behind the national averages as well (Office for Education Policy, 2006).

In the 2005 legislative session, the Arkansas General Assembly approved a budget that allocated \$3.4 billion to the public school fund over the 2006-07 and 2007-08 fiscal years. The public school fund would receive \$172 million in new revenue in 2006-07, including \$40 million for additional prekindergarten programs, \$20 million for additional students statewide, and an additional \$35 million a year for teachers' insurance. Also, \$134 million would be used to fund court-ordered school facility improvements for the 2006-07 and 2007-08 school years. The legislature also passed a bill to update the current funding formula for school operations. While the legislature did not provide an increase in per-pupil funding for the 2005-06 fiscal year, it did agree to increase the foundation level from \$5,400 to \$5,497 in 2006-07.

Despite the legislature's many reforms and funding increases since 2003, these measures have yet to satisfy many educators or the judicial branch. Near the end of the 2005 legislative session, 49 school districts requested the state Supreme Court to recall its mandate and reappoint Special Masters to reopen the Lake View case and evaluate the state's efforts to improve the adequacy of Arkansas' school finance system (Office for Education Policy, 2005c). The court granted this request on June 9, 2005, and the Masters filed their report on October 3, 2005, finding that "the state has not lived up to the promise made by the 84th General Assembly Regular and Extraordinary Sessions of 2003 to make education the state's first priority". On October 24, 2005, the plaintiffs filed a motion requesting the Court to adopt the Special Masters' recommendations, to call upon the Governor to convene a special session of the General Assembly, and to retain jurisdiction of the case to assure compliance.

On December 15, 2005, the Arkansas Supreme Court again declared that the state retreated from its obligation to adequately fund public education in the 2005 legislative session and "grossly underfunded" school building repairs and construction (*Lake View Sch. Dist. No. 25 v.*

Huckabee, 355 Ark. 617, 142 S.W.3d 643). The Court gave the state until December 1, 2006, to "correct the constitutional deficiencies," but did not direct the General Assembly to appropriate a specific increase in foundation or categorical funding amounts, as requested by the school districts (Office for Education Policy, 2005b).

In a special session in April 2006, the 85th General Assembly increased education funding by \$132.5 million, including increasing per-pupil funding for 2006-07 to \$5,620 from \$5,497. Meanwhile, the state has called for and is awaiting the results of a second "adequacy" study, in order to make an informed decision about how to best allocate future funding (Bleed, 2005; Sadler, 2005). Many legislators contend that before more resources are allocated to schools, information should be collected to indicate what schools have done with their additional resources and determine if these resources have improved the schools.

Teacher Supply in Arkansas

On top of these ongoing funding issues, many policymakers and educators in Arkansas remain worried that the state faces a critical shortage of qualified teachers. After all, there was a 19% decline in the number of education degrees awarded between 1993 to 2002 in the state of Arkansas (Arkansas Department of Higher Education, 2003). Moreover, only 60% of students in Arkansas who graduate with education degrees receive an Arkansas teaching license, and fewer than half of those teachers actually begin teaching in Arkansas. In 2002, it was reported that more than 27,000 licensed teachers in Arkansas were not teaching in the schools (The New Teacher Project, 2002). By 2004, the Arkansas Department of Education (ADE) reported that the state's teacher preparation programs were not producing enough graduates to meet the state's needs (Office for Education Policy, 2005e).

However, a regional analysis of the U.S. Department of Education's 1999–2000 School and Staffing Survey (SASS) reported that Arkansas is actually among the group of states that has the least difficulty in hiring teachers (Murphy, DeArmond, & Guin, 2003). All 50 states were categorized into four groups according to their late-fill rate (persons

hired after the school year began): less than 1.0%; 1.0 to 1.49%; 1.5 to 2.0%; and greater than 2.0%. Arkansas fell in the less than 1.0% group. The findings from this study indicate that the perception and reality of Arkansas' teacher workforce may be different.

However, Arkansas, like most states, does seem to be facing greater challenges with teacher sorting and out-of-field teaching than it does with recruiting new teachers (Ingersoll, 2001; Murphy, DeArmond, & Guin, 2003). The ADE has described the problem as a "teacher availability dilemma," meaning that the state has a sufficient number of certified teachers, but most of these teachers are concentrated in urban areas or college towns throughout the state (Arkansas Division of Legislative Audit, 2002).

Further, the Arkansas Department of Education has recognized that the sorting problem is not limited to urban versus rural areas; there is also a problem with the distribution of teachers certified to teach certain subjects. According to the ADE, Arkansas does not have enough qualified teachers in foreign languages, secondary mathematics, secondary science, special education, and English as a Second Language (ESL) (Arkansas Department of Education, 2004).

Over the past three years, the state legislature has created many incentives to help increase the supply, quality, and distribution of teachers throughout the state. For example, in 2004, the state legislature approved annual bonuses for teachers employed in special settings or working with high-need students (Acts 77, 85, and 101), and approved forgivable loans for college students who choose to teach high-need students or in a critical subject area (Act 48). Also, the legislature established the Arkansas Teacher Housing Development Foundation which would offer housing incentives to high-performing teachers who choose to teach in high-need school districts (Act 39).

RESEARCH ON TEACHER PAY

At the heart of many of Arkansas' recent school reforms lie several fundamental questions: *Does money lead to increased student performance? Is more money needed in Arkansas schools? Should the state provide more targeted money?* Arkansas is

not the first state to face these questions or courtordered reforms; however, each state must decide how it will address the issue of financing and ensuring highly-qualified teachers are in each classroom. Even a cursory review of the extant literature on school finance and teachers indicates that no single solution exists.

Some researchers posit that all teachers' starting salaries should be increased in order to attract more highly qualified teachers into the profession (Ferris & Winkler, 1986; Murnane, Singer, & Willet, 1991). Murnane, Singer, and Willet (1991) contend that increased salaries should be part of a broader approach to recruit talented graduates into the teaching profession. According to these authors, salaries affect the length of time teachers stay in the profession, and that salaries are more likely to affect the decisions of new teachers than experienced teachers.

Others have found that across-the-board teacher salary increases are ineffective for attracting and retaining teachers (Ballou & Podgursky, 1997; Hanushek, Kain, & Rivkin, 1999). Many such scholars believe that targeted increases (e.g., meritpay, or higher salaries for teachers in hard-to-staff schools and subject areas) provide more effective incentives for teachers.

The inconclusive findings from the literature force policymakers to consider what is best for their own state rather than relying on what other states have done. Notwithstanding, policymakers must rely on available information, which often comes from education officials, particularly district superintendents. Recognizing the important role of superintendents in the school reform landscape, the authors of this study attempted to gauge superintendents' views on the most recent education reforms in Arkansas.

RESEARCH QUESTIONS

The research questions for this study addressed superintendents' perceptions of the effect of recent school reforms and funding increases on teacher quality and supply in their district. In particular, the researchers asked:

- 1.) How are districts allocating recent funding increases?
- 2.) Are districts receiving an adequate number of qualified applicants for teaching positions to meet their needs?
- 3.) Do superintendents believe that a performance-pay system would help attract more highly-qualified teachers to their districts?

METHODS

The researchers developed a two-page survey instrument, consisting of a mix of closed and openended questions. The survey instrument and cover letters were approved by the University of Arkansas' Institutional Review Board. Surveys were mailed in the fall of 2005 to all 254 district superintendents in the state. The superintendents were given six weeks to complete the surveys. Since the response rate was initially lower than anticipated, we attempted to follow-up with all non-respondents via e-mail. At the end of the study, 101 surveys had been returned, which represented a 40 percent response rate.

Descriptive statistics (frequencies, percentages, means, and standard deviations) and cross-tabulations were used to summarize responses. We also examined the characteristics of responding districts compared to non-responding districts, to uncover any selection bias in the study's findings. Independent t-tests were used for statistical comparisons between respondents' and non-respondents' group mean scores.

RESULTS

We found that responding districts were generally representative of the state in terms of geographic region, with most respondents coming from Northwest (32%) and Northeast (28%) Arkansas, and the remainder of respondents from the Southwest (22%), central (13%), and Southeast (6%) parts of the state.

Responding districts were also generally representative of the state in terms of their average school sizes, teacher salaries, and per-pupil expenditures, which were shown to not be significantly different than the non-responding districts. The percentage of minority (non-white)

students and achievement test scores were slightly different between responding and non-responding districts, and the percentage of free and reduced lunch students was significantly lower in responding districts compared to non-responding districts (see Table 1). These differences do indicate that statements about superintendents' attitudes towards school reforms may be different in the

responding districts compared to all districts in the state; however, we do believe that the responding districts are important to recognize, since nearly 200,000 of the state's students (approximately 44%) are taught in districts of the responding superintendents.

Table 1: Comparing Responding and Non-Responding Districts' Characteristics

District Characteristics	Respondents Mean	Non- Respondents Mean	Significance Level (p < .05)
District size	1,899	1,723	.61
Teacher salaries	\$35,916	\$35,502	.39
Per-Pupil Expenditures	\$6,257	\$6,396	.13
% Minorities	18.9	25.0	.05
% Free/Reduced Lunch	54.0	58.5	.02
Grade 11 End-of-Course Literacy Exam	195.0	193.0	.05

Funding Allocations

Research Question 1 focused on how superintendents are using their additional resources. Survey respondents claim that they are using the majority of the recent per-pupil funding increase for professional development, hiring additional teachers and other staff, and increasing teacher salaries, among other uses (see Table 2). Of those districts

receiving an increase in categorical funding for lowincome students, most say that they are using this funding for special programs, such as after-school tutoring, as well as hiring additional staff, such as reading coaches. However, it is important to note that these are stated purposes, rather than actual allocations.

Table 2: Districts' Reported Use of Per-Pupil Funding Increase

Allocation	% of Districts
Professional development	37%
Hiring additional teachers	33%
Increasing teacher salaries	28%
Instructional materials	21%
Hiring additional staff (e.g., reading coaches)	20%
Other	10%
No new funding provided/Not enough funding	11%
Smaller class sizes	7%
New classes/programs	6%
Special needs students	4%

Nearly 48% of these respondents feel that the interventions that they were able to use as a result of the funding increases were indeed helping improve student achievement, though 39% believe it is too soon to tell. So far, one superintendent believes, "the [achievement] gaps still exist, but the gaps are smaller." Another noted that "programs that are developed to provide individualized instruction are very expensive, but they do work."

But some (11%) disagreed that the funding increase was significant enough to matter, or that they received any funding increase at all. "The increase did not even cover the required increase in the minimum teacher's salary schedule," one superintendent writes. Another superintendent adds, "Funding is sufficient to provide a quality education, but too many program requirements are being added and taking time away from instruction. The government is over-regulating us and driving quality educators away. "Another concludes, "Until the legislators realize that money does matter, Arkansas will continue to struggle and suffer." Clearly, despite the increases in resources that have been allocated in recent years, 60 percent of administrators still believe more resources are needed to provide an adequate education to all students (see Table 4).

Teacher Quality & Supply

To answer Research Question 2, we asked superintendents about the number and types of applicants they have for new teaching positions in their district over the past thee years. Superintendents responding to the survey hired an average of 17 new full-time K-12 teachers in 2004-05, with a median of six (see Table 3). Of these, an average of 12 graduated from an Arkansas university with undergraduate degrees in education, while five received master's degrees in education. Interestingly, most superintendents (76%) reported that the school from which teachers graduate does not matter much in hiring decisions, since most applicants graduate from the college closest to the

Superintendents had mixed responses on whether their district has been receiving an adequate number of qualified applicants for positions in specific subject areas or levels. Most superintendents (90%) claim that they are able to attract sufficient numbers of elementary school teachers, and 66 percent also claim that sufficient numbers of language and social studies teachers are applying to their districts. However, only three percent of superintendents claim to have sufficient numbers of special education teachers, and 10 percent claim to have enough math and science teachers (see Figure 1). Not surprisingly, higher-poverty districts have a harder time attracting teachers at all levels. As one respondent explains, "we have no choice but to take whoever applies." Another replied, "We have an absolutely critical shortage of minority teachers. We need African American staff, and we cannot find applicants."

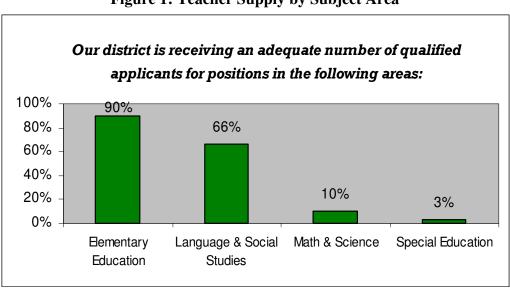


Figure 1: Teacher Supply by Subject Area

district.

While most respondents (86%) believe that nearly all of the teachers who have applied to their district over the past three years are highly qualified, most also feel that their district does not have adequate

funding to attract enough highly-qualified teachers to meet their needs (67%), or to provide an adequate education to all students (70%) (see Table 4).

Table 4: Superintendents' Views on School Funding and Teacher Issues

To what extent do you agree with the following statements?	Agree/ Strongly Agree
Nearly all teachers who apply to work in my district are highly qualified.	86%
My district has adequate funding to attract enough highly- qualified teachers.	33%
The current funding level in my district is sufficient to provide an adequate education to all students.	30%
A performance-pay system would help attract more highly-qualified teachers to our district.	41%

Notably, superintendents who deemed their resources as adequate to attract highly-qualified teachers (33%) were significantly more likely to pay higher teacher salaries and have students who score higher on the Grade 11 End-of-Course literacy exam (see Table 5). Intuitively, districts that are able to pay more to teachers are likely to attract

more candidates for open positions; therefore, it is reasonable that superintendents in these districts may believe they have adequate resources since they have larger applicant pools from which to hire future teachers. Conversely, superintendents from districts that pay teachers less may have fewer and lower qualified applicants for open positions.

Table 5: Superintendents' Views on Whether They Have Adequate Funding to Attract Enough Highly-Qualified Teachers

District Characteristics	Agree (n = 33)	Disagree (n = 68)	Significance Level (p <. 05)
District Size	2,333	1,688	.25
Teacher Salaries	\$37,088	\$35,346	.02
Per-Pupil Expenditures	\$6,234	\$6,269	.81
% Minorities	16.0%	20.2%	.33
% Free/Reduced Lunch	52.6%	54.6%	.48
Grade 11 EOC Literacy Exam	197.1	194.0	.03

One surprising finding is that as much as 40% of respondents believed that a performance-pay system would help attract more highly-qualified teachers to their district. The only significant difference between those agreeing and disagreeing about

whether performance-pay would attract more highly-qualified teachers was that respondents who favored performance pay had significantly higher per-pupil expenditures (see Table 6).

Table 6: Superintendents' Views on Whether a Performance-Pay System Would Help Attract More Highly-Qualified Teachers to Their District

District Characteristics	Agree (n = 38)	Disagree (n = 58)	Significance Level (p <. 05)
District Size	1,588	2,168	.30
Teacher Salaries	\$35,224	\$36,445	.11
Per-Pupil Expenditures	\$6,404	\$6,132	.05
% Minorities	18.1%	18.6%	.90
% Free/Reduced Lunch	56.2%	52.2%	.15
Grade 11 EOC Literacy Exam	194.4	195.6	.41

CONCLUSION

Several key findings emerged from this survey. First, according to superintendents' reports, the vast majority of new resources are being allocated to teachers by expanding professional development, hiring more teachers and more instructional staff, and increasing teacher salaries. Second, superintendents report that teacher shortages are distributed unevenly across school districts and subject areas, although all districts are struggling to find enough qualified special education and math and science teachers. Some superintendents also acknowledged that more resources are needed to adequately meet the needs of students within their district beyond the additions already provided by the state. At the time, the overwhelming majority of superintendents stated they were receiving highly qualified applicants to their schools. The contradiction or inconsistency within the need for more money in order to provide an adequate education and the belief that enough money exists to recruit and retain highly qualified teachers highlights the struggle to make school funding adequate and equitable across the state.

The state claims, however, that it does not have time to rest and observe if the changes to school funding are making a difference before districts are once again attempting to reopen the *Lake View* case. In April 2006, the state legislature voted to provide an additional \$132.5 million in school funding. The motivation for this increase was due, at least in part, to the discontent of superintendents who claim they do not have enough resources for their students.

Do schools in Arkansas have enough money? The answer to that question seems to depend on how the question is framed and who is asked. The laudable goal of everyone involved is to provide an adequate education to all students, to provide highly qualified teachers in every classroom, and to provide all students with an equal opportunity. Our study indicates that superintendents do not speak with one voice regarding recent education reforms or the remaining challenges they face. Future studies will determine how resources are being used in districts around the state; however, the superintendents seem to articulate that they each have very different needs. The state may therefore need to provide resources in new, innovative ways in order to meet the varying needs of all districts and students in Arkansas.

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