

No Child Left Behind: Perceptions and Challenges for Rural Arkansas Educators

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The promise of the No Child Left Behind Act (NCLB) was primarily to improve student achievement for all children by holding schools accountable. High performing schools are rewarded while low performing schools face having funds withheld, open enrollment, and possible closure. Rural schools are especially affected by this act, as they have more limited financial resources, and are less competitive in attracting quality teachers. Further, in smaller populations the relative influence of a single student on Adequate Yearly Progress can be significant (Reeves 2003, Monk 2007, Lee 2004).

The purpose of this study is to provide an overview of how Arkansas's school districts are faring under the provisions of NCLB with particular attention to differences between rural and urban districts. This overview includes descriptive statistics on rural and urban student enrollment, demographics, and performance, as well as relevant school characteristics by locale. Then, using a web-based survey, we explore how rural Arkansas school administrators perceive the unique challenges in meeting the requirements of NCLB while providing quality education in their respective districts. We find that in many ways Arkansas is fairly consistent with previous findings about rural schools compared to their urban counterparts such as little ethnic diversity, better academic performance, and concerns about funding and teachers teaching out of field. However, we also find that rural schools compared to urban schools in Arkansas have higher student to teacher ratios, perform less well at the advanced level on standardized tests, and rural superintendents were not highly concerned with professional development opportunities or retaining highly qualified teachers. Additionally, rural superintendents were considerably more positive about the benefits of NCLB than urban superintendents. These findings serve to focus attention on the unique challenges facing rural districts. We hope they help guide the current and future reforms in public education policy.

Introduction

Nearly a decade ago the federal government passed one of the most significant and sweeping acts of legislation concerning public education in the United States. In January of 2002, Congress passed the No Child Left Behind Act (NCLB). The purpose of this law (a reauthorization of the Elementary and Secondary Education Act of 1965) was primarily to hold schools accountable for student achievement. By using standardized testing and other assessments, schools must identify deficiencies and show that they are improving in these areas. High performing schools will be rewarded with federal funds, and low performing schools face having funds withheld, open enrollment, and possible closure.

Rural schools are especially affected by NCLB for a number of reasons. Rural schools have more limited financial resources, which is generally linked to lower academic achievement. Loss of federal funds would only exacerbate this condition. Rural areas are also less competitive in attracting quality teachers. The threat of open enrollment or closure means little in areas that are arguably already underserved.

What is less talked about, however, are economies of scale (or the lack thereof). It is often assumed that the higher a school's enrollment, the more cost efficient it is. Conversely, low enrollment often means fewer teachers covering the full range of subjects - often teaching outside their subject area. Often students travel considerable distances to get to school, limiting opportunities for extracurricular or after school activities or parental involvement. Perhaps more significantly, in smaller populations the relative influence of a single student is much greater, as that child represents a greater percentage of the student population.

The purpose of this paper is to provide an overview of how Arkansas's school districts are faring under the provisions of NCLB with particular attention to differences between rural and urban districts. This overview includes descriptive statistics on rural and urban student enrollment, demographics, and performance, as well as relevant school characteristics by locale. Then, using a web-based survey, we explore how rural Arkansas school administrators perceive the unique challenges in meeting the requirements of NCLB while providing quality education in their respective districts. These findings serve to focus attention on the unique challenges facing rural districts with the hope of helping to guide the current and future reforms in public education policy.

NCLB and Rural Education

With overwhelming bipartisan support, President George W. Bush signed into law the No Child Left Behind Act with the stated purpose “to close the achievement gap with accountability, flexibility, and choice, so that no child is left behind” (NCLB 2002). The main goal is to raise the achievement of all groups of students. In order to achieve this purpose, NCLB required the implementation of standards based reforms that have dramatically increased the role of the federal government into K-12 public education by raising the requirements for schools, districts, and states to receive federal funding.

Among the numerous reforms, there is a combination of requirements, rewards, and sanctions. NCLB mandates the annual testing of all students in reading and mathematics in grades 3 through 8 and at least once in high school. Additionally, states must report test scores by subgroups such as race/ethnicity, income, students with disabilities, and students with limited English proficiency. These standardized tests must be aligned with state standards and states must develop plans to have all students reach proficiency by 2014. States are required to assess the adequate yearly progress (AYP) of each school and identify schools “in need of improvement.” These schools must then develop improvement plans which may include requirements for public school choice and supplemental educational services (SES). Furthermore, NCLB requires certain qualifications for teachers in core academic areas. In order for a teacher to be “highly qualified,” states have to ensure teachers are fully certified, have a bachelor’s degree, and demonstrate competence in the subject area (NCLB 2002).

Since its passage, there has been a virtual cottage industry evaluating the impacts of NCLB on public education.¹ Much of the research has focused on urban school districts with much less focus on the unique challenges faced by rural schools districts. Many of the provisions of NCLB have had a disparate impact on rural schools especially in the areas of highly qualified teachers, AYP, and sanctions (Provasnik et al. 2007).

Rural children constitute about 20% of the more than nine million public school students nationwide (Johnson and Strange 2009). In their extensive study of rural education in America, Provasnik et al. (2007) note several

¹ A *ProQuest* search on “No Child Left Behind” returns over 11,500 hits.

characteristics of rural schools. Demographically, they note that rural schools are most prevalent in the South and Midwest and generally serve a larger White population in smaller schools than their urban and suburban counterparts. Further, their research shows that rural parents tend to have lower expectations of educational attainment level for their children. With regard to student outcomes such as National Assessment of Educational Progress (NAEP) scores and high school graduation rates, the authors find that rural students generally perform better than their urban peers but worse than their suburban peers. At the same time, rural students are less likely to enroll in college than students in other areas. Lastly, Provasnik and his colleagues examined several indicators concerning resources for public education in rural schools. They find that while rural schools tend to have lower pupil-to-teacher ratios and more expenditures per pupil, rural school students have less access to more rigorous curriculum such as Advanced Placement (AP) and International Baccalaureate (IB) course work. Additionally, rural school teachers earn lower salaries than any of their counterparts in urban, suburban, or town locations. Other researchers have noted that geographic isolation, generational poverty, consolidation pressures, and small school size, among other factors are challenges that define rural education in America (Jimerson 2005; Reeves 2003; Schwartzbeck and Prince 2003; U.S. GAO 2004).

Even before the passage of NCLB, a persistent problem faced by rural schools was the recruitment and retention of teachers. Research has shown that rural schools often have greater teacher shortages in areas such as special education, math, and the sciences, and that they employ teachers with lower levels of educational attainment (Carlsen and Monk 1992; McClure and Reeves 2004; Monk 2007). While rural school teachers generally have smaller classes, they are often required to teach multiple areas and combined grade levels. Monk (2007) observed that “this drawback is perhaps most obvious at the secondary level, where a single high school science teacher may teach all the science subfields” (pp. 160-61). Most notably for both recruitment and retention, teacher salaries have been found to be 21% lower for starting rural teachers than that of their urban counterparts (Gibbs 2000).

The mandate of NCLB for “highly qualified” teachers has taken a one-size-fits-all approach that is often not practical to the realities of rural school teachers. Jimerson (2005) notes that issues such as teacher shortages in core areas and multiple-subject teaching are not being ameliorated by the new requirements. In fact, researchers find that teacher retention in rural areas is

more difficult as teachers are leaving those schools rather than becoming certified in multiple areas (Eppley 2009; Jimerson 2005; Northwest Regional Educational Laboratory 2003).

The accountability provisions of NCLB in the form of meeting AYP standards have been of special concern to rural educators and researchers. Due to the nature of rural schools, which are often much smaller than their urban and suburban counterparts, there exist “small N” problems with reporting annual test scores. In other words, a few students can radically skew the percentage of students scoring “proficient” from one year to the next. Coladarci (2003) demonstrates drastic fluctuations in the percentage of students scoring proficient “for schools having 15 or fewer fourth graders, this change ranges from -.47 (a school declining from 60% proficient to 13% proficient) to +.83 (a school increasing from 17% proficient to 100% proficient)” (p. 2). Moreover, NCLB requires that 95% of students must take the annual tests. Thus, six absences on test day for a school of 100 students will result in that school being labeled as failing to meet AYP (Jimerson 2005). Because of these problems associated with “small N” size, many states have used alternatives such as multiple-year rolling averages and confidence intervals to reduce the volatility of measuring AYP (Reeves 2003).

Rural schools also face challenges in trying to implement the sanctions associated with not meeting the AYP standards. Under NCLB, sanctions for failing schools increase with every consecutive year. However, sanctions such as public school choice and supplemental educational services are not realistic given the situation of many rural schools. Rural districts are less likely to have another school alternative within the district to offer school choice, and often transportation costs associated with attending a neighboring school district are too high to make such a choice feasible (Reeves 2003). Many of the supplemental services have to be provided as distance learning and quality control is often lacking as schools try to meet the requirements of NCLB (Reeves 2003). Jimerson (2005) observes that “the sanctions are, at best, impractical and time-consuming distractions. At worse, they are harmful and inappropriately demoralize educators, student and communities” (p. 215-216).

In this study, we first examine secondary data to gain a clear picture of Arkansas’s rural school districts. In particular, we are interested to see if, as a predominantly rural state, Arkansas’s districts share similarities with the rural districts described in the preceding literature. Where we find discrepancies, we attempt to offer explanations as to why Arkansas is *not*

like other rural districts. Next, we examine superintendents' perceptions of NCLB. Specifically, we hypothesize that while both urban and rural districts have faced challenges in implementing NCLB, those challenges differ by district locale.

Data and Method

The data for this study are collected from both secondary sources and primary sources via a web-based survey of superintendents. Descriptive analyses are based on data collected from the National Center for Education Statistics' *Common Core of Data*, and the Arkansas Department of Education's (ADE) *Annual Statistical Reports*, *ADE Data Center*, *Highly Qualified Teacher District Report*, and the *Adequate Yearly Progress Reports* for both public schools and school districts. All data are from the 2008 school year.

Data for part two of the study, which examines superintendents' perceptions of NCLB were collected through a web-based survey.² Invitations to participate in the study were sent to 241 superintendents at their official e-mail address.³ These addresses are available through the Arkansas Department of Education website. To ensure anonymity, each superintendent was provided a link to the survey, and identifying information such as respondent email or IP address were not tracked. The survey was available for three weeks, beginning April 5, 2010. A total of 112 superintendents completed the survey, yielding a response rate of approximately 47%. This is considered an acceptable response rate for email-administered surveys. Questions address superintendents' overall perceptions of NCLB, the district's AYP status, any sanctions imposed on the district, the availability of highly qualified teachers (HQT), and any supplemental grant funding received. Respondents are also asked questions about their awareness and perceptions of proposed changes to NCLB under the Obama administration. The results of these surveys were analyzed to identify prevailing attitudes and unique challenges facing Arkansas's rural superintendents.

Findings and Discussion

To determine which schools are "urban" and which are "rural," we use the Urban-Centric Locale Codes developed by NCES. This system classifies school districts into four categories: urban, suburban, rural, and town. For

² A copy of the questionnaire is included in the appendix.

³ While there are 244 school districts in the state, e-mail addresses are available for only 241.

the purposes of comparison, we use the locale codes 11, 12, and 13 (urban) and 41, 42, and 43 (rural).⁴ Secondary data on Arkansas school districts are examined to better understand school district characteristics, student characteristics and student performance by locale.

District Characteristics. Arkansas is an overwhelmingly rural state. Based on NCES Urban-Centric Locale Codes, nearly 70% of Arkansas school districts are classified as “rural”, as opposed to just over 30% nationwide. While rural students make up approximately 20% of national school enrollment (Johnson & Strange 2009), in Arkansas rural students account for 37% of total enrollment.

As shown in Table 1, urban districts have an average of 14.81 schools and rural districts have an average of just three schools with little variation

Table 1. Selected District Characteristics by District Locale

Variable	State	Urban	Rural
<i>Average Number of Schools</i>	4.49 (4.98)	14.81 (11.95)	3.25 (0.22)
<i>Area in Square Miles</i>	208.88 (151.91)	123.86 (97.01)	208.55 (158.11)
<i>Per Pupil Expenditure</i>	8051.78 (949.61)	8624.97 (1046.37)	8228.03 (1052.94)
<i>Pupil-to-Teacher Ratio</i>	14.90 (6.91)	14.71 (2.10)	15.01 (0.63)
<i>Average Total Teachers (FTE)</i>	137.38 (206.99)	570.56 (499.99)	78.47 (8.50)
<i>Instructional Aides</i>	32.41 (44.41)	137.88 (116.97)	19.09 (1.04)
<i>Percentage of Core Academic Teachers Who are not "Highly Qualified"</i>	3.47 (6.23)	1.28 (2.31)	3.26 (0.45)
<i>Average Total Staff</i>	284.87 (391.09)	1151.13 (925.27)	169.84 (15.56)
<i>Total Administrators</i>	2.71 (2.74)	7.75 (6.06)	1.92 (0.11)
<i>N</i>	245	17	167

Standard deviations in parentheses

Source: Arkansas Department of Education District Improvement List 2007-2008

⁴ In 2006, NCES adopted the *Urban-Centric Locale Codes* to replace the previous *Metro-Centric Locale Codes*. This measure is considered more precise than the Metro-centric system. While the previous system was based metropolitan statistical areas (MSA's), the new system takes into consideration a community's proximity to an urban area.

among the rural districts on this measure. Rural districts are approximately 68% larger in area than urban districts. It has been found that rural districts tend to spend more per pupil than other districts (Provasnik et al. 2007); this is not the case in Arkansas. With an average per pupil expenditure of approximately \$8228, rural schools spend approximately \$400 less per student than their urban counterparts. However, this amount is still about \$177 more than the statewide average.

Not surprisingly, rural districts tend to employ fewer teachers, aides, administrators, and staff than urban districts. There are an average 73.6 teachers for every urban administrator, but only 40.9 teachers for every rural administrator. It is important to point out, however, that rural districts have an average of only 1.9 district administrators. At 15.01 students for every teacher the pupil-to-teacher ratio is slightly higher for rural districts than urban district. This seems to contradict the findings of Provasnik, et al. (2007), which indicated that rural districts tended to have lower pupil-to-teacher ratios. While the standard deviations for both the rural and urban pupil-to-teacher ratios are rather small, it is fairly large when we look at the state as a whole. In both rural and urban districts, there is an average of about 4.1 teachers to every instructional aide. Statewide, this ratio is slightly higher at just over 4.2 teachers per instructional aide. This is due to the fact that suburban schools generally have a higher teacher-to-instructional-aide ratio.

A key mandate of NCLB is that all schools and districts achieve AYP, with the ultimate goal that all students will be proficient in core areas by the year 2014. To make AYP, districts are required to show increases in student performance on the state standardized exams. Improvement must be demonstrated by the composite student body, as well as for each of five subgroups: African American, Caucasian, economically disadvantaged, disability, and English language learners (ELL). The subgroup scores are not counted in the AYP calculation if there are fewer than 40 of these students in a school. A district is considered in improvement status if it fails to make AYP two years in a row. To get out of improvement status, the district must meet AYP for two consecutive years. Districts may also be designated Alert status (districts are in the first year of not meeting AYP) and School Improvement Meeting Standards status (districts are in improvement status but are meeting AYP standards for the current year).

Table 2 shows the overall district AYP status of both urban and rural districts. It does not appear that rural districts, on the whole, have a more

difficult time meeting AYP. While there are 14 rural districts in some level of improvement status, this represents only about 8% of all rural districts. In contrast, the five urban districts which failed to meet AYP represent nearly 30% of all urban districts.

Table 2. District AYP Status

AYP Status	Urban	Rural
Meets Standards	9	148
Alert	3	5
School Improvement: MS		5
School Improvement: Year 1		3
School Improvement: Year 2	3	4
School Improvement: Year 3	2	1
School Improvement: Year 4		1
Total	17	167

Source: Arkansas Department of Education District Improvement List 2007-2008

Student Characteristics. Next, we look at the student demographics of urban and rural school districts. The total student enrollment, as well as the percentage of students who are African American, economically disadvantaged, English language learners, and individualized education program (formerly special education), are presented in Table 3.

Table 3. Selected Student Variables by District Locale

Variable	State	Urban	Rural
<i>Average Number of Students</i>	1943.31 (2944.53)	8294.75 (7017.96)	1071.67 (113.30)
<i>Percent African American Enrollment</i>	16.41 (24.84)	36.28 (32.91)	10.96 (20.02)
<i>Percent Free Lunch Eligible</i>	48.73 (17.95)	50.04 (17.12)	47.51 (15.98)
<i>Percent English Language Learners</i>	2.49 (5.58)	7.71 (11.24)	1.96 (4.98)
<i>Percent Individualized Education Program</i>	12.16 (2.81)	11.47 (2.91)	12.31 (2.83)
N	245	17	167

Standard deviations in parentheses

Source: National Center for Education Statistics Common Core of Data: 2007-2008

As demonstrated in this table, average urban district enrollment is nearly eight times that of the average rural district enrollment. Consistent with the

literature, we see that African American students account for only 11% of rural enrollment, as opposed to more than 36% of urban enrollment.

Economic disadvantage, as measured by eligibility for the Federal School Lunch Program (free lunch), affects a smaller percentage of rural students than urban students. Further, English language learners make up only a very small percentage of rural district enrollment, though they constitute nearly 8% of urban students. There is only a slightly higher percentage of rural students with individualized educational programs (students with disabilities) than urban students.

Academic Performance Measures. For the purpose of determining AYP, academic performance is measured using the Arkansas Benchmark Exams, the 11th grade literacy exam, and end-of-course exams in Algebra I and Geometry. The Benchmark exams are criterion referenced tests given to students in grades 3 through 8, and are used for accountability. Table 4 reports the mean test scores for 4th and 8th grade math and literacy, by district type. Standard deviations are presented in parentheses.

Table 4. Academic Achievement by Grade and District Locale

Arkansas Benchmark Exam	State	Urban	Rural
<i>4th Grade Math</i>	612.38 (31.49)	599.38 (37.04)	611.89 (30.69)
<i>4th Grade Literacy</i>	628.44 (53.05)	601.31 (62.73)	630.05 (51.33)
<i>8th Grade Math</i>	708.31 (32.89)	706.25 (45.60)	706.83 (30.83)
<i>8th Grade Literacy</i>	749.20 (51.44)	730.81 (78.51)	750.55 (46.53)
<i>N</i>	245	16	167

Standard deviations in parentheses

Source: Arkansas Department of Education 2008 Benchmark data

As demonstrated in the table, rural students outperform their urban counterparts in both subjects and grades. The rural average for 4th grade math is 12 points higher than the urban average. Admittedly, the difference between urban and rural 8th grade math scores is negligible. For the 4th grade literacy Benchmarks, rural averages are significantly higher, with a nearly 29 point difference. This gap appears to narrow somewhat by the 8th grade however, to just under 20 points. When compared to overall state averages,

rural school averages are marginally lower in both 4th and 8th grade math, and higher in 4th and 8th grade literacy.

Generally, Benchmark scores are presented in terms of student proficiency categories rather than raw scores. Tables 5 and 6 present the percentages of 4th grade proficiency levels in math and literacy by location. Again, we can see that rural districts have higher proficiency levels in both math and literacy than their urban counterparts. In fact, the percentage of rural students who were *proficient* or above was 6.54% points higher than urban students in math, and nearly 8% points higher in literacy.

Table 5. Proficiency Level in 4th Grade Math by District Locale

	Percent Below Basic	Percent Basic	Percent Proficient	Percent Advanced Proficient
State	11.62	14.18	31.63	42.56
Urban	17.31	14.56	29.31	38.56
Rural	11.46	14.14	2.2	42.21

Source: Arkansas Department of Education 2008 Benchmark data

Table 6. Proficiency Level in 4th Grade Literacy by District Locale

	Percent Below Basic	Percent Basic	Percent Proficient	Percent Advanced Proficient
State	7.21	25.63	40.45	27.00
Urban	10.44	29.37	36.13	24.31
Rural	7.02	24.96	41.30	26.84

Source: Arkansas Department of Education 2008 Benchmark data

When we look at the 8th grade scores, we see a similar pattern. Rural and statewide percentages are quite similar, while the percentages of urban students scoring *proficient* or above are somewhat lower. For 8th grade math, the percentages of total students and rural students who scored *proficient* or higher are both about 55%, while the urban percentage is just above 53%. The gap between rural and urban proficiency in literacy is wider, with both overall and rural percentages scoring *proficient* or above at more than 66%, while urban districts were scoring at about 61%.

However, when we look at only the percentage of students scoring *advanced proficient*, urban districts outperform both rural districts and the

Table 7. Proficiency Level in 8th Grade Math by District Locale

	Percent Below Basic	Percent Basic	Percent Proficient	Percent Advanced Proficient
State	28.05	16.68	36.76	18.49
Urban	30.94	15.69	32.81	20.25
Rural	27.98	16.98	37.53	17.48

Source: Arkansas Department of Education 2008 Benchmark data

Table 8. Proficiency Level in 8th Grade Literacy by District Locale

	Percent Below Basic	Percent Basic	Percent Proficient	Percent Advanced Proficient
State	9.51	24.52	45.17	20.76
Urban	12.69	25.50	40.81	20.94
Rural	9.17	24.53	45.82	20.46

Source: Arkansas Department of Education 2008 Benchmark data

statewide district percentages. This gap is most pronounced for 8th grade math. If, as Monk (2007) suggests, rural districts have difficulty attracting and retaining highly qualified teachers in math and science, the lack of highly qualified teachers might explain the gap between the percentages of advanced performers. To test this we look at the end-of-course exams for Algebra 1 and Biology. As we can see in Table 9, the rural-urban math gap does appear to persist somewhat through the Algebra end of course exam. Both urban and suburban districts outperform rural districts in the percentage of students scoring *advanced proficient*. That said, nearly 65% of rural students score *proficient* or above, in contrast to less than 60% of urban students.

Table 9. Proficiency Level in Algebra I End-of-Course Exam

	Percent Below Basic	Percent Basic	Percent Proficient	Percent Advanced Proficient
State	8.07	26.98	42.37	22.63
Urban	13.56	26.94	35.88	23.69
Rural	7.32	27.81	43.73	21.20

Source: Arkansas Department of Education 2008 Benchmark data

Table 10. Proficiency Level in Biology I End-of-Course Exam

	Percent Below Basic	Percent Basic	Percent Proficient	Percent Advanced Proficient
State	34.11	38.82	21.64	5.61
Urban	40.69	33.75	20.63	5.63
Rural	33.40	40.02	22.11	6.06

Source: Arkansas Department of Education 2008 Benchmark data

When we look at the Biology end of course exam, however, we see that the percentage of rural students scoring *advanced proficient* is slightly higher than urban and statewide students. The percentage of students performing *proficient* or above is also higher. It should be noted, however, that across all groups nearly 75% of students are scoring *below proficient* on the Biology end of course exam.

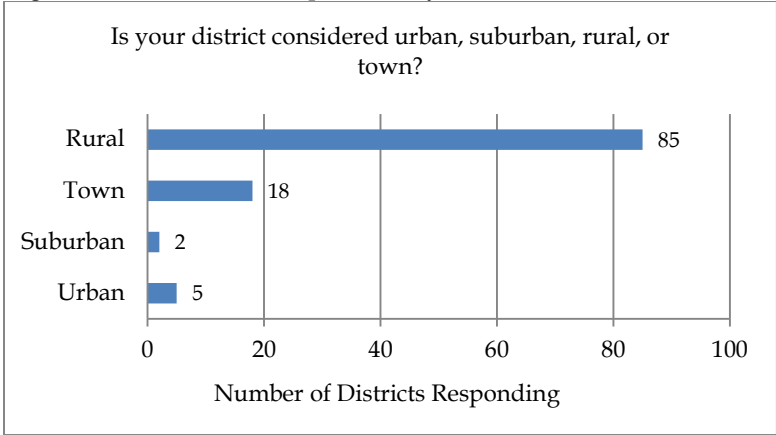
Overall, we find that in measures of academic performance, Arkansas Benchmark scores appear to be consistent with other findings. Rural students tend to perform, on average, better than their urban counterparts, but slightly lower than the statewide averages. The evidence that urban and suburban districts have higher percentages of advanced proficiency in all areas except Biology warrants further investigation, however.

Survey Findings. Clearly, secondary data can only tell part of the story. To fully understand how superintendents perceive the impact NCLB has on their districts, we administered a web-based survey to all Arkansas superintendents. The following section summarizes the results of the superintendent survey responses.

Figure 1 shows the distribution of respondents by locale. We see from this chart that 85 rural districts responded to the survey. This constitutes 77.2% of our sample, which is considerably higher than the state total of 68%. At 4.6%, participation by urban districts falls somewhat below the state total of 7%. With the urban districts being represented by only five respondents, urban-rural differences should not be taken as conclusive.

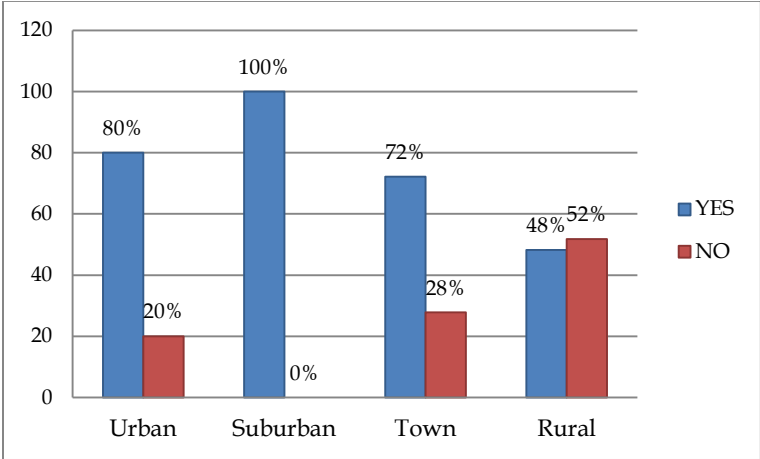
While much of the data concerning rural education and would lead us to believe that rural districts have difficulty meeting the mandates of NCLB, neither district data nor superintendent responses seem to support this notion. According to the sample data, rural districts are least likely to report having schools failing to make AYP. We find that less than 50% of the rural

Figure 1: Distribution of Respondents by Locale



respondents indicated that they had at least one school which failed to meet AYP. Urban and suburban districts were most likely to report failing schools, at 80% and 100% respectively. It is important to put these numbers into context, however. First, urban and suburban districts have more schools, and thus more opportunities to have a school that fails to make AYP. Second, with fewer schools, rural students are less likely to have the option of transferring to another school than their urban and suburban counterparts.

Figure 2: Percentage of District with at Least One School Failing to Make AYP.



To identify problems or concerns facing Arkansas school districts, survey respondents were asked to consider 27 items that have been identified in previous research as challenges in implementing NCLB. They were asked if they *strongly agree, agree, disagree, or strongly disagree* that each item is a problem or concern for their district. These were then grouped by district locale to determine if rural and urban districts differed in their responses.

Table 11: Top Ranked Concerns for Districts by Locale

Urban	Mean	Rural	Mean
"At Risk" Students	3.8	Funding	3.4
Funding	3.6	"Adequate Yearly Progress"	3.1
Economic Disadvantage	3.6	Economic Disadvantage	3.1
High Stakes Testing	3.4	Subgroup Mandates	3.0
Technology	3.4	Student Attitudes Toward Standardized Tests	2.8
Teacher, Student, & Parent Attitudes Toward Standardized Tests	3.4	Parent Attitudes Toward Standardized Tests	2.7
N	5	N	85

Looking at the top six responses for each item, we find that both urban and rural districts agree that *funding* and *economic disadvantage* were issues of concern. Urban districts also identified *at-risk students, high stakes testing, technology, and attitudes toward standardized tests* as problems, while rural superintendents were more likely to indicate *adequate yearly progress, subgroup mandates, and attitudes toward standardized tests* as concerns. *M, school facilities, community support and data management* were of greater concern for urban districts than for rural districts. The challenge which appeared to be a greater concern for rural districts than urban was *availability of educational support services*. When asked which one of these is of greatest concern, rural superintendents overwhelmingly cited *funding*. There was no consensus among urban superintendents, as each selected a unique problem.

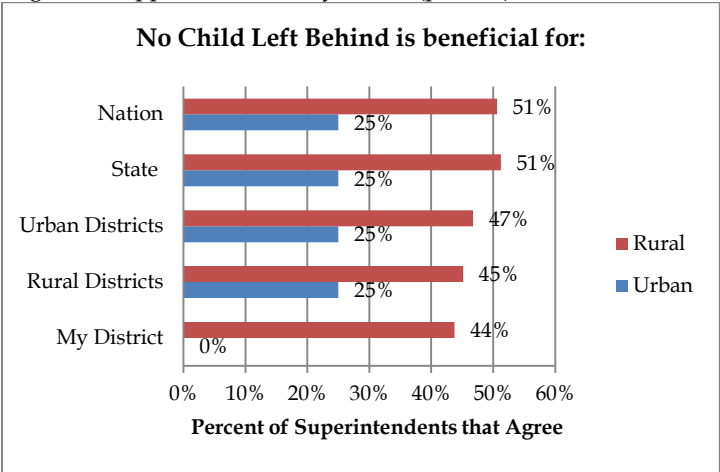
While there are a number of grant opportunities for school districts in general, and for rural districts specifically, respondents overwhelmingly (87%) indicated that the available funding is not adequate. As indicated in the survey responses, small and rural districts overall receive less funding

than urban districts, yet several reported that they are too large or too wealthy to qualify for rural-specific grants.

One of the most often-cited challenges for rural schools is the inability to attract and retain highly qualified teachers. To determine if Arkansas superintendents considered this to be a problem, they were asked if they had many, some, or no teachers “teaching out of field.” While 58% of rural superintendents reported having “some” teaching out of field, only one urban district reported having any. Among those who reported some, the greatest needs were in math, special education, and science, respectively. While this was not identified as one of the greatest challenges facing rural districts, it does appear that it is more difficult for rural districts to attract these teachers than it is for urban districts.

When asked if they think NCLB has been beneficial, rural superintendents were considerably more positive than their urban counterparts. Of the five urban superintendents, only one reported that NCLB is beneficial for the nation, state, rural, and urban districts. None responded that it was beneficial for their district. However, approximately 52% of rural superintendents felt NCLB is beneficial for the nation and state, 45% felt it was beneficial for rural districts, 51% felt it was beneficial for urban districts, and just under 45% felt it was beneficial for their own district.

Figure 3: Support for NCLB by Locale (percent)



Conclusion

The purpose of this paper has been first to describe Arkansas's rural school districts and to compare these findings with those of other researchers. In many ways the Arkansas data are fairly consistent with the findings reported in the literature (Provasnik et al. 2007). There is little ethnic diversity in rural districts, they have slightly higher percentages of students with individualized educational programs, and they tend to perform better academically than their urban counterparts. All of this is consistent with what we would expect to find in rural districts.

There were a few surprises, however. Rural districts in Arkansas appear to have fewer students who are economically disadvantaged. They also have higher reported student-teacher ratios, despite having significantly smaller student populations. While at first glance, it might be surprising to find that rural Arkansas districts spend less per student than other districts, as Pvoasnik, et al. (2007) might suggest. This might be explained by the fact that rural districts have a lower percentage students participating in the Federal School Lunch program.. This may result in fewer federal dollars. It is also important to note that after *Lake View School District, No. 25 v. Huckabee* (2001), Arkansas has made great strides in education-finance equity. Thus discrepancies in per-pupil expenditures are relatively small. Finally, we were surprised by the finding that, while rural students perform better on the Benchmark exams, a smaller percentage of them seem to reach the *advanced proficient* threshold.

We hypothesized that while both urban and rural district administrators have faced challenges with the NCLB mandate, these challenges will manifest differently according to their urban or rural locale. While this does appear to be the case, the differences are not always those suggested by the literature. It is true that rural superintendents were more likely to cite funding, subgroup mandates, and teachers teaching out-of-field than their urban counterparts. They also expressed a need for teachers in math, science, and special education. These findings are consistent with the literature on rural education. However, we did not find that rural superintendents were especially concerned with transportation, professional development opportunities, English language learners, or even attracting /retaining highly qualified teachers.

Perhaps most surprising is the finding that rural superintendents were considerably more positive about the benefits of NCLB. Nearly half of the

rural respondents reported that that NCLB was beneficial for their own district, while none of the urban districts perceived such benefit. Much of the literature regarding the rural experience with NCLB focuses on how this legislation disproportionately penalizes rural school districts. Based on the data presented here, however, rural superintendents do not appear to perceive such disadvantage.

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