



**ARKANSAS EDUCATION REPORT**  
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**AYP IN ARKANSAS:**

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**WHO'S ON TRACK?**

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## ABSTRACT

*Nearly a quarter of Arkansas' public schools failed to make adequate yearly progress (AYP) in 2004-05 under the federal No Child Left Behind (NCLB) legislation, and were therefore classified as being in "school improvement" status for the 2005-06 school year. OEP analyzed data for all Arkansas schools on the list of schools needing improvement for 2004-05 and 2005-06, as compared to all schools that did make AYP during these periods. Among other findings, schools not making AYP had significantly more low-income and minority students than those who did make AYP. In addition, the subgroups most likely to not make AYP in 2004-05 were low-income students in math and reading (51.8% and 45.3% of sanctioned schools, respectively, missed making AYP in these subgroups), African-American students in math (45.4%), and the combined student population in math (34.7%). This follows the trend from 2003-04. Therefore, the identification of these schools as "needing improvement" may be more of a reflection of the disadvantages they face than the quality of their instruction.*

## INTRODUCTION

How "good" are the schools in Arkansas? Under the federal No Child Left Behind (NCLB) Act of 2001, the current measure of a school's success in Arkansas and around the country is based on whether its students meet the adequate yearly progress (AYP) benchmark on annual standardized tests. Those schools not making AYP are placed on the list of schools "in need of improvement" and therefore must give expanded educational choice (including school transfers and/or free tutoring) to eligible students. In contrast, schools that do not appear on the list are typically regarded as "successful" schools. This paper provides an overview of the AYP standard under NCLB, describes the various subgroups held accountable for making AYP, and analyzes the types of schools and subgroups in Arkansas that are failing to meet AYP.

Among other findings, the authors found that schools not making AYP had significantly more low-income and minority students than those who did make AYP. Indeed, the subgroups most likely to not make AYP in 2004-05 were low-income students in math and reading (51.8% and 45.3% of sanctioned schools, respectively, missed making AYP in these subgroups), African-American students in math (45.4%), and the combined student population in math (34.7%). This follows the trend from 2003-04. Therefore, the identification of these schools as "needing improvement" may be more of a reflection of the disadvantages they face than the quality of their instruction. At the same, it is important to give these schools the assistance they need to improve student achievement. As long as AYP is used as a diagnostic tool under NCLB, rather than viewed as a punitive sanction, the law may be doing exactly what it intended to do: targeting assistance to schools that need help most and expanding educational options for students that have long been underserved in our nation's school system.

## UNDERSTANDING ADEQUATE YEARLY PROGRESS

No Child Left Behind (NCLB) mandates that all states develop an accountability system that measures student achievement every year in order to continue receiving Title I funds, a federal funding program that commits \$12 billion per year to help low-income students. Under NCLB, schools and districts must ensure that all students reach proficiency in math and reading by the end of the 2013-14 school year. Each year, schools must meet the predetermined cut-off score on state tests in order to be considered making adequate yearly progress (AYP). Since states can set their own level of "proficiency," definitions of "proficiency" and AYP formulas vary considerably from state to state.

The NCLB law also requires that schools must successfully meet AYP for several different subgroups of students in both math and reading, including:

- Combined population (all students);
- White students;
- African-American students;
- Hispanic students;
- Limited English Proficient (LEP) students;
- Low-income students; and
- Special education students.

A school is only held accountable for a subgroup's performance if it has more than a certain number of students in that particular subgroup; in Arkansas, the minimum number of students in a subgroup is 40. If any of these subgroups fail to meet AYP targets, the entire school is considered not to have made AYP and is put on the "school improvement" (SI) list. This subgroup method of calculating AYP has been referred to as a "trip wire" system, in which poor performance by one subgroup in one subject area can "trip up" an entire school (Ritter & Lucas, 2003).

As of the 2001-02 school year, the Arkansas Comprehensive Testing Assessment and Accountability Program (ACTAAP) serves as the basis for determining AYP in Arkansas and meeting the mandates of NCLB. Under ACTAAP, students' performance is measured on the state's Benchmark exams (administered to students in grades four, six, and eight) and End-of-Course exams in Geometry, Algebra I, and 11<sup>th</sup> grade literacy. Schools typically don't receive notification of their AYP status until late fall; school administrators then have 30 days to appeal their AYP status. Appeals are often made due to coding errors. In addition, schools may apply for "safe harbor" in order to be removed from the school improvement list due to great improvements. In this case, schools must decrease the percent of students scoring below proficient by 10 percent from the previous year, as well as show that 95 percent of eligible test takers took the exam. In addition, schools must also make improvement on a secondary criteria: graduation rates for high schools and attendance rates for elementary schools. However, some researchers have found that the safe harbor provision generally does not reduce the

number of schools identified as needing improvement (Lee, 2004; Linn, 2003).

## LEVELS OF AYP SANCTIONS

The level of severity of NCLB sanctions is commensurate with the number of years a school has failed to make AYP (Office for Education Policy, 2004). Beginning in the 2002-03 school year, schools that fail to meet AYP for *two* consecutive years are classified as "needing improvement" (known as School Improvement Year 1) and are required to develop a school improvement plan. By the next school year, these schools must also give students the option of transferring to another public school in the same district that has not been sanctioned, unless such transfers are prohibited by state law (for example, if it disrupts desegregation efforts).

Schools that fail to make AYP for *three* consecutive years (School Improvement Year 2) must also provide free supplemental education services to their students, in addition to continuing to offer public school choice. Supplemental education services may include "one-on-one tutoring, small-group prescriptive skill-building, individualized gap assessment and remediation, small-group drill and practice, computer-based assessment and skill-building, interactive e-tutoring on the internet, and internet-based skill-building with direct feedback" (U. S. Department of Education, 2004, p. 2). These services may be provided by non-profit or for-profit organizations, churches, or the school district itself, unless it, too, has been sanctioned. (*See OEP Policy Brief No. 3, 2006: "Supplemental Education Services in Arkansas."*)

After the *fourth* consecutive year of failing to make AYP (School Improvement Year 3), schools must also undergo certain corrective actions, such as implementing a new curriculum or replacing staff. If schools fails to make AYP for *five* consecutive years (School Improvement Status Year 4), they must begin developing plans to restructure, such as converting to a charter school, contracting with a private management firm, restructuring staff, or being taken over by the state. During the sixth year of failing to make AYP (School Improvement Year 5), schools must ultimately undergo restructuring. Offering public school choice and supplemental

services to students continues to be required during the fourth, fifth, and sixth consecutive years of not making AYP. Sanctioned schools can be removed from the SI list once they make AYP for at least

two consecutive years. Table 1 summarizes the various levels of AYP sanctions.

**Table 1: Levels of AYP Sanctions**

| <b># of Consecutive Years Failing AYP</b> | <b>Year of School Improvement</b> | <b>Required Actions for Schools</b>  |
|---|-----------------------------------|--|
| <b>2</b>                                  | <b>Year 1</b>                     | <ul style="list-style-type: none"> <li>• Offer students public school choice until school exits school improvement</li> <li>• Develop school improvement plan</li> </ul>   |
| <b>3</b>                                  | <b>Year 2</b>                     | <ul style="list-style-type: none"> <li>• Offer students supplemental education services until school exits improvement</li> <li>• Continue to offer public school choice</li> <li>• Implement school improvement plan</li> </ul>         |
| <b>4</b>                                  | <b>Year 3</b>                     | <ul style="list-style-type: none"> <li>• Implement corrective action (new curriculum, replace staff, etc.)</li> <li>• Continue to offer choice and supplemental education services</li> </ul>  |
| <b>5</b>                                  | <b>Year 4</b>                     | <ul style="list-style-type: none"> <li>• Begin planning for school restructuring (reopen as a charter school, turn school over to state agency, etc.)</li> <li>• Continue to offer choice and supplemental education services</li> </ul> |
| <b>6</b>                                  | <b>Year 5</b>                     | <ul style="list-style-type: none"> <li>• Implement school restructuring</li> <li>• Continue to offer choice and supplemental education services</li> </ul>   |

**THE IMPACT OF AYP ON SCHOOLS**

Several studies have found that the effects of No Child Left Behind’s (NCLB) AYP and subgroup standards vary depending upon the context in which they are implemented. In one of the largest national studies of NCLB implementation nationwide, the Center on Education Policy (2005) found that the schools most likely to be identified as needing improvement in 2004-05 were urban schools and schools in very large districts. CEP attributes this phenomenon to fact that these schools tend to have the most subgroups large enough to count toward AYP. CEP also found that the number of middle schools identified for improvement nationwide more than doubled between 2002-03 and 2004-05, making them disproportionately represented among all Title I schools identified for school

improvement. Likewise, CEP theorizes that the over-identification of middle schools is a function of their having larger enrollments than elementary and high schools, and thus more subgroups large enough to be held accountable under NCLB.

Some researchers fear that subgroup accountability policies unfairly penalize schools with large numbers of disadvantaged students by over-identifying such schools as “failing” (Kane & Staiger, 2002, 2003; Haas, Wilson, Cobb, & Rallis, 2005; Welner, 2005). Therefore, some have challenged validity of using AYP as a measure of school quality, since test score differences often reflect external factors, such as differences in students’ backgrounds before they ever enter school (Kim & Sunderman, 2005; Linn, 2003). In fact, a large body of research has shown that there is a

strong correlation between race, poverty, and academic achievement (Orfield & Lee, 2005). Schools with either an African-American or Hispanic subgroup may be more likely to fail to make AYP, since such students tend to have lower test scores and poorer educational opportunities than their white peers. Due to their high levels of minority students, these schools typically have many other subgroups which must make AYP as well, such as low-income students and limited English proficient (LEP) students. In contrast, predominately white schools typically have lower poverty rates and thus may be less likely to have to meet AYP in multiple subgroups.

For example, Kim and Sunderman (2005) studied the effects of AYP requirements in high-poverty schools with significant numbers of African-American and Hispanic students in six states. The authors found “a clear demographic divide” (p. 5) between schools making AYP and those identified

as needing improvement, with far more minority students enrolled in the latter. The authors of this study attempted to test whether schools and subgroups not making AYP in Arkansas also served disproportionate numbers of disadvantaged students.

#### FINDINGS: AYP IN ARKANSAS

In 2004-05, 274 schools (24.1%) in Arkansas did not make AYP and are now on the state’s “school improvement” (SI) list, compared to 305 schools in 2003-04. Over 66% of districts had at least one school on the SI list this year. The state Department of Education points out that this year’s decrease in the number of schools on the SI list is partly due to the fact that several of the schools on the latest list have been closed as a result of district consolidation or annexation. Table 2 shows the number of schools and districts in each level of school improvement for 2004-05, as compared to 2003-04.

**Table 2: School Improvement (SI) Status for Schools Not Making AYP**

| School Improvement Status | 2003-04      |                         |                                 | 2004-05      |                         |                                 |
|---------------------------|--------------|-------------------------|---------------------------------|--------------|-------------------------|---------------------------------|
|                           | # of Schools | % of Schools on SI List | % of all AR schools (N = 1,130) | # of Schools | % of Schools on SI List | % of all AR schools (N = 1,137) |
| SI-Year 1                 | 235          | 77.0%                   | 20.7%                           | 74           | 27.0%                   | 6.5%                            |
| SI-Year 2                 | 65           | 21.3%                   | 5.7%                            | 151          | 55.1%                   | 13.2%                           |
| SI-Year 3                 | 4            | 1.3%                    | 0.3%                            | 44           | 16.0%                   | 3.8%                            |
| SI-Year 4 and 5           | 1            | 0.3%                    | 0.0%                            | 5            | 1.7%                    | 0.3%                            |
| <b>Total</b>              | <b>305</b>   | <b>100.0%</b>           | <b>26.9%</b>                    | <b>274</b>   | <b>100.0%</b>           | <b>24.1%</b>                    |

As shown in Table 2, 74 schools did not make AYP for two consecutive years as of 2004-05; therefore, they are in the first year of school improvement (SI) in 2005-06. Over one half (55.1%) of all sanctioned schools in Arkansas are now in Year 2 of school improvement, and 16.0% are in Year 3. Four schools were in SI-Year 4, and only one school, Lucilia Wood Elementary School in the Elaine School District, was in SI-Year 5, making it a possible candidate for state takeover.

The school improvement list actually includes some schools that *did* make AYP in 2004-05, in addition to those that did not. For example, schools in “SI-M1” were in SI-Year 1 last year but made AYP this

year; however, they must make AYP for two consecutive years in order to be removed from the list. According to the Arkansas Department of Education, 14 schools on the list achieved their second year of meeting AYP in 2004-05, allowing them to be removed from the latest list.

#### CHARACTERISTICS OF SCHOOLS FAILING TO MAKE AYP

We examined the following characteristics of schools not making AYP for at least two consecutive years in 2003-04 and 2004-05:

- school level (grade span);
- school and district size;

- geographic region;
- urbanicity;
- levels of minority students;
- levels of students in the free- or reduced-price lunch (FRL) program;
- per-pupil expenditures; and
- scores on the Iowa Test of Basic Skills (ITBS) and the state's Grade 11 Literacy Exam.

### **School Level**

For 2004-05, over a third (36.5%) of schools not making AYP were elementary schools; 33.6% were middle/junior high schools, and 29.9% were senior high schools (see Table 3). However, the number of middle/junior high schools in school improvement is disproportionately high, since only 17.1% of schools in Arkansas are at the middle or junior high school levels. It is possible that there will be even more middle schools on the SI list next year, since more grades will soon be tested in math (exams will be given in grades four, six, and eight, as well as Algebra I and Geometry).

We also compared the characteristics of schools on the SI list to those of schools that *did* make AYP during these same periods, which will be discussed later in this paper.

**Table 3: Schools on SI List According to School Level**

| School Level       | 2003-04                      |                       | 2004-05                      |                       |
|--------------------|------------------------------|-----------------------|------------------------------|-----------------------|
|                    | # Schools in SI<br>(N = 305) | # of Schools<br>in AR | # Schools in SI<br>(N = 274) | # of Schools<br>in AR |
| Elementary         | 123 (40.3%)                  | 608 (53.8%)           | 100 (36.5%)                  | 610 (53.6%)           |
| Middle/Junior High | 90 (29.5%)                   | 183 (16.1%)           | 92 (33.6%)                   | 195 (17.1%)           |
| Senior High        | 92 (30.2%)                   | 339 (30%)             | 82 (29.9%)                   | 332 (29.1%)           |
| TOTAL              | 305                          | 1,130                 | 274                          | 1,137                 |

### **School and District Size**

In 2005-06, most schools on the school improvement list (62.8%) were relatively small schools (fewer than 500 students), since most schools in the state (70%) are small. However, most

schools on the list (52.9%) were also located in relatively large districts (more than 2,000 students) (see Table 4). Notably, the percentage of large schools in school improvement is relatively high (37.2%), considering that only 29.8% of schools in Arkansas have more than 500 students.

**Table 4: School and District Enrollment Levels for Schools in School Improvement**

| Enrollment Level                                    | 2003-04                      | 2004-05                      | All AR<br>Schools<br>(N = 1,137) |
|---|------------------------------|------------------------------|----------------------------------|
|   | # Schools in SI<br>(N = 305) | # Schools in SI<br>(N = 274) |                                  |
| Small school (499 or fewer students)                | 214 (70.2%)                  | 172 (62.8%)                  | 72.5%                            |
| Large school (500 or more students)                 | 91 (29.8%)                   | 102 (37.2%)                  | 27.4%                            |
| Located in small district (1,999 or fewer students) | 168 (55.1%)                  | 129 (47.1%)                  | 53.8%                            |
| Located in large district (2,000 or more students)  | 137 (44.9%)                  | 145 (52.9%)                  | 46.1%                            |

**Geographic Region**

The highest percentage of schools on the school improvement list in 2005-06 is located in the central part of the state (31.7%), with the second highest percentage located in the northeast (20.4%). However, the regional distribution of schools not making AYP during this period is somewhat disproportionate to the regional distribution of all

schools in Arkansas. For example, while 29.4% of all of the state’s schools are located in Northwest Arkansas, only 15.3% of the schools on the SI list are located in that region. In contrast, while only 7.7% of all schools are located in Southeast Arkansas, 14.1% of the schools of the SI list are from that region. Table 5 breaks down the SI status of sanctioned schools in 2005-06 according to region.

**Table 5: Schools on School Improvement List by Region**

| REGION    | Year in School Improvement Status<br>2004-05 |        |        |        |        | Total in SI<br>(N = 274) | All AR<br>Schools<br>(N = 1,137) |
|-----------|--|--------|--------|--------|--------|--------------------------|----------------------------------|
|           | Year 1                                       | Year 2 | Year 3 | Year 4 | Year 5 |                          |                                  |
| Northwest | 17   | 21     | 3      | 1      | 0      | 42 (15.3%)               | 29.4%                            |
| Northeast | 16   | 26     | 14     | 0      | 0      | 56 (20.4%)               | 24.7%                            |
| Central   | 21   | 51     | 12     | 3      | 0      | 81 (31.7%)               | 24.1%                            |
| Southwest | 12   | 33     | 5      | 0      | 0      | 50 (18.2%)               | 14.1%                            |
| Southeast | 8  | 20     | 10     | 0      | 1      | 39 (14.2%)               | 7.7%                             |

**Urbanicity**

Similar to the regional distribution of schools on the SI list, the urbanicity of schools not making AYP is not quite proportional to the distribution of all schools in Arkansas. For example, while 21.1% of all schools in Arkansas can be classified as urban,

28.5% of schools on the SI list are in urban areas. There is also a smaller percentage of rural schools on the SI list (34.3%) than the percentage of all rural schools in Arkansas (45.0%). Table 6 breaks down the SI status of sanctioned schools according to urbanicity.

**Table 6: Schools on School Improvement List by Urbanicity**

| URBANICITY | Year in School Improvement Status<br>2004-05 |        |        |        |        | Total in SI<br>(N = 274) | All AR<br>Schools<br>(N = 1,137) |
|------------|--|--------|--------|--------|--------|--------------------------|----------------------------------|
|            | Year 1                                       | Year 2 | Year 3 | Year 4 | Year 5 |                          |                                  |
| Urban      | 19   | 42     | 13     | 4      | 0      | 78 (28.5%)               | 21.1%                            |
| Suburban   | 27   | 60     | 15     | 0      | 0      | 102 (37.2%)              | 33.9%                            |
| Rural      | 28   | 49     | 16     | 0      | 1      | 94 (34.3%)               | 45.0%                            |

### ***Level of Minority Students***

In 2005-06, about 30 percent of all students in the state were non-white. We estimated the level of minority students served by schools on the school improvement list in 2004-05 and 2005-06. For simplicity's sake, we divided schools into two tiers: A school with more than the state average of minority students (30%) is classified as a "high-

minority school". A school with minority student enrollment of less than or equal to 29 percent of the student body is classified as a "low-minority" school. While just under 40 percent of the state's schools are high-minority in 2005-06, nearly 75 percent of the schools on the school improvement list were high-minority during this period. Table 7 illustrates the results from this analysis.

**Table 7: Schools on School Improvement List by Minority Level, 2004-05 and 2005-06**

|                                   | <b>2003-04</b>                       | <b>2004-05</b>                       |                                |
|-----------------------------------|--------------------------------------|--------------------------------------|--------------------------------|
| <b>Level of Minority Students</b> | <b># of Schools in SI, (N = 305)</b> | <b># of Schools in SI, (N = 274)</b> | <b>All AR Schools, 2005-06</b> |
| High minority (> 30.0%)           | 225 (73.8%)                          | 204 (74.5%)                          | 38.8%                          |
| Low minority (≤ 29.9%)            | 80 (26.2%)                           | 70 (25.5%)                           | 61.2%                          |

### ***Level of FRL Students***

In 2004-05, over half (52.8%) of all students in Arkansas were eligible to enroll in the federal free- and reduced-price lunch (FRL) program for low-income students. As a proxy for school poverty, we estimated the level of students eligible to participate in the FRL program for schools on the school improvement list in 2004-05 and 2005-06. The 50 percent eligibility rate for students in FRL is often used as a criterion for classifying "high-poverty" schools (Orfield & Lee, 2005; Raudenbush, 2004).

Thus, in our analysis, if over 50 percent of students in a school participated in the FRL program, then that school is considered to have relatively high levels of students in poverty. A school with anything below this level is considered to be a relatively low-poverty school. While just under 65 percent of the state's schools were high-poverty in 2005-06, over 76 percent of the state's schools on the school improvement list were high-poverty during this period (see Table 8).

**Table 8: Schools on School Improvement List by FRL/Poverty Level**

|                              | <b>2003-04</b>                       | <b>2004-05</b>                       |                                |
|------------------------------|--------------------------------------|--------------------------------------|--------------------------------|
| <b>Level of FRL Students</b> | <b># of Schools in SI, (N = 305)</b> | <b># of Schools in SI, (N = 274)</b> | <b>All AR Schools, 2005-06</b> |
| High FRL (>50.0%)            | 245 (80.3%)                          | 209 (76.3%)                          | 64.8%                          |
| Low FRL (≤ 49.9%)            | 60 (19.7%)                           | 65 (23.7%)                           | 35.2%                          |

## COMPARING SCHOOLS MAKING AYP VS. THOSE NOT MAKING AYP

We also compared the characteristics of schools on the school improvement list to those of schools that did make AYP in 2004-05. Using an independent sample, one-way t-test, we found significant differences at the  $p < .05$  level on several characteristics. As shown in Table 9, schools not

making AYP had significantly more African-American students (45.0%, versus 17.0% in schools making AYP), more students in the free/reduced lunch program (FRL) (66.0%, versus 55.0% in schools making AYP), higher district per-pupil expenditures (an average of \$475 more per pupil than schools making AYP), and larger school enrollment (an average of 116 more students than schools making AYP).

**Table 9: Characteristics of Schools Not Making AYP vs. Those Making AYP in 2004-05**

|  | SCHOOLS NOT MAKING AYP | SCHOOLS MAKING AYP | SIGNIFICANCE LEVEL (2-TAILED) | STATE AVERAGE      |
|--|------------------------|--------------------|-------------------------------|--------------------|
| % African-American                         | 45.0%                  | 17.0%              | .00                           | 23.0%              |
| % Hispanic                                 | 6.0%                   | 5.0%               | .11                           | 6.0%               |
| % Free/Reduced Lunch                       | 66.0%                  | 55.0%              | .00                           | 52.8%              |
| Per-Pupil Expenditures (District, 2004-05) | \$6,832.45             | \$6,357.39         | .00                           | \$6,467.70         |
| School Enrollment                          | 493.7                  | 377.8              | .00                           | 406.6              |
| ITBS Math Scores <sup>1</sup>              | 45.5<br>(N = 254)      | 58.7<br>(N = 814)  | .00                           | 56.0<br>(N = 1064) |
| ITBS Reading Scores <sup>1</sup>           | 45.5<br>(N = 254)      | 57.1<br>(N=814)    | .00                           | 54.6<br>(N = 1064) |
| Grade 11 Literacy Exam Scores <sup>1</sup> | 187.4<br>(N =81)       | 194.4<br>(N = 235) | .00                           | 192.8<br>(N = 313) |

<sup>1</sup>Not all schools administered ITBS or Grade 11 Literacy Exams in 2004-05.

Not surprisingly, significant differences in standardized test scores were also found between schools not making AYP and those making AYP. Table 9 illustrates that schools not making AYP had significantly lower scores on both the math and reading portions of the norm-referenced Iowa Test of Basic Skills (ITBS) administered in 2004-05: an average of 13.1 points lower in math and 11.6 points lower in reading. In addition, schools not making AYP that administered the Grade 11 End-of-Course Literacy Exam had significantly lower scores on the exam (an average score of 187.4) than those making AYP (an average of 194.4).

## WHAT MAKES SCHOOLS FAIL AYP?

### *Number of Subgroups Failing AYP*

The reason most schools have been on the school improvement list over the past two years is that they have failed to make AYP in one or more subgroups (or overall) in either math or reading. And as previously mentioned, having just one subgroup fail in either subject causes an entire school to fail to make AYP. Of all schools failing AYP in 2004-05, about one quarter (24%) of these schools failed to make AYP because of only one subgroup; twenty percent (20%) of schools on the SI list failed to make AYP due to two subgroups; and 45.2% failed to make AYP due to three or more subgroups. Table

10 breaks down the number of subgroups for which schools failed to make AYP in either math or

reading in 2004-05, compared to 2003-04.

**Table 10: Number of Subgroups Not Making AYP for Schools on SI List**

| # Subgroups         | 2003-04         |                        |                                 | 2004-05         |                        |                                 |
|---------------------|-----------------|------------------------|---------------------------------|-----------------|------------------------|---------------------------------|
|                     | # Schools in SI | % of SI List (N = 305) | % of All AR Schools (N = 1,130) | # Schools in SI | % of SI List (N = 274) | % of All AR Schools (N = 1,137) |
| 0                   | 44              | 14.4%                  | 3.8%                            | 29              | 10.5%                  | 2.5%                            |
| 1                   | 64              | 20.9%                  | 5.6%                            | 66              | 24.0%                  | 5.8%                            |
| 2                   | 54              | 17.7%                  | 4.7%                            | 55              | 20.0%                  | 4.8%                            |
| 3 or more subgroups | 143             | 46.8%                  | 12.6%                           | 124             | 45.2%                  | 11.1%                           |

As Table 10 illustrates, 29 schools on the SI list in 2005-06 (10.5%) had no subgroups that were identified as failing to make AYP, either because their schools did not have the minimum number of students in each AYP subgroup or they are still on the SI list due to failing AYP in the previous year.

schools on the SI list in 2005-06, 72.9% failed AYP in some subgroup in math, 66.8% failed in reading, and 50.3% failed in both subjects (see Table 11). Nearly 15% of schools did not fail to make AYP in either math or reading in 2004-05; these schools still on the SI list because they failed to make AYP in the previous year, 2003-04, and must remain on the SI list for at least another year until they make AYP.

***Math and Reading Subgroups***

So which “tripwires” most commonly cause Arkansas schools to fail to make AYP? Out of all

**Table 11: Number of Schools in SI Failing AYP in Math and Reading**

| Subject Failed                 | 2003-04            |                             | 2004-05            |                             |
|--------------------------------|--------------------|-----------------------------|--------------------|-----------------------------|
|                                | # of Schools in SI | % of Schools in SI (N= 305) | # of Schools in SI | % of Schools in SI (N= 274) |
| Failed Math                    | 203                | 66.5%                       | 200                | 72.9%                       |
| Failed Reading                 | 210                | 68.8%                       | 183                | 66.8%                       |
| Failed Both                    | 152                | 49.8%                       | 138                | 50.3%                       |
| Did Not Fail in Either Subject | 44                 | 14.4%                       | 29                 | 10.5%                       |

In 2004-05, 118 of the schools failed AYP only for combined scores, and 185 failed only for subgroup scores (African-American, Hispanic, white, LEP, low-income, or special education) (see Table 12).

**Table 12: Subgroups Not Making AYP in Math or Reading**

|                     | <b>2003-04</b>                          | <b>2004-05</b>                          |
|---------------------|---|---|
| <b>Subgroup</b>     | <b># of Schools in SI<br/>(N = 305)</b> | <b># of Schools in SI<br/>(N = 274)</b> |
| Combined Population | 122 (40.0%)                             | 118 (43.0%)                             |
| African-American    | 171 (56.0%)                             | 143 (52.1%)                             |
| Hispanic            | 10 (3.2%)                               | 9 (3.2%)                                |
| LEP                 | 4 (1.3%)                                | 5 (1.8%)                                |
| Low-Income          | 211 (69.1%)                             | 187 (68.2%)                             |
| Special Education   | 20 (6.5%)                               | 29 (10.5%)                              |
| White               | 15 (4.9%)                               | 9 (3.2%)                                |

As Table 13 shows, when broken down by subject area, the subgroups most likely not to make AYP in 2004-05 were low-income students in both math and reading (51.8% and 45.3% of sanctioned schools, respectively), African-American students in math (45.4%), and the combined student

population in math (34.7%). Schools on the SI list were least likely to have missed making AYP for the subgroups of white students in math (1.1% of sanctioned schools), and limited-English proficient students in both math and reading (1.1% each). These figures follow the trend from 2003-04.

**Table 13: All Subgroups Not Making AYP**

|                          | <b>2003-04</b>                       | <b>2004-05</b>                       |
|--------------------------|--------------------------------------|--------------------------------------|
| <b>Subgroup</b>          | <b># Schools in SI<br/>(N = 305)</b> | <b># Schools in SI<br/>(N = 274)</b> |
| Combined Reading         | 91 (29.8%)                           | 74 (27.0%)                           |
| Combined Math            | 89 (29.2%)                           | 95 (34.7%)                           |
| African-American Reading | 126 (41.4%)                          | 90 (32.8%)                           |
| African-American Math    | 143 (47.0%)                          | 124 (45.4%)                          |
| Hispanic Reading         | 7 (2.3%)                             | 9 (3.3%)                             |
| Hispanic Math            | 5 (1.6%)                             | 5 (1.8%)                             |
| LEP Reading              | 4 (1.3%)                             | 3 (1.1%)                             |
| LEP Math                 | 1 (0.3%)                             | 3 (1.1%)                             |
| Low-Income Reading       | 165 (54.1%)                          | 124 (45.3%)                          |
| Low-Income Math          | 156 (51.1%)                          | 142 (51.8%)                          |
| Special Ed Reading       | 19 (6.2%)                            | 24 (8.8%)                            |
| Special Ed Math          | 17 (5.6%)                            | 23 (8.4%)                            |
| White Reading            | 12 (3.9%)                            | 3 (1.1%)                             |
| White Math               | 3 (1.0%)                             | 6 (2.2%)                             |

## CONCLUSION

Our analysis shows that certain types of schools were far more likely to make AYP than others in Arkansas in 2003-04 and 2004-05, based in large part on their student characteristics. Among our main findings, schools not making AYP had significantly more minority and low-income students than those that did make AYP. Not surprisingly, the subgroups most likely to not make AYP in 2004-05 were low-income students in math and reading and African-American students in math. Our findings appear to support those of many other studies on AYP and subgroup accountability policies: the identification of many schools in Arkansas as “needing improvement” may, in fact, be more of a reflection of the disadvantages they face than the quality of their instruction (Kim & Sunderman, 2005; Kane & Staiger, 2002, 2003).

But is this really a problem? After all, the purpose of the NCLB law (in theory) is to identify and target assistance to the schools and students that need help the most. One could argue that the “sanctions” triggered by not making AYP under NCLB (e.g., offering school choice and supplemental services) are not really sanctions at all; rather, these provisions are simply a way of increasing educational opportunities for disadvantaged students. As long as the identification of schools as “needing improvement” is used as a diagnostic tool rather than a punitive mechanism, then the findings from this study should not be troubling.

However, more research is needed in order to understand whether this really is the case, and whether Arkansas schools on the SI list are actually receiving the help they need in order to improve student achievement. In addition, it is important to note that some schools with large percentages of disadvantaged students are making AYP, and we need to know more about what they are doing differently in the classroom.

In the meantime, some researchers have recommended measuring annual growth in student achievement rather than using mean proficiency as the primary measure of the performance of schools and subgroups (Kim & Sunderman, 2005; Linn, 2003; McCall, Kingsbury, & Olson, 2004; Novak &

Fuller, 2003; Raudenbush, 2004). In fact, the U. S. Department of Education (DOE) is currently considering proposals from several states—including Arkansas—to participate in a pilot program that would allow them to use value-added measures of student growth rather than the current AYP model under NCLB (Olson, 2006). Arkansas’ proposal moved to the next stage of peer review in March 2006; if the proposal passes peer review, it will then await approval from the U. S. Secretary of Education later this year. OEP will continue to monitor Arkansas schools’ AYP status and the potential new growth model over the coming months and how it will affect all students and schools across the state.

## REFERENCES

- Arkansas Department of Education. (2006, March 31). Arkansas ‘growth model’ proposal for NCLB moves to next phase. Little Rock, AR: Author. Retrieved March 31, 2006, from [http://arkedu.state.ar.us/publications/pdf/growthmodel\\_033106.pdf](http://arkedu.state.ar.us/publications/pdf/growthmodel_033106.pdf)
- Center on Education Policy. (2005). *From the capital to the classroom: Year three of the No Child Left Behind Act*. Washington, DC: Author.
- Haas, E., Wilson, G., Cobb, C., & Rallis, S. (2005). One hundred percent proficiency: A mission impossible. *Equity & Excellence in Education*, 38: 180-89.
- Kane, T. J., & Staiger, D. O. (2002). Volatility in school test scores: Implications for test-based accountability systems. In D. Ravitch (Ed.), *Brookings papers on education policy, 2002* (pp. 235-283). Washington, DC: Brookings Institution Press.
- Kane, T. J., & Staiger, D. O. (2003). Unintended consequences of racial subgroup rules. In P. E. Peterson & M. R. West (Eds.), *No child left behind? The politics and practice of school accountability* (pp. 152-176). Washington, DC: Brookings Institution Press.

- Kim, J. S., & Sunderman, G. L. (2005). Measuring academic proficiency under the No Child Left Behind Act: Implications for educational equity. *Educational Researcher*, 34(8): 3-13.
- Lee, J. (2004). How feasible is adequate yearly progress (AYP)? Simulations of school AYP “uniform averaging” and “safe harbor” under the No Child Left Behind Act. *Education Policy Analysis Archives*, 12(14). Retrieved January 25, 2006, from <http://epaa.asu.edu/epaa/v12n14>
- Linn, R. L. (2003). Accountability: Responsibility and reasonable expectations. *Educational Researcher*, 32, 3-13.
- McCall, M. S., Kingsbury, G. G., & Olson, A. (2004). Individual growth and school success. Lake Oswego, OR: Northwest Evaluation Association. Retrieved January 30, 2006, from <http://www.nwea.org/assets/research/national/Individual%20Growth%20and%20School%20Success%20-%20Complete%20Report.pdf>
- Office for Education Policy. (2004). Adequate yearly progress. (Policy Brief No. 10). Fayetteville, AR: University of Arkansas.
- Office for Education Policy. (2006). Supplemental education services in Arkansas. (Policy Brief No. 3). Fayetteville, AR: University of Arkansas.
- Olson, L. (2006, February 1). States vie to be part of NCLB ‘growth’ pilot. *Education Week*, 25(21): 24, 26.
- Orfield, G., & Lee, C. (2005). *Why segregation matters: Poverty and educational inequality*. Cambridge, MA: The Civil Rights Project, Harvard University.
- Raudenbush, S. W. (2004). *Schooling, statistics, and poverty: Can we measure school improvement?* Princeton, NJ: Educational Testing Service.
- Ritter, G. W., & Lucas, C. J. (2003). Puzzled states. *Education Next*, 3(4). Retrieved April 22, 2006, from <http://www.educationnext.org/20034/54.html>
- U. S. Department of Education. (2004). *Innovations in education: Creating strong supplemental education services programs*. Washington, DC: U.S. Department of Education, Office of Innovation and Improvement.
- Welner, K. G. (2005). Can irrational become unconstitutional? NCLB’s 100% presuppositions. *Equity and Excellence in Education*, 38: 171-79.