

4-3-2009

The New Arkansas School Performance Report

Sarah C. McKenzie
University of Arkansas, Fayetteville

Gary W. Ritter
University of Arkansas, Fayetteville

Follow this and additional works at: <https://scholarworks.uark.edu/oepbrief>



Part of the [Educational Assessment, Evaluation, and Research Commons](#), and the [Educational Leadership Commons](#)

Citation

McKenzie, S. C., & Ritter, G. W. (2009). The New Arkansas School Performance Report. *Policy Briefs*. Retrieved from <https://scholarworks.uark.edu/oepbrief/81>

This Brief is brought to you for free and open access by the Office for Education Policy at ScholarWorks@UARK. It has been accepted for inclusion in Policy Briefs by an authorized administrator of ScholarWorks@UARK. For more information, please contact scholar@uark.edu.

The Arkansas Department of Education has just released the Arkansas School Performance Report, a yearly report on academic achievement in all of Arkansas' schools.¹ One important addition to the Report this year is an academic *improvement* rating for all elementary and middle schools in the state. This rating should be of interest to all school observers who desire more nuanced information about school and student performance than is provided in commonly used school performance indices, such as the Adequate Yearly Progress (AYP) rating. We applaud the Arkansas Department of Education for collecting and releasing this invaluable information on student growth.

A school's improvement rating is based on how well its students did on Arkansas' annual Benchmark tests compared to the performance of *these same students* in the prior year. Simply put, when a school's students improve on average, the school will earn a positive gains rating; if a school's students achieve the same as last year on average, the school will earn a gains rating of approximately zero; if a school's students do worse than they did in the prior year, that school will earn a negative gains rating. (The specific details of the gain rating methods are described in the text box on the following page.)

MIXED MESSAGES?

While more information is generally good, it can also lead to confusion for those trying to make sense of potentially contradictory messages. For example, a school in which most children were not reaching proficient levels might still earn a high "improvement" rating if students make substantial learning gains. Similarly, a school that is

successfully meeting AYP goals because most children are testing at or above proficient levels may do poorly on the state's new growth rating because student scores could be unchanged from year to year.

So, what should we do with multiple indicators? Since these are all useful pieces of information, we should consider them all.

The new improvement rating system is informative and useful, and any school stakeholder should take a school's improvement into account – along with other information – when making judgments about school effectiveness.

Indeed, if parents and officials want to have a clear picture of what a school is or is not doing to facilitate academic achievement, it is important that they take into account *all* of the available facts – both how the school's students are doing in each year, and whether the students are on a trend of improvement or decline.

Thus, our office created a new dataset based on information available from the Arkansas Department of Education. Observers who wish to see all of that data collected in one location can obtain our new dataset by going to this link <http://www.uark.edu/ua/oep/performance.html>

Using this new dataset, we have attempted to address a few important questions regarding the new rating system. First, Arkansas students are doing fairly well. Despite the fact that 61% of Arkansas' students are eligible for free/reduced price school lunches (an indicator of poverty), 61% of students were proficient or advanced in math in 2007, a figure that rose to 67% in 2008. Similarly, 59% of students were proficient or advanced in literacy in 2007, a figure that rose to 63% in 2008. In other words, the majority of Arkansas students are proficient or better in key subject areas, and on an upward trend of improvement.

¹ See http://www.arkansased.org/performance_report/index.html. Information specific to each school or district is available here: <http://normessasweb.uark.edu/schoolperformance/>.

ADE Method for Assigning Gains Rating

Students' Benchmark performance is normally classified into four levels: Below Basic, Basic, Proficient, or Advanced. For purposes of the new ratings, those four levels are each divided into two levels steps (that is, levels 1 and 2). Thus, a gain score is computed for each student with test scores in the current year and the prior year. A student whose score moves up one level – perhaps from Basic 1 to Basic 2 or from Proficient 2 to Advanced 1 – earns a 0.5 gain score. A student whose score grows by two levels – say from Proficient 1 to Advanced 1 – earns a 1.0 gain score. Of course, students can also earn negative gain scores as a result of decreases in performance. At the extremes, a student could earn a gain score of 3.5 by moving all the way from Below Basic 1 to Advanced 2 and a student could earn a score of - 3.5 by dropping all the way from the highest to the lowest level.

Each school is then given a rating depending on the average gain score for all of the students in that school. Each school is placed into one of five categories:

Level 5, for schools of “excellence” (average gain score > 0.25)

Level 4, for schools exceeding standards (average gain score > 0.12)

Level 3, for schools that meet standards (average gain score > 0.00)

Level 2, for schools “on alert” (average gain score < 0.00)

Level 1, for schools in need of immediate improvement (average gain score < -0.12)

Further examination of the data reveals three main themes. First, we can consider the possibility that the improvement rating system is troubled by **ceiling effects**. That is, very successful schools with many students already achieving at high levels will find it difficult to fare well in the new Arkansas gains rating, because they have little room to “improve” any further.

This is a valid concern. In any ranking system where students are ranked by categories (rather than on a continuous scale with no maximum), at least some students who are already scoring at the maximum level will not be able to reach a higher level.

At the same time, our analyses suggest that ceiling effects are not a systematic, statewide concern, at least not yet. In reaching this conclusion, we divided up Arkansas schools into quartiles based on how their students performed last year, and compared how the schools in each quartile did in terms of this year's improvement rating. If anything, the data show the *opposite* of a ceiling effect: Schools in the lowest quartile (that is, schools in which the fewest students were proficient or advanced last year) actually got a little bit worse this year, while schools in the highest quartile (with the most proficient or advanced students last year)

actually tended to have the greatest improvement this year.

Perhaps it is not so surprising that we were unable to uncover ceiling effects since we do not have very many schools in which the vast majority of the students are performing at advanced levels. For example, as of 2007, only the top 10% of schools in Arkansas had even half of their students scoring at the advanced level in math, while only the top 1% of schools had half of their students scoring at the advanced level in literacy. Moreover, under the Department of Education's method, a school can achieve the highest improvement rating (Level 5) merely by having an average improvement score of .25, which could be achieved if only half of the school's students improved by one level in a given year.

Thus, for now and likely the next several years, Arkansas schools still have plenty of room for improvement. And even if schools eventually hit the ceiling, that will not mean that the improvement rating system is an ill-conceived idea; it will merely mean that an improvement rating of Level 3 (*i.e.*, maintaining the same level of academic performance) will be the highest possible rating for those schools and that, as noted above, a school should be measured not just by improvement but by its absolute level of performance as well.

Second, we were also able to explore whether schools in high poverty areas were more or less likely to fare well in this system. Our measure of poverty was the number of students in a given school that are eligible for free or reduced-price school lunches. In the end, there was *no* systematic correlation at all between poverty and gain scores. What this means is that schools in low-poverty areas were just as likely as other schools in high-poverty areas to make gains in academic performance.

Third, and perhaps most interesting, we were able to uncover a few schools in Arkansas that were succeeding on a number of different metrics. That is, some schools had high student performance in 2007, but were still able to improve at the highest level in 2008. Strikingly, this finding was not

limited to wealthy schools: a few schools in Arkansas managed to have both high performance last year and improved performance this year even with an impoverished student body. We highlight a few of those schools in the table below.

CONCLUSIONS

The new Arkansas School Performance Report provides valuable new information about how students in Arkansas are improving from year to year, and which schools are doing a good job of moving students forward. Parents, school officials, and policymakers should use these data in combination with other school performance data to make informed and thoughtful judgments about school effectiveness.

EXAMPLES OF HIGH-PERFORMING AND HIGH-IMPROVING SCHOOLS IN ARKANSAS, 2007-08

| School | District | ADE Gain Score | % Poverty Students | 2007 Math % Proficient or Advanced | 2008 Math % Proficient or Advanced | 2007 Lit. % Proficient or Advanced | 2008 Lit. % Proficient or Advanced |
|-----------------------------|----------------------------------|----------------|--------------------|------------------------------------|------------------------------------|------------------------------------|------------------------------------|
| Turrell Elementary | Turrell School District | 0.39 | 100% | 25% | 48% | 19% | 26% |
| Beech Crest Elementary | Helena/W. Helena School District | 0.38 | 100% | 44% | 67% | 46% | 51% |
| Pike Elementary | Fort Smith School District | 0.43 | 91% | 55% | 61% | 43% | 46% |
| Jackson Elementary | West Memphis School District | 0.36 | 100% | 39% | 65% | 35% | 42% |
| Greenland Elementary | Greenland School District | 0.43 | 57% | 61% | 73% | 50% | 67% |
| Centerton Gamble Elementary | Bentonville School District | 0.37 | 36% | 71% | 85% | 61% | 71% |
| Skyline Heights | Harrison School District | 0.34 | 42% | 89% | 94% | 74% | 88% |
| Holt Middle School | Fayetteville School District | 0.30 | 49% | 71% | 79% | 67% | 71% |