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GRADUATION RATES IN ARKANSAS
EXECUTIVE SUMMARY

Full Report Posted at:
http://www.officeforeducationpolicy.org/graduation-rates-in-arkansas/

Supporting Databases Posted at:
http://www.officeforeducationpolicy.org/arkansas-schools-data-graduation-rate/

By:
Vera E. DeBerg
Jennifer W. Ash
Gary W. Ritter
Jocelyn R. McDaniel

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Office for Education Policy
University of Arkansas
211 Graduate Education Building
Fayetteville, AR 72701
Phone: (479) 575-3773
Fax: (479) 575-3196
E-mail: oep@uark.edu

EXECUTIVE SUMMARY

In April 2014, the National Center for Education Statistics published a national report on state-level graduation rates in 2010-11 and 2011-12. The news was positive for the nation, as the national rate reached 80% for the first time, and for Arkansas, as students in the Natural State boasted higher than average rates in both years. While the statewide news was good, Arkansans may well be interested in the graduation rates of particular schools across the state.

Thus, in this report, we examine graduation rate data for the 2011-12 and 2012-13 school years for 273 high schools across the state of Arkansas. As far as we can tell, this is the first statewide analysis of high school graduation rates using the new and more meaningful measures. We first present statewide overall and subgroup school-level graduation rates for the state as a whole and by region. We further examine graduation rates by school size, poverty rate, racial composition, rural or urban classification, and levels of student achievement. In our initial analyses, we examine how each of these variables is individually related with school graduation rates. In each case, we consider both the graduation rate of the overall student body and the graduation rate for the specific group of students known as TAGG (Targeted Achievement Gap Group)[1] students. We then conduct a multivariate analysis, which examines how regional characteristics, school grade configuration, cohort group achievement, cohort group poverty and racial composition, and school size simultaneously relate to overall and TAGG school graduation rates.

Key Findings from Initial Analyses:

School Size
- In both years and for both graduation rate outcomes (overall student population and TAGG students), smaller schools have higher graduation rates than larger schools.
- **On average, the overall graduation rates of extra-small schools (enrollment less than 350) are greater than the rates in any of the groups of larger schools.**
- **These differences in favor of smaller schools are most pronounced in analyses of graduation rates for TAGG students.**

Poverty Rates
- Schools serving greater percentages of economically-disadvantaged students (as measured by eligibility for free or reduced priced lunches, or FRL) have lower overall graduation rates for 2011-12 and 2012-13.

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[1]The Targeted Achievement Gap Group (TAGG) includes special education, free or reduced lunch (FRL)-eligible, and limited English proficiency (LEP) students. Students that meet more than one of these criteria are only included once in the group.

- **Schools classified as high-poverty (FRL-eligible student population greater than 66%), on average, have significantly lower overall graduation rates than schools with 53-65% FRL-eligible student populations.**
- **However, the level of student economic disadvantage is not related to graduation rates for TAGG students in particular.**

<u>Racial Composition</u>
- Schools serving greater percentages of students from racial minority groups have lower overall and TAGG graduation rates for 2011-12 and 2012-13.
- **Schools classified as highest-minority (minority student population greater than 49%), on average, have significantly lower overall and TAGG graduation rates than schools with 44% or less minority student populations.**

<u>Rural/Urban Classification</u>
- **Rural schools have higher overall and TAGG graduation rates for 2011-12 and 2012-13 than do urban schools.**

Key Findings from Multivariate Analysis:

- In models simultaneously considering each of these independent factors, we find that school size, poverty, and being located in the Central region of the state are negatively correlated with <u>overall</u> graduation rates for 2011-12. As for 2012-13, school size, poverty, and racial composition are negatively correlated with <u>overall</u> graduation rates.
- In analyses examining the graduation rates for TAGG students in particular, we find that school size, poverty, and being located in the Central region of the state are negatively correlated with 2011-12 TAGG graduation rates. School size and poverty size are negatively correlated with 2012-13 TAGG graduation rates.
- Overall, then, we find that two variables in particular are negatively related to high school graduation rates in Arkansas in each year and for both overall and TAGG analyses: school size and school poverty rate.
- **In each model run, we find that larger high schools and schools serving more economically-disadvantaged students have lower graduation rates.**

Highest Graduation Rates for Groups of Arkansas Schools

While the overall analyses and the significant differences among predictor variables might be interesting, many readers in the state may well be more interested in learning which high schools were the most successful at graduating students on time in the past couple of years. Thus, in this report, we also present lists of the schools with the highest graduation rates across the state and by region. In addition, we introduce our own OEP GRAD Index, which highlights the graduation rate "performance" of each high school by comparing the schools' actual graduation rates to the rates that would be expected at the school given the student population served. The GRAD (Graduation Regression Adjusted

Differences) Index is calculated by taking the deviation of each school's overall and TAGG graduation rates from the school's predicted values based on the multiple regression analyses. Therefore, a school with greater overall and TAGG graduation rates than its predicted values will have a greater GRAD Index. Since this report utilizes graduation rate data from the 2011-12 and 2012-13 school years, we present the top schools for 2011-12 and for 2012-13 based on their GRAD Index from each year. (The GRAD Index data and details are presented in an accompanying Excel Databases on the OEP web site at http://www.officeforeducationpolicy.org/arkansas-schools-data-graduation-rate/.)

In the two tables that follow, we first present the list of the Arkansas high schools with the highest raw graduation rates for both overall and TAGG students; second, we present the list of the high schools with the top GRAD index scores in the state. The full report includes additional tables for the top schools in each region as well as the list of top schools across the state.

Table A1: Top 20 schools in Arkansas based on <u>actual</u> graduation rates, 2011-12 and 2012-13

	2011-12 Overall Rate	2011-12 TAGG Rate	2012-13 Overall Rate	2012-13 TAGG Rate	Simple Average
1. Haas Hall Academy	100%	100%	100%	100%	100%
1. Lisa Academy North	100%	100%	100%	100%	100%
1. Mammoth Spring High School	100%	100%	100%	100%	100%
1. Mount Ida High School	100%	100%	100%	100%	100%
1. Oark High School	100%	100%	100%	100%	100%
1. Scranton High School	100%	100%	100%	100%	100%
1. Umpire High School	100%	100%	100%	100%	100%
1. Wickes High School	100%	100%	100%	100%	100%
9. Salem High School	98%	97%	98%	100%	98.5%
10. Lisa Academy High	100%	100%	98%	96%	98.4%
11. Horatio High School	96%	98%	100%	100%	98.3%
12. Maynard High School	95%	95%	100%	100%	97.7%
13. Izard County Cons. High School	95%	100%	97%	97%	97.1%
14. Viola High School	100%	100%	93%	95%	96.9%
15. Danville High School	94%	93%	100%	100%	96.7%
15. Rural Special High School	94%	92%	100%	100%	96.7%
17. Bruno-Pyatt High School	100%	100%	92%	95%	96.6%
18. Westside High School	95%	95%	98%	98%	96.4%
19. Tuckerman High School	96%	94%	98%	97%	96.3%
19. Elkins High School	94%	92%	99%	100%	96.3%

* Based on an average of the 2011-12 and the 2012-13 Overall and TAGG graduation rates for each school.

Table A2: Top 20 schools in Arkansas based on GRAD Index, 2011-12 and 2012-13

	2011-12 Overall Rate	2011-12 TAGG Rate	2012-13 Overall Rate	2012-13 TAGG Rate	GRAD Index*
1. Lisa Academy High	100%	100%	98%	96%	17.7%
2. Lisa Academy North	100%	100%	100%	100%	16.5%
3. ESTEM High Charter	98%	93%	97%	97%	16.0%
4. Danville High School	94%	93%	100%	100%	14.6%
5. Oark High School	100%	100%	100%	100%	13.2%
6. Scranton High School	100%	100%	100%	100%	12.8%
7. KIPP Delta Collegiate	96%	95%	93%	94%	12.1%
8. Parkview Magnet High School	94%	91%	95%	93%	11.9%
9. Wickes High School	100%	100%	100%	100%	11.8%
10. Horatio High School	96%	98%	100%	100%	10.4%
10. Mineral Springs High School	100%	100%	90%	91%	10.4%
12. Western Yell Co. High School	95%	93%	96%	94%	10.3%
12. Mammoth Spring High School	100%	100%	100%	100%	10.3%
14. Mount Ida High School	100%	100%	100%	100%	10.2%
15. Westside High School	95%	95%	98%	98%	10.0%
16. Umpire High School	100%	100%	100%	100%	9.9%
17. North Little Rock High School	73%	63%	92%	89%	9.8%
17. Haas Hall Academy	100%	100%	100%	100%	9.8%
19. Salem High School	98%	97%	98%	100%	9.7%
20. Augusta High School	90%	90%	88%	86%	9.6%
20. Academics Plus High School	95%	100%	94%	89%	9.6%

* Based on an average of the 2011-12 and the 2012-13 GRAD Index values for each school.

Conclusions and Implications

In this report, we present data from the Arkansas Department of Education on graduation rates for Arkansas high schools in 2011-12 and 2012-13. This is the first statewide analysis of high school graduation rates using the relatively new four-year adjusted cohort method to compute these rates. This report is particularly timely as the National Center for Education Statistics (NCES) recently (April 2014) published a nationwide graduation report using the new and more meaningful measures. In the NCES national analysis, Arkansas students boasted rates that were above the national average, both overall and for subgroups of students.

The data presented in this report are simply the initial step to the long-term examination of which schools and which student groups are meeting the Arkansas' graduation rate target and goals. Overall, this report serves two purposes: to investigate what school characteristics are related to grad rate and to identify schools across the state with the top grad rates. With regard to the first purpose, the answer appears straightforward: in each model run, we find that larger high schools and schools serving more economically-disadvantaged students have lower graduation rates.

It is perhaps somewhat surprising that high school size, or enrollment, is consistently negatively correlated with both overall and TAGG graduation rates. This is interesting in Arkansas because the largest high schools and districts often boast relatively high test score results. While these results are not necessarily causal, they do remind us that smaller high schools in the state may provide environments that are conducive to keeping students in school through graduation. Indeed, small-school advocates have consistently made the claim that small schools provide greater opportunities for student involvement, student engagement, meaningful interactions between students and educators. Students in larger schools, on other hand, may be at greater risk of "falling through the cracks" and disappearing from the school community and thus not making it through to graduation.

Of course, this report does not confirm the hunches of small-school advocates, but it might provide some insights for school leaders in various communities in Arkansas who must make decisions regarding school sizes and school configurations for their students.