

Implementing Graduation Accountability Under NCLB

Editorial Projects in Education Research Center

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NCLB Graduation Accountability

This brief reports the results of a new Editorial Projects in Education Research Center analysis of state policies related to the implementation of high school graduation accountability under the federal No Child Left Behind Act (NCLB). Graduation rates are a required academic indicator under the law's provisions for defining and measuring adequate yearly progress (AYP) for high schools and districts. States must calculate and report graduation rates for all students and required subgroups, must establish performance targets for graduation, and must incorporate this information into their procedures for determining AYP.

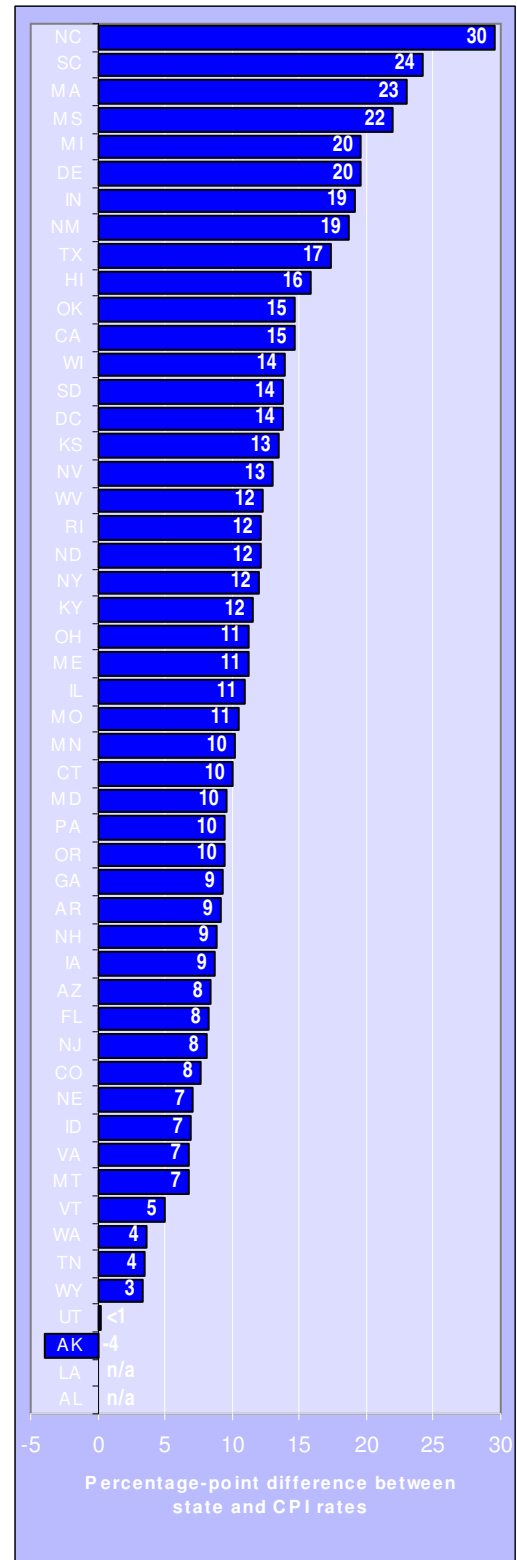
Results of this analysis reveal that states are beginning to respond to mounting pressure to produce more accurate graduation rates. However, states continue to exercise substantial autonomy when deciding exactly how they will respond to the mandates of the federal law.

That latitude, along with sometimes-sizeable differences between state-reported rates and estimates from independent researchers, has raised questions about whether state-reported graduation rates are accurately capturing the magnitude of the dropout problem. Research has shown that many states significantly underestimate the number of students graduating each year.

In 2003-04, the average state reported a graduation rate of 83 percent to the U.S. Department of Education. By comparison, the EPE Research Center's Cumulative Promotion Index (CPI) estimated that only 70 percent of public school students graduated with a standard diploma that same year. The CPI rates for minorities are lower still, with about 53 percent of black students and 58 percent of Hispanic students graduating in 2004.

In 2005, the National Governors Association unveiled its Graduation Rate Compact. Signed by the governors of all 50 states, the Compact served as an important impetus encouraging states to produce more realistic and consistent graduation rates. The Compact requires states to work toward implementing a graduation rate calculation that tracks individual students from 9th grade to graduation and accounts for transfers in and out of the system. It also sets forth a strict definition of a high school graduate and rules for assigning certain students to different cohorts.

State-reported graduation rates in 2003-04 were higher than rates calculated by the EPE Research Center using the Cumulative Promotion Index (CPI) in every state except Alaska.



Calculating Graduation Rates

For the 2006-07 school year, an EPE Research Center analysis of state accountability workbooks and supplemental sources finds that 16 states are using a cohort rate for calculating graduation rates under NCLB. This method allows for the accurate determination of an entering high school cohort and movement into and out of school systems. A cohort rate based on a statewide data system typically satisfies the NGA Compact's requirements for calculating a graduation rate. Statewide data are employed by 14 of the 16 states that have implemented a cohort method.

During the 2005-06 school year, 10 states were employing a cohort rate. This indicates a substantial amount of progress during the past year. In addition, several states moving to cohort rates between 2006 and 2007 replaced methods generally viewed to overestimate the graduation rate by considerable margins.

For example, Indiana adopted a cohort rate for 2007, replacing its persistence-rate calculation. That earlier method estimated the percent of students not dropping out from grade to grade during high school. It should be noted that a persistence rate does not actually measure high school completion. Using the cohort calculation, Indiana reported a 76.5 percent graduation rate for the class of 2006, compared to a rate of nearly 90 percent calculated for the 2005 graduating class using the persistence rate.

This comparison illustrates a major challenge states may face as they institute new graduation-rate methods. State policymakers may be reluctant to adopt new calculation approaches if there is a perception that such a step could negatively impact state-reported graduation rates.

Louisiana and North Carolina's move to a cohort rate this year marks the extinction of two graduation-rate methods that had come under scrutiny. In 2006, Louisiana was the only state using a dropout rate for purposes of NCLB accountability, the provisions of which explicitly require states to employ a graduation rate. Similarly, North Carolina abandoned its on-time rate calculation, which reported the proportion of all high school graduates in a given year who receive a standard diploma in the expected amount of time (as opposed to taking more than four years to finish high school). Sizeable shifts in publicly reported graduation figures can be expected in both states as a result of their new methods, an expectation

already confirmed in North Carolina. The state reported a cohort rate of 68.1 percent for the class of 2006, a precipitous drop from the state's on-time rate of 96.1 percent in 2005.

While many states are working to implement a cohort-based calculation, the leaver rate remains the most common approach to measuring graduation rates, with 32 states employing this method for 2006-07. The leaver rate expresses the percent of students leaving high school with a standard diploma as a proportion of all those documented as leaving with a diploma or other completion credential or as a dropout.

Not only do the states use a wide variety of methods to calculate graduation rates, but differences also exist in the specific ways that states may implement the same method. As a result, it can be difficult if not impossible to compare graduation rates across states or to ascertain the magnitude of the dropout problem using state-reported statistics. A key goal of the NGA Compact and the work of such groups as the Data Quality Campaign is to increase the comparability of state graduation rates and improve the overall quality of educational data systems.

Setting Goals for Graduation

As noted above, some states are working to implement more reliable methods for calculating graduation rates. Under the terms of NCLB, states are also allowed to decide how high or low to set their sights for graduation rates and to determine how much progress is sufficient for a school to make adequate yearly progress (AYP). Accordingly, graduation-rate goals have been established at very ambitious levels in some states and at less-than-ambitious levels in others. Some critics have argued that the discretion states possess over goal-setting for graduation rates considerably weakens this provision of the law.

As defined in this brief, a state's "current target" is the graduation rate high schools must achieve to make AYP on the graduation rate indicator for the 2006-07 school year. The average graduation target for the current year is 75 percent, down from 77 percent in 2005-06. Targets ranged from a high of 95 percent in Indiana to a low of 50 percent in Nevada. Graduation targets remained stable in 36 states between 2006 and 2007.

Some states, however, substantially reduced their target compared to last year. North Dakota had the most drastic

drop, setting the 2006-07 target at 73.09 percent compared to 89.9 percent for the previous year. Massachusetts dropped its target from 70 percent to 55 percent. Such reductions were sometimes the result of changes in a state's method for calculating graduation rates. For instance, states implementing a cohort method might consider recalibrating targets, since graduation rates calculated using this approach are often lower than those produced by other calculations.

The EPE Research Center analysis also identified the final graduation target that schools will be expected to achieve by 2013-14. Only three states set this goal at 100 percent, the ultimate target for the percent of students academically proficient required under NCLB. Nevada has the lowest final graduation target, maintaining its current target of 50 percent through the 2013-14 school year. In all, 32 states do not plan to raise their graduation goals between 2006-07 and 2013-14. Ohio shows the most ambitious increase in targets, raising its current goal of 73.6 percent to 100 percent by 2013-14.

Under NCLB, states are allowed to set criteria for the amount of annual improvement that schools failing to meet the current graduation target must demonstrate in order to make AYP. Those criteria are generally quite lenient. In 30 states, any amount of improvement, no matter how small, allows a school to make adequate yearly progress. An additional four states require annual improvement of just one-tenth of one percentage point annually for schools below the graduation goal. To make AYP in Delaware, New Mexico, and South Carolina graduation rates do not have to improve, they must simply hold steady from one year to the next.

Beyond NCLB

Although the No Child Left Behind Act does not require states to implement sophisticated data systems capable of following individual students over time, such systems have been advocated by a number of national organizations. As a result, many states are in the process of developing such capabilities, in part as a way to generate more accurate information on high school dropout and graduation.

To assess the state of state data systems, the EPE Research Center examined data from a 2006 survey conducted by the Data Quality Campaign (DQC). According to the DQC, 29 state data systems currently have the four key elements necessary for calculating a

graduation rate consistent with the NGA Compact: student identifiers; student-level enrollment, demographic, and program participation data; student-level graduation and dropout data; and a state audit system.

For many states, however, progress on data-system development is quite recent. In fact, only 18 of those 29 states have had student-identifier systems in place for at least four years, which would allow them to calculate a true cohort rate for the class of 2007. The EPE Research Center analysis also finds that fewer than half (eight) of those states intend to employ a cohort-based rate for purposes of NCLB accountability for 2006-07.

Prior to the passage of NCLB, a small number of states calculated graduation rates and used those indicators for their own accountability or public-information purposes. Some states currently report multiple graduation-rate indicators that might, alternatively: employ different calculation methods (e.g., a leaver versus a cohort rate); involve different time frames (e.g., a four-year versus a five-year rate of completion); or count recipients of different credentials as graduates (e.g., diplomas, alternative certificates, or GEDs).

Minnesota, for example, uses a leaver rate to comply with NCLB but also recently reported a statewide graduation rate for the class of 2006 that is consistent with the NGA Compact. Texas reports a variety of dropout and graduation indicators, such as alternative completion rates that include students who were still enrolled in school or had received a GED at the expected time of graduation.

The past few years have witnessed rising pressures on states to produce more accurate graduation rates. While states are responding to those pressures, a review of state progress in implementing policies on graduation accountability shows that there is still a significant amount of work to be done.

Increasing numbers of states are now using a cohort-based method to more accurately calculate graduation rates. However, some states capable of such a measure have not yet taken the step to employ a cohort rate for NCLB accountability. Apart from the measurement of graduation rates, the great variability in the goals states set for high school graduation continue to raise concerns regarding the practical consequences that graduation rates may have when determining AYP. ■

Implementing Graduation Accountability Under NCLB

	Calculating Graduation Rates	Graduation Goals Performance goals for adequate yearly progress (AYP)		NGA Compact	
	Formula used to calculate graduation rates for NCLB (2006-07)	Current target (2006-07)	Final target (2013-14)	Minimum annual improvement required if not meeting target	State data system able to calculate NGA Compact rate for class of 2007
Alabama	Leaver rate	90%	90%	Any improvement	No
Alaska	Leaver rate	55.58%	55.58%	Any improvement	Yes
Arizona	Cohort - statewide	71%	71%	1% improvement	Yes
Arkansas	Persistence rate	77.1%	77.1%	Any improvement	Yes
California	Leaver rate	82.9%	83.6%	0.1% improvement	No
Colorado	Cohort - statewide	57.4%	65%	Based on AMOs*	Yes
Connecticut	Leaver rate	70%	70%	Any improvement	No
Delaware	Leaver rate	79.5%	90%	None	Yes
District of Columbia	Leaver rate	Based on state avg.	Based on state avg.	1% improvement	n/a
Florida	Cohort - statewide	85%	85%	1% improvement	Yes
Georgia	Leaver rate	60%	60%	Any improvement	No
Hawaii	Cohort - statewide	75%	90%	Based on AMOs*	No
Idaho	Leaver rate	90%	90%	Any improvement	No
Illinois	Cohort - local	72%	85%	Based on AMOs*	No
Indiana	Cohort - statewide	95%	95%	Any improvement	No
Iowa	Leaver rate	Current state avg.	95%	Any improvement	No
Kansas	Leaver rate	75%	75%	Any improvement	No
Kentucky	Leaver rate	82.25%	98%	Any improvement	No
Louisiana	Cohort - statewide	60%**	60%**	0.1% improvement	Yes
Maine	Leaver rate	64%	75%	Based on AMOs*	No
Maryland	Leaver rate	83.24%	90%	0.1% improvement	No
Massachusetts	Cohort - statewide	55%**	Interim goals only	n/a	Yes
Michigan	Cohort - statewide	80%	90%	10% gap reduction	No
Minnesota	Leaver rate	80%	80%	Any improvement	Yes
Mississippi	Cohort - statewide	72%	72%	Any improvement	No
Missouri	Leaver rate	85%	85%	Any improvement	No
Montana	Leaver rate	80%	80%	Any improvement	No
Nebraska	Leaver rate	83.97%	83.97%	Any improvement	No
Nevada	Leaver rate	50%	50%	Any improvement	No
New Hampshire	Composite rate	75%	75%	Any improvement	No
New Jersey	Leaver rate	90% or state avg.	90% or state avg.	Any improvement	No
New Mexico	Completion ratio	90%	100%	None	No
New York	Cohort - statewide	55%	55%	1% improvement	No
North Carolina	Cohort - statewide	80%	80%	0.1% improvement	No
North Dakota	Leaver rate	73.09%	73.09%	10% reduction nongrad rate	Yes
Ohio	Leaver rate	73.6%	100%	Any improvement	Yes
Oklahoma	Leaver rate	68.8%	68.8%	Any improvement	No
Oregon	Leaver rate	68.1%	68.1%	Any improvement	Yes
Pennsylvania	Leaver rate	80%	80%	Any improvement	No
Rhode Island	Leaver rate	75.3%	95%	Based on AMOs*	No
South Carolina	Cohort - local	88.3%	88.3%	None	No
South Dakota	Leaver rate	80%	80%	Any improvement	Yes
Tennessee	Leaver rate	90%	100%	Any improvement	No
Texas	Cohort - statewide	70%	70%	Any improvement	Yes
Utah	Leaver rate	85.7%	85.7%	Any improvement	No
Vermont	Cohort - statewide	72%	72%	n/a	Yes
Virginia	Leaver rate	61%**	TBD	Any improvement	No
Washington	Cohort - statewide	68%	85%	2% improvement	Yes
West Virginia	Leaver rate	80%	80%	Any improvement	Yes
Wisconsin	Leaver rate	81.7%	81.7%	Any improvement	Yes
Wyoming	Leaver rate	80%	80%	Any improvement	No
U.S.	—	—	—	—	18

* AMO = annual measurable objectives

** Pending final approval by the U.S. Department of Education

Methods Used by States to Calculate Graduation Rates Under NCLB, 2006-07

Leaver Rate: Percent of students leaving high school with a standard high school diploma, expressed as a proportion of all those documented leaving with a diploma or other completion credential or as a dropout. This method is sometimes referred to as a departure-classification index. **(32 states)**

Cohort Rate: Percent of students from an entering 9th grade cohort who graduate with a standard diploma within four years. Method can account for transfers and students retained in grade. Student data may be tracked on a statewide or local basis. **(16 states)**

Persistence Rate: Percent of students who remain in school from grade 9 through grade 12. Rate is calculated using information on (1) the percent of students not dropping out at specific grade levels or (2) the percent of students estimated to be promoted from grade to grade. This method does not measure high school completion. **(1 state)**

Completion Ratio: Number of diploma recipients divided by an approximation of the starting 9th grade class. Method cannot fully account for entering cohort membership, net transfer, and grade retention. **(1 state)**

Composite Rate: Proportion of students estimated to remain in high school until grade 12 and receive a diploma. The rate for a given year is calculated by multiplying (1) the rate of persistence between grades 9 and 12 and (2) the percent of completers who receive a diploma rather than another credential. **(1 state)**

State Graduation Rates, 2003-04			
	State-reported (%)	CPI Method (%)	Difference State minus CPI (%)
Alabama	—	59.0	—
Alaska	61.2	65.1	-3.9
Arizona	76.8	68.4	8.4
Arkansas	81.3	72.2	9.1
California	85.3	70.7	14.6
Colorado	82.3	74.6	7.7
Connecticut	89.8	79.8	10.0
Delaware	81.6	62.0	19.6
District of Columbia	71.9	58.2	13.7
Florida	68.7	60.5	8.2
Georgia	65.4	56.1	9.3
Hawaii	80.0	64.1	15.9
Idaho	83.9	77.0	6.9
Illinois	86.6	75.7	10.9
Indiana	90.0	70.9	19.1
Iowa	89.8	81.1	8.7
Kansas	87.8	74.4	13.4
Kentucky	81.5	70.0	11.5
Louisiana	—	61.4	—
Maine	87.4	76.2	11.2
Maryland	84.3	74.7	9.6
Massachusetts	96.2	73.2	23.0
Michigan	88.7	69.1	19.6
Minnesota	88.9	78.7	10.2
Mississippi	84.0	62.1	21.9
Missouri	85.5	75.0	10.5
Montana	82.9	76.2	6.7
Nebraska	86.9	79.8	7.1
Nevada	67.0	54.0	13.0
New Hampshire	84.8	76.0	8.8
New Jersey	90.6	82.5	8.1
New Mexico	78.8	60.1	18.7
New York	77.0	65.0	12.0
North Carolina	95.7	66.1	29.6
North Dakota	91.5	79.4	12.1
Ohio	85.9	74.7	11.2
Oklahoma	85.1	70.4	14.7
Oregon	80.6	71.1	9.5
Pennsylvania	87.7	78.2	9.5
Rhode Island	82.8	70.6	12.2
South Carolina	78.0	53.8	24.2
South Dakota	92.3	78.5	13.8
Tennessee	75.7	72.2	3.5
Texas	84.6	67.3	17.3
Utah	84.0	83.8	0.2
Vermont	86.0	81.0	5.0
Virginia	79.9	73.1	6.8
Washington	70.1	66.5	3.6
West Virginia	84.0	71.7	12.3
Wisconsin	91.2	77.3	13.9
Wyoming	79.2	75.8	3.4
U.S.	82.9	69.9	13.0

SOURCE: State-reported graduation rates from Education Trust, 2006. CPI statistics from EPE Research Center, 2007.

Notes and Sources

Implementing Graduation Accountability Under NCLB

Calculating graduation rates, formula used to calculate graduation rates for NCLB (2006-07): Editorial Projects in Education Research Center analysis of graduation-rate formulas described in state accountability workbooks approved by the U.S. Department of Education (as of April 23, 2007) and supplemental state documentation.

Graduation-rate performance goals for adequate yearly progress (AYP), current target (2006-07): The current target is the graduation rate that schools and school districts are expected to achieve in order to make AYP for the 2006-07 school year. EPE Research Center, 2007.

Graduation-rate performance goals for adequate yearly progress (AYP), final target (2013-14): The final target is the graduation rate that schools and school districts will be expected to achieve in order to make AYP for the 2013-14 school year. EPE Research Center, 2007.

Graduation-rate performance goals for adequate yearly progress (AYP), minimum annual improvement: This indicator reports the minimum amount of annual improvement that schools and school districts that do not reach graduation-rate targets are expected to achieve in order to make AYP. EPE Research Center, 2007.

State data system able to calculate NGA Compact rate for class of 2007: State data system is capable of calculating a graduation rate for the class of 2007 as defined by the 2005 National Governors Association Graduation Rate Compact. Specifically, the data system has the elements the Data Quality Campaign deems necessary for calculating the compact rate, including: unique student identifiers; student-level enrollment, demographic, and program participation data; student-level graduation and dropout data; and a state audit system. To receive credit, a state must also have implemented an individual-student-identification system in 2003-04 or earlier. Data are not available for the District of Columbia. Data Quality Campaign, 2006.

State Graduation Rates, 2003-04

State-reported graduation rate: The Education Trust, "Graduation Rates at a Glance," 2006. The graduation rate for Maine was not available at the time of the Education Trust publication. The EPE Research Center obtained that information from the state's Consolidated State Performance Report for 2004-05.

CPI Method: The percent of public high school students who graduated on time with a standard diploma for the 2003-04 school year. The graduation rate is calculated using the EPE Research Center's Cumulative Promotion Index (CPI) formula with data from the U.S. Department of Education's Common Core of Data. EPE Research Center, 2007.

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