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At-a-Glance

KEY ISSUE

 A close review of accurate dropout and graduation patterns is essential for directing resources and developing effective strategies to ensure more students stay in high school.

TAKE-AWAYS FOR STATES

- States must use a uniform and reliable method for calculating graduation rates as well as dropout rates.
- States need longitudinal data systems to provide student-level data in order to generate the most useful and accurate graduation and dropout data.

State Approaches to More Reliable and Uniform Dropout and Graduation Data

Prepared by the National High School Center August 2007

DROPOUT RATES VS. GRADUATION RATES

It is estimated that nearly 7,000 high school students drop out each day (Alliance for Excellent Education, 2006). However, this is only a rough estimate and it is largely unknown exactly who these students are and why they left high school.

Getting an accurate picture of who graduates, who drops out, and why they drop out is critical to targeting resources for dropout prevention and for supporting students in their efforts to graduate. For this reason, education policy-makers and practitioners alike have joined in calling for more accurate graduation and dropout data. Yet there is a long way to go before states are able to calculate, report and use more accurate graduation and dropout data. Nevertheless, this work is critical to improving high schools in the United States, as it involves key information upon which reform efforts may be built.

Because dropout rates do not directly translate into graduation rates, it is necessary to calculate the two rates separately. If 75 percent of students in a given year graduate, that does not necessarily mean 25 percent dropped out — some may have been held back, for example.

Both the No Child Left Behind Act (NCLB) and the Individuals with Disabilities Education Improvement Act of 2004 (IDEA) aim to improve both graduation and dropout rates for all students. But because of the inaccuracy of the graduation and dropout data currently available and the fact that states use different approaches for calculating graduation and dropout rates, it is impossible to get a clear picture of the impact that mandated testing and stiffer graduation requirements are really having, particularly on special needs students.^a

Efforts to enhance the reliability of available information regarding who graduates are currently underway.

^{*}NCLB directs states and their schools to track dropout information, but dropout rate is not a required indicator for determining whether schools meet Adequate Yearly Progress (AYP). On the other hand, graduation rates are a required indicator. In the past, many states have taken advantage of the option to use their own methods of defining and calculating graduation other than the one set forth in the legislation, upon special approval from the U.S. Department of Education.

For example, the National Governors Association (NGA) made significant progress not only in raising awareness of the need to more accurately track graduation rates, but in getting all 50 governors to agree to a uniform method of measurement along with the development of better data systems in 2005 (Curran, 2005).

NGA's suggested approach involves tracking individual student progress over time — including tracking which students transfer to another school and which students get GEDs — to create an "adjusted" cohort rate. This approach depends on a state implementing a longitudinal data system that can track individual student progress over time.

The NGA Center for Best Practices 2006 follow-up survey, "Implementing Graduation Counts: State Progress to Date," (Curran, 2006) shows that states are committed to calculating and reporting accurate, significant student-level data using a unique student identifier. Thirty-nine states plan to report the NGA Compact Formula graduation rate by 2010, and three states were already reporting a rate consistent with the NGA model — Arizona, New York, and Texas (Curran, 2006).

As states work to implement NGA's uniform, reliable, and relatively data-rich longitudinal approach, the U.S. Department of Education introduced an interim measure (called an Averaged Freshman Graduation Rate, or AFGR). The AFGR is gleaned from the existing National Center for Education Statistics' Common Core of Data and is to be reported in state performance report cards under NCLB to help introduce some standardization of graduation rates, although this rate does not account for student transfers in and out of high schools as the NGA-suggested approach does.^b

A recently released report by The Education Trust also calls on states to maintain more rigorous graduation rates and to set higher goals to aim for when raising graduation rates. The report, "Graduation Matters: Improving Accountability for High School Graduation," promotes disaggregated graduation rates so that schools can see how subgroups of students are doing and can therefore better target their dropout prevention work. The report points out that current state goals for raising graduation rates are often too low to spur needed improvement in high schools (Hall, 2007).

STATE-REPORTED GRADUATION RATES VS. NCES' AVERAGE FRESHMAN GRADUATION RATE

On the following pages is a comparison of state-reported graduation rates with the National Center for Education Statistics (NCES) reported Averaged Freshman Graduation Rate. The state-reported 2003–2004 rates were included in the table whenever they were made available on states' Web sites, the source most readily accessible to parents and educators seeking information on state graduation rates. Even when using an on-time approach such as the AFGR, states often included those students receiving a GED rather than only those receiving a regular high school diploma, thus boosting graduation numbers (American Federation of Teachers, 2006). States use a variety of approaches to calculate their graduation rates, with some states dividing the number of incoming 12th graders by the number of graduates the same year, thus yielding higher rates than the AFGR, for example.

The table reveals significant gaps between what states have reported as their (generally higher) graduation rate and the more standardized rates that NCES has published and that are required under NCLB. This comparison may not be direct because, in practice, states use a variety of approaches to capture their graduation rates, but the comparison provides a general indication of the distance between what is publicly understood to be the percentage of students graduating in a given state and a more standardized measure. The endnotes contain the individual state methodologies and are taken directly from the states' Web sites.

As outlined in this brief, many states are hard at work improving their approaches to capturing dropout and graduation rates and have either implemented these improvements already or have set goals for doing so.

^bThe Averaged Freshman Graduation Rate (AFGR) = # of on-time regular diploma recipients in a given year divided by average of # of 8th graders enrolled five years earlier, 9th graders enrolled four years earlier, and 10th graders enrolled three years earlier. This does not account for student transfers. The information is made available by the U.S. Department of Education's National Center for Education Statistics through its Common Core of Data.



STATE-REPORTED GRADUATION RATES VS. NCES' AVERAGE FRESHMAN GRADUATION RATE (CONTINUED)

State	AFGR percentage	State-reported percentage
Nevada ²	57.4	74.8
South Carolina ³	60.6	77.3
Georgia ⁴	61.2	65.4
Mississippi ⁵	62.7	83.7
Florida ⁶	66.4	71.6
Arizona ⁷	66.8	76.8
Alaska ⁸	67.2	55.6
Michigan ⁹	72.5	88.7
Hawaii ¹⁰	72.6	79.8
Delaware ¹¹	72.9	81.6
Kentucky ¹²	73.0	81.5
Indiana ¹³	73.5	89.8
California ¹⁴	73.9	70.7
Oregon ¹⁵	74.2	80.8
Washington ¹⁶	74.6	70.1
Rhode Island ¹⁷	75.9	83.0
Texas ¹⁸	76.7	84.6
Arkansas ¹⁹	76.8	81.6
West Virginia ²⁰	76.9	84.0
Oklahoma ²¹	77.0	75.4
Maine ²²	77.6	87.8
Colorado ²³	78.7	82.3
New Hampshire ²⁴	78.7	84.8
Maryland ²⁵	79.5	84.3
Illinois ²⁶	80.3	86.6
Missouri ²⁷	80.4	76.5
Montana ²⁸	80.4	84.8
Connecticut ²⁹	80.7	90.0
Ohio ³⁰	81.3	85.9

State	AFGR percentage	State-reported percentage
Idaho ³¹	81.5	84.0
Pennsylvania ³²	82.2	88.0
Utah ³³	83.0	85.0
South Dakota ³⁴	83.7	92.3
Vermont ³⁵	85.4	86.0
lowa ³⁶	85.8	89.8
North Dakota ³⁷	86.1	91.5
New Jersey ³⁸	86.3	77.1
Nebraska ³⁹	87.6	85.8

Source: Seastrom, M., Hoffman, L., Chapman, C. and Stillwell, R. (2006). The Averaged Freshman Graduation Rate for Public High Schools from the Common Core of Data: School Years 2002–03 and 2003–04 (NCES 2006–606rev). U.S. Department of Education, National Center for Education Statistics. Washington, DC. Retrieved April 2, 2007 from http://nces.ed.gov/pubs2006/2006606rev.pdf

TOWARD A MORE ACCURATE AND STANDARDIZED DROPOUT RATE

Although progress is being made on generating standard, reliable information pertaining to graduation, less emphasis has been placed on the need for consistent dropout data and a reliable dropout rate. This information is also critical in planning strategies for dropout prevention for all students, but particularly for students with disabilities (who drop out at higher rates than the general student population). An adjusted four-year cohort rate based on identification of student status, in which the default for a student whose status is unknown is "dropout" would be an optimal approach for states to take (Curran, 2005). As with the NGA-suggested approach to calculating graduation rates, this approach also depends on a state implementing a longitudinal data system that can track individual student progress over time. This approach provides more information than other approaches, such as the event rate, status rate, or unadjusted cohort rate (EPE Research Center, 2006).

When states provide guidance to districts on data collection and analysis (such as: offering direction around categorizing graduation and dropout information; providing a clear explanation of a uniform method for defining and tracking data; suggesting different and promising approaches regarding collection and analysis), districts and schools are much more likely to understand and diagnose dropout problems in addition to being more able to implement successful dropout prevention programs.





National Governors Association Approach to Graduation Rates

Governors agreed to a graduation rate, called an Adjusted Cohort Graduation Rate (ACGR), that is a measure of on-time completion, with most (but not all) students expected to finish in four years, in which Graduation Rate = [on time grads in yr x] \div [first time 9th graders in yr x - 4) + (transfers in) – (transfers out)]. Students earning a modified diploma, such as a special education diploma, count as graduates if the modified diploma is the standard the state and the school system set for the student in an Individualized Education Program (IEP). NGA recommends that states use multiple measures to evaluate four-, five- and six-year graduation rates as well to better track outcomes for a limited number of special education students and limited-English proficient students, who may take more than the standard four years to graduate. States are advised to establish guidelines and safeguards so that their policies are not abused as a way to hide students who do not finish in four years. Non-diploma credentials, such as GED, certification of attendance or certificate of completion do not count as graduating from high school. NGA is currently working on a corresponding approach to capturing dropout data, with a method for calculating the dropout rate that will be an adjusted four-year cohort rate based on identification of student status, in which the default for a student whose status is unknown is "dropout." Because many students are lost in or between grades eight and nine, states will be advised to include those students in dropout indicators (Curran, 2005).

Strong State-Level Data Systems

Implementing longitudinal data systems is widely recognized by states as the best tool for tracking not only dropout and graduation information, but to gauge individual student academic progress as well. Many states face hurdles in employing such a system, not least of which is meeting the cost.

A first step in such a system requires states to have unique statewide student identifiers that will be able to connect student data across key databases across years. States with this element include Alabama, Alaska, Arizona, Arkansas, California, Colorado, Connecticut, Delaware, Florida, Georgia, Hawaii, Illinois, Indiana, Iowa, Kansas, Kentucky, Louisiana, Maine, Massachusetts, Michigan, Minnesota, Mississippi, Montana, Nebraska, Nevada, New Hampshire, New Mexico, New York, North Dakota, Ohio, Oklahoma, Oregon, Pennsylvania, Rhode Island, South Carolina, South Dakota, Tennessee, Texas, Utah, Vermont, Virginia, Washington, West Virginia, Wisconsin, and Wyoming (Data Quality Campaign, 2006).^d

Far fewer states are able to build on these student identifiers with a variety of student data, such as course completion and test scores, and few can link such data with teacher-level information. Florida is one state that has made significant strides in this regard, and its data system is featured in a case study offered by the Data Quality Campaign: http://www.dataqualitycampaign.org/files/State_Specific-Florida_2006_Site_Visit.pdf.

Additionally, few systems are in place that can get the information back to educators so that it can be used as an instructional diagnostic or dropout prevention tool.

As it stands, significant political will and planning are required to ensure that this type of longitudinal data system is in place, able to provide student-level data, and well-implemented across all states.

^{&#}x27;NGA recently released a report addressing states' status in implementing longitudinal data systems. By 2010, 39 states plan to report a graduation rate using the compact definition. These states will begin reporting as they develop four or five years of longitudinal data capable of tracking student progress from first-time entry into ninth grade through exit from high school (Curran, 2006).

^dNot all of these states may be actively using their unique student identifier yet.

NCLB links student "non-completion" rates with students who drop out, including those who transfer to a high school equivalency program. In practice, estimates of "non-completers" or "leavers" involve relying on students themselves reporting that they have dropped out. Typically, dropout data exclude all students who leave the educational system without officially notifying the school of their departure. Under section 618 of IDEA 2004, however, students with disabilities who are considered moved, not known to be continuing are included in the dropout count (http://idea.ed.gov/download/statute.html).

END NOTES

- Thirteen states are not included in this table because either the state does not currently calculate a graduation rate or the figure was unavailable: Alabama, Kansas, Louisiana, Massachusetts, Minnesota, New Mexico, New York, North Carolina, Tennessee, Virginia, Washington, DC, Wisconsin, and Wyoming.
- Nevada: The graduation rate is calculated using the following formula:

[(# St D + # Ad D + Adv D) / (# Comp + DO 12 Y + DO 11 Y-1 + DO 10 Y-2 + DO 9 Y-3)] × 100

Where:

St D = Number of Standard Diplomas,

Adv D = Advanced Diplomas,

Ad D = Number of Adult Diplomas,

Comp = Number of Completers (Standard, Advanced, Adult, Adjusted, Certificates of Attendance),

DO 12 Y = Number of 12th Grade Dropouts from Current Year,

DO 11 Y-1 = Number of 11th Grade Dropouts from Year Previous,

DO 10 Y-2 = Number of 10th Grade Dropouts from 2 Years Previous,

DO 9 Y-3 = Number of 9th Grade Dropouts from 3 Years Previous

http://www.nevadareportcard.com/

- ³ South Carolina: Methodology unavailable
- Georgia: "Sum the 9th-grade dropouts in 2000-2001, the 10th-grade dropouts in 2001-2002, the 11th-grade dropouts in 2002-2003 and the 12th-grade dropouts in 2003-2004 for a four-year total of dropouts

Divide the number of students receiving regular diplomas by the four-year total of dropouts plus the sum of students receiving Special Education Diplomas plus the number of students receiving Certificates of Attendance plus the number of students receiving regular diplomas. The number of students displayed on the graphs represents an approximation to the students in the ninth-grade in 2001-2002 that should have graduated in 2004 and is the denominator in this step.

Change the result in step 2 from a decimal to a percentage (example: 0.83 equals 83%). The same process was followed for the 2002 rate except the years begin with 1998-1999 through 2001-2002 academic years and for the 2003 rate, the years begin with 1999-2000 through 2002-2003 academic years." Retrieved from http://reportcard.gaosa.org/yr2004/k12/about.asp#D9A

Mississippi: "Graduation Rate - The graduation rate is calculated by dividing the number of graduates by the number of ninth grade students four years earlier. The ninth grade enrollment number has been adjusted to reflect the number of new students entering the district, the number moving out, and the number failing, over the four-year period. Students who were originally coded by the school districts as dropouts who are later determined to be transfer students may not be included in the calculations. Please note the dropout rate is not the inverse of the graduation rate."

Retrieved from http://www.mde.k12.ms.us/Account/RC4B/RC03-04.pdf





- ⁶ Florida: "Florida's Graduation Rate The percentage of students who have graduated within four years of entering ninth grade for the first time. Students who transfer out of the school or district to attend school elsewhere or to enroll in an adult-education program are removed from the group of students (cohort) tracked. Incoming transfer students, at the time of their enrollment, are included in the count of the class with which they are scheduled to graduate and are tracked accordingly. A graduate is defined as a student who receives a standard diploma, a special diploma, or a diploma awarded after successful completion of the GED examination. Certificate recipients are not included. Although the school-level rate is shown only for regular high schools, district and state rates cover all schools with graduates, which may include schools other than regular high schools (e.g., alternative education centers). Data is available for 1998-99 and later years." Retrieved from http://data.fldoe.org/fsir/indicator_desc.cfm
- Arizona: "After students entered ninth grade for the first time in the fall of 2000, they were identified as members of the cohort class of 2004. Over the next five years, each public school in Arizona tracked enrollment, transfer and graduation activities of students attending their schools. Four years later, after the Spring commencement in 2004, each school attributed one of the following outcomes to every student who was a member of the cohort class of 2004: graduated, still enrolled, dropped out, status unknown, or GED recipient. One year after the four year outcomes were reported, students who were members of the cohort class of 2004, and who graduated in a fifth year, were reported as five year graduates. Likewise, students who received a GED in the fifth year were reported as fifth year GED recipients. Four year and five year data on members of this cohort class were entered into a Graduation Rate Study online computer application and electronically submitted to the ADE. 5 The ADE distributed forms and instructions for data collection to high schools via regional training centers and by mail. High schools required to submit data were defined as those having had student membership in one or more of the following grades over the course of four years and offered a high school diploma:

Membership in ninth grade in the 2000-2001 school year, or Membership in tenth grade in the 2001-2002 school year, or Membership in eleventh grade in the 2002-2003 school year, or Membership in twelfth grade in the 2003-2004 school year, or Graduated members of the cohort class of 2004 in the 2004-2005 school year

-And-

Offered a high school diploma

Schools that met these criteria were considered to have served members of the cohort class of 2004 at some point during the students' high school years and were required to submit data even if none of those students received a diploma from that school. Therefore, if all members of the cohort transferred to other educational facilities, it is 5. In the fifth year, schools only report students who receive a diploma or GED after their four year Spring commencement and before the first day of Summer recess at the end of the fifth year. Those who graduate after the Spring commencement of their fifth year are not reported as fifth year graduates. 4 possible for a school to have a class membership of zero with a corresponding zero graduation rate." Retrieved from http://www.ade.state.az.us/ResearchPolicy/grad/GradRate_2004_5_Year_%20Report_110905.pdf

⁸ Alaska: "The graduation rate is a fraction, the numerator of which is the number of graduates receiving a regular diploma before June 30, and the denominator of which is the sum of the number of graduates, plus the number of dropouts in grade nine three school years prior, plus the number of unduplicated dropouts in grade 10 two school years prior, plus the number of unduplicated dropouts in grade 11 in the prior school year, plus the number of unduplicated dropouts in grade 12 during the current year, plus the number of grade 12 continuing students." Retrieved from

http://www.eed.state.ak.us/reportcard/2003-2004/6 Report % 20 Card % 20 Handbook / RC% 20 Handbook % 20 2003-2004.pdf

- Michigan: "Michigan Graduation Rate Calculations The graduation rate is a four-year "estimated" rate that is derived by multiplying the four graduating class retention rates together. Class retention rates are determined by taking one graduation class (grade) at a time and dividing the fall 2005 enrollment by the fall 2004 enrollment, after all the transfers-in and transfers-out have been identified." (same methodology as used for 2003-04 calculations) Retrieved from: http://www.michigan.gov/documents/GrdDrpMeth_157282_7.pdf
- Hawaii: "Graduation, Graduation Rate, Graduate On Time, Four-Year Graduation: Count or percent of all high school students, including public charter school students, who had completed high school within four years of their 9th grade entry date." Retrieved from http://arch.k12.hi.us/PDFs/state/superintendent_report/2004/2004SuptRpt2_OPT.pdf
- Delaware: "The Delaware graduation rate is calculated using the following formula: (Cohort graduates) / (Cohort graduates + Cohort dropouts). A cohort is established by the students who were in grade 9 for the first time on Sept. 30 or, if the student enrolled later, at the end of the school year, in a given school. Dropouts are counted against the school where the student dropped out. Only cohort members are counted in the number of dropouts. Graduates are always credited to the school where the student was in the ninth grade, regardless of the graduating school.

The difference between the Delaware and NCLB rates is that Delaware does not consider a student who is enrolled in the Groves program to be a dropout, if enrolled during the fall of the year immediately following the year they dropped out. NCLB considers these students dropouts." Retrieved from http://www.doe.state.de.us/files/pdf/dedoe_GradRate_District_2006.pdf

- 12 Kentucky: Methodology unavailable
- ¹³ Indiana: "Prior to the 2005-2006 graduation rate calculation, Indiana's graduation rate was calculated using a formula that, at the time, was recommended by the National Center for Education Statistics. The old rate was not based on actual graduates, but instead used the number of students who dropped out in a given year. To calculate the graduation rate for 2002-2003 using the old rate, a school would multiply the following numbers:

Percent of 9th graders who didn't drop out Percent of 10th graders who didn't drop out Percent of 11th graders who didn't drop out Percent of 12th graders who didn't drop out.

EXAMPLE (OLD GRADUATION RATE):

XYZ High School's 2002-2003 enrollment was:

9th grade: 250 students 10th grade: 312 students 11th grade: 220 students 12th grade: 205 students

On the 2002-2003 Dropout/Mobility Report, XYZ High School reported that each grade had the following number of dropouts:

9th grade: 1 student (1/250 = .004) (1.0-.004 = .996) 10th grade: 5 students (5/312 = .016) (1.0-.016 = .984) 11th grade: 7 students (7/220 = .032) (1.0-.032 = .968) 12th grade: 3 students (3/205 = .015) (1.0-.015 = .985)





The 2002-2003 graduation rate at XYZ High School was calculated as:

(.996 * .984 * .968 * .985) * 100 = 93.4%

The old rate was called the "cohort survival rate" and was based directly on the number of students who dropped out." Retrieved from: http://www.doe.state.in.us/htmls/docs/GradRateFAQ1-2-07.pdf

¹⁴ California: "Ninth Grade to Graduate Rate Description: This rate is calculated using two different types of data, single point-in-time data (enrollment) and year-end cumulative data (graduates). When used at the state level, this calculation provides a reasonable statewide graduation rate estimate. However, application of this calculation at the school-level creates invalid rates for schools with increasing or declining enrollment, or moderate student mobility. Therefore this rate is only calculated at the state level.

Formula: Number of graduates (col. f) divided by grade 9 enrollment from 4 years prior (col. a)." Retrieved from http://dq.cde.ca.gov/dataquest/CompletionRate/CompRate1.asp?cChoice=StGradRate&cYear=2003-04&level=State

Oregon: "Both types of REGULAR diplomas are used in the calculation of the Graduation Rate. The Graduation Rate formula is:

Number of Regular Diplomas

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Number of Regular Diplomas + the Number of Dropouts for Grades 9-12 for the Year"

Retrieved from http://www.ode.state.or.us/search/results/?id=322

- Washington: "On-Time Graduation Rate 100*(1-grade 9 dropout rate)*(1-grade 10 dropout rate)*(1-grade 11 dropout rate)*(1-grade 12 dropout rate-grade 12 continuing rate)" Retrieved from http://www.k12.wa.us/DataAdmin/pubdocs/GradDropout/03-04/Graduationanddropoutstatistics2003-04Final.pdf
- 17 Rhode Island: Methodology unavailable
- Texas: "Texas Completion Rate: This indicator shows the status of a group (cohort) of students after four years in high school. The cohort consists of students who first attended ninth grade in 2000-01. They are followed through their expected graduation as the class of 2004. Any student who transferred into the 2000-01 cohort is added to it, and any student who transfers out of the 2000-01 cohort is subtracted from it. Graduated. Based on the 2000-01 cohort, this shows the percent who received their high school diploma on time or earlier by the end of the 2003-04 school year. It is calculated as follows:

number of students from the cohort who received a high school diploma by the end of 2003-04/divided by/number of students in the 2000-01 cohort*

*The cohort in the denominator of the formulas shown above includes those students who graduated, continued in school, received a GED, or dropped out. It does not include data errors or leavers with leaver reason codes 03, 16, 19, 21, 22, 24, 30, 31, 60, 61, 63, 64, 66, 72, 78, 80, 81, 82, or 83."

Retrieved from: http://www.tea.state.tx.us/perfreport/aeis/2005/glossary.html#complete

- 19 Arkansas: Methodology unavailable
- West Virginia: For West Virginia, the graduation rate is measured using the number of students who graduate from a public high school with a regular diploma (not including a GED or any other diploma not fully aligned with the state's academic standards) in the standard number of years. As per final regulation 200.19 (B), West Virginia will include a provision for students with disabilities that allows the IEP team to determine the standard number of years for graduation. The number of high school graduates and dropouts by grade has been reported to the West Virginia Department of Education for the last five years.

$$gt/(gt+d12t+d11(t-1)+d10(t-2)+d9(t-3))$$

Where: g = graduates

t = year of graduation

d = dropouts

12, 11, 10, 9 = class level

The West Virginia Board of Education will establish the graduation rate standard. Schools will be considered as having met AYP if they meet or exceed the standard or if they have made improvement toward the standard.

For the AYP determination, the graduation rate calculation will be used for accountability at the school/LEA levels, but will not be calculated for each subgroup. However, for schools/LEAs that must use the "safe harbor" provision to meet AYP for the achievement indicator, the graduation rate standard must then be met by the subgroup(s) that failed to meet AYP on the assessment standards." Retrieved from http://wweis.k12.wv.us/nclb/pub/GradRate.htm

- Oklahoma: "The Oklahoma graduation rate is calculated by comparing the current number of graduates to the 9th grade student enrollment (ADM) four years earlier. Using this method, the 2003-04 statewide graduation rate was 75.4% (36,609 graduates in 2003-04 divided by a 9th grade ADM of 48,545 in 2000-01). The rate increased ninetenths of a percentage-point from 2002-03 and was up four-tenths of a percentage-point since 1994-95. The national-level four-year graduation rate was 68.2% for 2002-03. Based on USDE figures, Oklahoma's graduation rate was 72.1% for the same year." Retrieved from http://www.ed-stats.state.ok.us/downloadstaterpt.htm
- Maine: "Calculation of Rate. The Class Completion Rate is calculated as follows:

Number of Regular Diploma Recipients in a High School Class

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(Number of Regular Diploma Recipients + Number of Other Diploma Recipients + Number of All Dropouts during the 9th, 10th, 11th, and 12th grade years of this graduating class)"

Retrieved from http://www.maine.gov/education/enroll/grads/comprate/compratetip.htm

- Colorado: "What Is the Graduation Rate? The graduation rate is a cumulative or longitudinal rate which calculates the number of students who actually graduate as a percent of those who were in membership and could have graduated over a four-year period (i.e., from Grades 9-12). A graduation rate will be reported for each graduating class (i.e., the Class of 1999). The rate is calculated by dividing the number of graduates by the membership base. The membership base is derived from end-of-year count of eighth graders four years earlier (i.e., in the spring of 1995), and adjusted for the number of students who have transferred into or out of the district during the years covering grades 9 through 12." Retrieved from http://www.cde.state.co.us/cdereval/rv2004GradLinks.htm
- ²⁴ New Hampshire: Methodology unavailable
- ²⁵ Maryland: "Graduation Rate: The percentage of students who received a Maryland high school diploma during the reported school year. This is an estimated cohort rate. It is calculated by dividing the number of high school graduates by the sum of the dropouts for grades 9 through 12, respectively, in consecutive years, plus the number of high school graduates." Retrieved from http://msp.msde.state.md.us/StatDisplay.aspx?PV=26|12|99|AAAA|1|N|6|1|1|1|1|1|1|3



²⁶ Illinois: "HIGH SCHOOL GRADUATION RATE

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Calculated rate -----> 83.3% (Line 11A) 9th graders 1998 ----> 100 (Line 11B) Graduates 2002 ----> 90 (Line 11C) Transfers out ----> 4 (Line 11D) Transfers in ----> 12 Formula: Graduation Rate = (90 / (100-4 + 12)) × 100 Line 11b 11A 11C 11D
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NOTE: Students should only be listed in 11C if they were in 11A as first-time 9th graders. Also, students should only be listed in 11D if they were in 11B as graduates this year and were not included in 11A as first-time ninth graders. Transfers in also include late graduates from a previous class." Retrieved from http://www.isbe.net/research/Report_Card_02/verifysum_repcard2002.htm

- Missouri: "Graduation Rate. The quotient of the number of graduates in the current year, as of June 30, divided by: the sum of the number of graduates in the current year as of June 30, plus the number of twelfth-graders who dropped out in the current year, plus the number of eleventh-graders who dropped out in the preceding year, plus the number of tenth-graders who dropped out in the third preceding year." Retrieved from http://www.dese.mo.gov/planning/profile/definitions.html
- ²⁸ Montana: "Completion Rate Formula

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Completion Rate = ct / (ct + d12)

t + d11

(t-1) + d10

(t-2) + d9

(t-3)
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Where:

 $c = number \ of \ graduates \ receiving \ a \ standard \ high \ school \ diploma + nonstandard \ graduates + GED \ recipients \ through \ a \ school \ district \ administered \ program$

t = year of graduation

d = dropouts

12, 11, 10, 9 = class level

Example:

The 2003-04 Completion Rate for Montana High Schools =10,864

Completers for Class of 2004 divided by (1,951 students dropped out over four years plus 10,864 Completers for the Class of 2004) multiplied by 100 = 84.8 %"

Retrieved from: http://www.opi.state.mt.us/

- ²⁹ Connecticut: Methodology unavailable
- ³⁰ Ohio: Methodology unavailable
- ³¹ Idaho: This statistic reflects data reported by school districts on a "cohort" or "class" of students over a four-year period beginning with the group's ninth-grade year. Idaho uses a formula established by the National Center for Education Statistics for calculating this rate.

The formula is:

Numerator = High school diplomas + other completers (does not include students who have earned a GED)

Denominator = Completers +

12th grade drop outs +

11th grade drop outs from the prior year +

10th grade drop outs from the year before that +

9th grade drop out from the year before that

Other completers may include special education students or others issued a certificate of completion from their high school." Retrieved from http://www.sde.idaho.gov/ipd/reportcard/SchoolReportCard.asp

- ³² Pennsylvania: Methodology unavailable
- 33 Utah: Methodology unavailable
- South Dakota: "Methodology for Calculating Graduation Rate: The below formula will be fully implemented in four years. It is South Dakota's intention to build the database needed to calculate this rate for all subgroups over a four year period based on the following schedule. In school year 2003 include 12th grade data only; in school year 2004 include 11th and 12th grade data; in school year 2005 include 10th through 12th grade and in school year 2006 full implementation with the inclusion of data for grades 9th through 12th grades.

The formula to be utilized is as follows:

High School Completers in Year 4 Dropouts (Gr 9, year 1 + Gr 10, year 2 + Gr 11, year 3 + Gr 12, year 4) + HS Completers, Year 4"

Retrieved from http://doe.sd.gov/nclb/docs/Workbook%208.2.05.pdf

Vermont: "We are reporting two separate completion rates in this report. The event completion rate represents the percentage of 12th grade students who were promoted from Vermont High Schools in the 2003-2004 school year. The statewide 03-04 event completion rate for twelfth graders is 90% To calculate this rate we simply divide the number of promoted 12th graders by the adjusted enrollment of 12th graders during the same school year (see below for a definition of adjusted enrollment). The longitudinal completion rate is calculated by dividing the total number of graduates in a particular class (in this report the class of 2004) and dividing it by the cumulative number of dropouts over the four-year period when the specified class would have attended high school. This rate attempts to estimate the graduation rate for a single class of students when actual cohort data are unavailable. The statewide longitudinal completion rate for the class of 2004 is 86%. This completion rate has been reported previously from Vermont's Department of Education, but this is the first year it has been included in this report. It is important to note that the longitudinal completion rate has real limitations. It cannot account for students who may dropout and re-enroll in either the same school or another the following year. The rate includes both graduates and dropouts who may not have been part of the original cohort that started in the school in the ninth grade. However, until a statewide student tracking system is in place, the longitudinal completion rate provides the best information available on high school completion." Retrieved from:

http://education.vermont.gov/new/pdfdoc/data/dropout/dropout_completion_04.pdf



³⁶ Iowa: "The high school graduation rate is calculated by dividing the number of high school regular diploma recipients in a given year by the estimated number of 9th graders four years previous. The estimated 9th grade enrollment is the sum of the number of high school regular diploma recipients in that year and dropouts over the four series year period. More specifically: The total dropouts include the number of dropouts in grade 9 in year 1, the number of dropouts in grade 10 in year 2, the number of dropouts in grade 11 in year 3, and the number of dropouts in grade 12 in year 4.

GRi = Gi/Gi + Di + D(i - 1) + D(i-2) + D(i-3)

Where: GRi is the graduation rate for a given year (i).

Gi is the number of students achieving a regular high school diploma for year i.

Di is the number of dropouts in grade 12 for year i.

D(i-1) is the number of dropouts in grade 11 for the first previous year (i-1).

D(i-2) is the number of dropouts in grade 10 for the second previous year (i-2).

D(i-3) is the number of dropouts in grade 9 for the third previous year (i-3)."

Retrieved from http://www.iowa.gov/educate/content/view/346/299/

- ³⁷ North Dakota: Methodology unavailable
- New Jersey: "The graduation rate for schools with seniors is calculated by the formula contained in the approved Accountability Workbook for New Jersey as required by the No Child left Behind Act. Based on the National Center for Education Statistics' definition, this calculation provides an estimate for the cohort of students that began high school four years ago. The calculation is derived by taking the number of school-year graduates plus the summer graduates following the school year and dividing by a combination of the following: School year plus summer graduates plus number of grade 9 dropouts four years prior, plus number of grade 10 dropouts three years prior, plus number of grade 11 dropouts two years prior, plus number of grade 12 dropouts for this report card year. The product is then multiplied by 100 to get the graduation rate." Retrieved from http://education.state.nj.us/rc/2004/definitions.htm
- 39 (27) "Schools: Graduation Rate: High School Graduation Rate Based on standards published by the National Center for Education Statistics, this definition combines dropout and high school diploma recipient data. This rate seeks to answer the question "of those students who have left school, what proportion has done so as completers?" The rate incorporates four years worth of data and thus is an estimated cohort rate. It is calculated by dividing the number of high school completers by the sum of dropouts for grades nine through twelve respectively, in consecutive years, plus the number of completers. If a hypothetical graduating class begins as ninth graders in year one, this four-year completion rate would look like:

Formula: High School Diploma Recipients (year 4)/ Dropouts (Grade 9 (year 1) + Grade 10 (year 2) + Grade 11 (year 3) + Grade 12 (year 4)) + High School Diploma Recipients year 4

DATA SOURCE: Dropout Report, High School Completer Report." Retrieved from http://reportcard.nde.state.ne.us/20032004/Page/DemoGraduationRate.asp?Level=st

REFERENCES

Alliance for Excellent Education. (2006). Who's counted? Who's counting? Understanding high school graduation rates. Retrieved April 17, 2007, from http://www.all4ed.org/publications/WhosCounting/WhosCounting.pdf

American Federation of Teachers. (2006). *Graduation rates: An AFT update of research.* Retrieved April 2, 2007, from http://www.aft.org/topics/gradrates/downloads/gradratebrief.pdf

- Curran, B. (2005). Graduation counts: A report of the National Governors Association task force on state high school graduation data; Redesigning the American high school. Retrieved April 2, 2007, from http://www.nga.org/Files/pdf/0507GRAD.PDF
- Curran, B. (2006). *Implementing graduation counts: State progress to date.* Retrieved April 2, 2007, from http://www.nga.org/Files/pdf/0608GRADPROGRESS.PDF
- Data Quality Campaign. (2006). 2006 NCEA survey of state data collection issues related to longitudinal analysis results. Retrieved April 2, 2007, from http://www.dataqualitycampaign.org/survey_results/index.cfm
- EPE Research Center. (2006). *Diplomas count: An essential guide to graduation policy and rates*. Retrieved April 2, 2007, from http://www.edweek.org/ew/toc/2006/06/22/index.html
- Hall, A. (2007). Graduation matters: Improving accountability for high school graduation. Retrieved August 3, 2007, from
 - http://www2.edtrust.org/NR/rdonlyres/5AEDABBC-79B7-47E5-9C66-7403BF76C3E2/0/GradMatters.pdf

ADDITIONAL RESOURCES

Graduation Counts: A Report of the National Governors Association Task Force on State High School Graduation Data. National Governors Association Center for Best Practices, 2005. http://www.nga.org/Files/pdf/0507GRAD.PDF

Implementing Graduation Counts: State Progress to Date. National Governors Association Center for Best Practices, 2006. http://www.nga.org/Files/pdf/0608GRADPROGRESS.PDF

Who's Counted? Who's Counting? Understanding High School Graduation Rates. Alliance for Excellent Education, 2006. http://www.all4ed.org/publications/WhosCounting/index.html

Averaged Freshman Graduation Rates (AFGR) for Public School Students. National Center for Education Statistics, 2006. http://nces.ed.gov/pubs2006/dropout/06.asp

Graduation Rates: An AFT Update of Research. American Federation of Teachers, 2006. http://www.aft.org/topics/gradrates/downloads/gradratebrief.pdf

This brief is offered by the National High School Center, a central source of information and expertise on high school improvement issues that does not endorse any interventions or conduct field studies. Funded by the U.S. Department of Education, the National High School Center serves Regional Comprehensive Centers in their work to build the capacity of states across the nation to effectively implement the goals of No Child Left Behind relating to high schools. The National High School Center is housed at the American Institutes for Research (AIR) and partners with other leading education research organizations such as Learning Point Associates, MDRC, the National Center for Educational Accountability (NCEA), and WestEd. The contents of this brief were developed under a grant from the U.S. Department of Education. However, those contents do not necessarily represent the policy of the U.S. Department of Education, and you should not assume endorsement by the Federal Government.

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