



Implementing the NGA Graduation Rate Compact: Recommendations for State Data Managers

***Developed by a CCSSO Technical Panel in Collaboration with
the NGA Center for Best Practices***

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In 2005 the National Governors Association convened a Task Force on State High School Graduation Data¹ to make recommendations on how states could measure graduation rates in a way that was comparable across states and based on high-quality, student-level longitudinal data. An accurate and comparable graduation rate can help policymakers across the country communicate with and learn from each other as education research and policies are designed and implemented. The resulting recommendation, ultimately agreed to by all 50 governors in 2005, was for all states to calculate a high school graduation rate based on the following formula:

$$\frac{\text{On-time graduates by year X}}{[(\text{first time 9}^{\text{th}} \text{ graders in year X-4}) + (\text{transfers in}) - (\text{transfers out})]}$$

This graduation rate applies to students who receive standard diplomas, not certificates of completion or attendance, nor General Educational Development (GED) certificates.

While the formula appears to be straightforward, because of the many differences among state data systems, as well as variations in state-specific rules for accounting for and providing services to students with special needs, cross-state comparability is questionable unless states also follow consistent implementation guidelines. In June 2006, the Council of Chief State School Officers worked with the National Governors Association Center for Best Practices to gather representatives from several states and organizations² to evaluate and discuss implementation issues related to the NGA Graduation Rate.

The goal of the technical panel was to identify standard implementation practices that could be adopted by all states to make the state graduation rates as comparable as possible. The specific recommendations are listed below and discussed in greater detail later in this document.

Panel Recommendations

1. Calculate the NGA rate for cross-state comparability, but in addition, consider calculating at least a five-year rate for students who receive a regular or advanced diploma within five years. In other words, determine the appropriate freshman cohort according to the NGA guidelines, and calculate a graduation rate for that group at the end of both four and five years.
2. For the purposes of the NGA graduation rate, the panel recommends defining first-time 9th graders as any student who was enrolled at least one day in grade 9 in the first year of a given cohort.
3. The panel recommends that the count of *transfers in* include every student who enters the cohort on grade-level at *any* point during the four-year period and does not exclude students who arrive late in the 12th grade (or any grade).
4. Define, document, and implement a detailed student-level exit data collection process to account for students who leave the public school during or between school years.
5. Establish a process by which the SEA reviews statistical trends of exit data within and across school years to identify potentially erroneous data. Establish a detailed review and validation process for samples of district, school, and/or student data. Establish clearly defined consequences for schools and districts that do not maintain clear and accurate documentation and validation processes that meet the state guidelines and for submitting erroneous data to the state. Clearly communicate each of the processes and consequences to districts and schools.
6. Students who 'vanish' (*i.e.*, cannot be found in another location, no documentation exists for where they went, etc.) should be counted as dropouts, not as *transfers out*.
7. 4th-year summer graduates should be counted as graduates in the NGA rate.
8. A student receiving special education services whose IEP allows an extra year to graduate, or a student receiving services for limited

English proficiency who is allowed extra time to graduate, should be placed in the cohort with which that student is expected to graduate. Thus, a student who enters 9th grade in 2006-2007 but has documentation showing that he or she is allowed five years to graduate under his or her IEP or special program should be placed in the 2012 graduation cohort.

9. Follow existing state policies and practices regarding tracking and accounting for incarcerated students, but be very clear in how those students are included in the calculation of the NGA graduation rate.
10. Students retained in grades 9-12 remain in the cohort to which they were originally attributed.
11. States should clearly describe by component how they are calculating the rate. A national organization such as CCSSO should consider reviewing state documents that explain how the NGA graduation rate was calculated in each state (or surveying states for that information if documents are not available). In addition, that organization should consider providing a resource document that outlines how states address special populations and circumstances in the calculation of the NGA graduation rate. Also, the Data Quality Campaign and CCSSO should incorporate the NGA rate into the Coordinated Data Ask (a system that coordinates requests for data from a variety of organizations in order to reduce the number of separate data requests made of states).

General Guidelines

Before the NGA graduation rate formula can be used by a state, the state must have the ability to identify first-time 9th graders, which generally implies that it has implemented a student-level longitudinal data system that can track individual student enrollment and participation status from year to year.² States that are unable to track enrollment for individual students typically calculate graduation rates based on aggregate or summary statistics (using total counts of students collected each year from local education agencies) and usually cannot identify the number of first-time 9th graders from those aggregate values. As a consequence, some states will be unable to calculate this rate until four to six years after they have implemented a longitudinal tracking system and subsequently gathered at least five years of student-level data. (At least one state, Washington, is using an interim aggregate rate consistent with recommendations of the NGA Task Force until the necessary student-level data is available.)

Ideally, the NGA graduation rate formula would be applied to student-level data at the school, district, and state levels. This paper focuses on state-level implementation issues. Other issues may arise when implementing this rate at the school and districts levels, and additional implementation guidance is needed for calculating the rates at those levels.

The panel also discussed the use of the rate for accountability purposes. The NGA calculation was developed to be an accurate and more comparable measure of high school graduation rates. A secondary but important consideration was that the rate be compatible with NCLB requirements so as not to impose additional burden on states. States that wish to adopt the NGA rate in place of their current graduation rates may submit the proposed change in their accountability workbooks for approval by the US Department of Education.

Graduates, Dropouts, and Other Exiters

When considering graduation statistics, it should be noted that a state's four-year graduation rate will not necessarily be 100% minus the dropout rate. Put another way, it is easy to assume that if a state has a four-year graduation rate of 83% it will also have a dropout rate of 17%, but that is not the case. The two rates are sometimes considered to be the inverse of each other, but they reflect only two distinct events and are not the only educational outcomes for students. Students may receive a standard diploma in more than four years, or students may receive some form of vocational credential recognized by the state as a valid program completion. Students receiving such a credential are not considered to be either graduates or dropouts, but they are considered to be program completers.

Students may also exit a state public education system by transferring into another educational system or into a homeschool environment. In order to accurately track students who transfer in and out of a state or local education agency, a state must have a unique ID assigned to each student, and must collect enrollment records to track membership and attendance at every campus and district in the state. Ideally, the state will also maintain an exit or "leaver" data system, based on a uniform set of codes that identify the reason each student left a particular district or campus. States that already maintain exit data systems provide their districts with a variety of codes (sometimes 30 or more) with which to identify students' exit reasons. These codes most likely include events such as marriage, death, transfer out of

state, transfer to a home school, transfer to another country, transfer to a private school, incarceration, obtaining a General Educational Development (GED) certificate, being hospital-bound, and so on. The degree of detail and accuracy with which these exit codes are reported and used can affect the reliability of the graduation and dropout rates reported by the state.

The National Forum on Education Statistics produced an excellent document³ that outlines the need for an exit code data system and provides recommendations for how to establish a classification system of exit codes. This document and the suggested guidelines came from a task force of district, state and federal representatives with many years of experience in data collection, analysis, and reporting who believed that the quality of education data in general, and the calculation of graduation and dropout statistics in particular, could best be improved by standardizing the way exit data are defined and collected.

Specific Implementation Recommendations

Cohort Length

Under the NGA definition, states will identify the number of students who graduate *within* four years of becoming a first-time 9th grader. For most students, a four-year high school curriculum is designed to be sufficient to earn a diploma, although there are some students who will be allowed at least five years (see Special Populations below for more detail on these students) and will still be counted as on-time graduates. The NGA rate is defined in such a way as to focus on reaching graduation within four years of entering 9th grade, or longer if prescribed by the school.

Other than the limited exceptions detailed in the NGA report, students who take longer than four years to graduate will not be included in the numerator of the NGA rate. For example, a student who repeats the 9th grade and graduates in the 5th year will not be counted as a graduate using the NGA graduation rate. The NGA recognizes that its graduation rate does not and cannot account for all necessary state performance indicators. The NGA Task Force and the technical panel encourage the use of additional indicators of success among students in order to gain a more complete picture of student outcomes. One example of an additional indicator would be the reporting of a five-

year graduation rate by the state to account for students who do graduate, albeit on a longer schedule.

There are a variety of reasons why some high school students are unable to graduate within the standard four-year period but persist in school until they earn their diploma. Students may take more than four years to earn a diploma for reasons such as being retained in at least one grade, dropping out and returning to school later, or moving out of state or country and later being reinstated in an out-of-cohort grade. While these students cannot be counted as on-time graduates in the NGA graduation cohort, states can report on these graduates with another graduation indicator. To account for these situations, states have the option of calculating a five- or six-year graduation rate *in addition* to the NGA rate and reporting all of the rates. By reporting a series of graduation rates, states would be able to show the persistence levels of students who move through the education pipeline via more circuitous routes.

How many years of student-level data are needed to calculate the NGA rate?

In order to calculate the NGA graduation rate based on student-level data, the SEA ideally needs data from six academic years:

- the year prior to the first year of the cohort (i.e., the year prior to when the student is expected to be a first-time 9th grader),
- the four years accounting for grades 9-12, and
- the fall of the year after grade 12 when the graduation status is collected.

States will want to check the grade level assignment in the year prior to the beginning of the cohort to ensure that students are indeed first-time 9th graders. Evaluating exit data from the year after the expected 12th grade year (or the 5th year from the beginning of the cohort) is typically how states identify students as graduates, dropouts, transfers, or non-graduates. This is done during the fall after the expected senior year in order to account for summertime activity. This delayed accounting increases accuracy and explains why reports on graduates and dropouts usually are published one year behind other performance indicators.

Cohort Definition

First-Time 9th Graders

The technical panel identified areas of potential variation among the states regarding who is identified as a first-time 9th grader. Some states implement a process that essentially pre-enrolls 8th graders from Year X-1 as 9th graders in Year X. If those students do not appear in enrollment records in Year X, they are counted as leavers and must be identified as a transfer out, graduate, or dropout. Other states do not maintain this policy. Some states identify 9th graders as any student who was counted on Average Daily Attendance (ADA) in grade 9.

Panel Recommendation: For the purposes of the NGA graduation rate, the panel recommends defining first-time 9th graders as any student who was enrolled at least one day in grade 9 in the first year of a given cohort.

Transfers In

Some states have policies that include all students who transfer into the state at any time in the four-year period on grade level within a cohort, whether that is the second day of 9th grade or the second to the last day of the 12th grade. Other states may implement policies that do not account for students who transfer into the cohort after October 1 of the senior year. The thinking is that if a student transfers into a system at such a late date then the receiving entity (school, district, or state) is not accountable for that student's graduation status.

The NGA rate is intended to incorporate all transfers into one state cohort depending on a student's grade level upon entry into the state's system. Future transfers by the student across schools or districts within the state will not affect the cohort in which that student is counted.

Panel Recommendation: The count of *transfers in* should include every student who enters a cohort on grade-level at *any* point during the four-year period and does not exclude students who arrive late in the 12th grade (or any grade).

Transfers Out

Policies addressing transfers out of the education system are complex and vary widely across states. The primary goal for states to address regarding transfers out is to be transparent about what their state

policies and procedures are so that users of the NGA rate can identify any comparability problems or issues.

The panel discussed various issues related to identifying and counting transfers out, including those of documenting and validating which students leave and why, and existing or recommended auditing practices associated with these data.

Transfer Documentation and Validation Issues

The most complex aspect of the NGA graduation rate is accurately identifying and calculating transfers out of the state's public education system. Panel members agreed that documentation and verification of the reasons why a student leaves the state's public education system is a challenge.

At the crux of the issue is the state's role in the documentation and validation processes. SEAs can and should establish accepted policies and practices for districts and schools to follow when documenting where, when, and why students leave their systems and how these data are reported to the state. The state's student exit data collection should be as well defined and documented as any other data collection system. The state specifications provided to schools and districts should clearly outline what types of exit codes the state will expect, how each code is defined, when and how the data should be transferred to the state, and how those data should be documented and maintained at the local education agency.

One common issue that states struggle with is how to document and validate that a student is transferring from one school to another. Actual processes across the states vary widely. They include parental notification to the school from which the student is moving, either in writing or by requesting records. However, parents might not notify the school that a student is transferring. The school to which the student moves might request the student's records from the former school, and that might be how the former school is alerted that the student is no longer officially enrolled. The former school might never get documentation from the student, parents, or new school; the staff may simply become aware that the student is no longer in attendance. Similar experiences occur when a student transfers to a private school, home school, another state, or another country. There are many reasons why a student leaves one school or district, and school and district officials need guidance on acceptable documentation practices to account for students who are no longer in attendance.

Documentation guidelines include topics such as when parental notification is necessary, the age at which students can make notification for themselves, and when and how to receive notification from schools or districts. In some instances, states provide a recommended hierarchy of acceptable notification methods. In addition, state guidelines should include policies for how to code the data if no information can be collected on why a student left, and how much time a school or district should spend trying to find that student. If the state can assist schools and districts in tracking students elsewhere in the state through their student identification number or a student location number, the state should outline these procedures as well.

Panel Recommendation: Define, document, and implement a detailed student-level exit data collection process to account for students who leave the public school during or between school years.

Transfer Audit Systems

While the state can provide guidelines to schools and districts about how to document transfers out, detailed oversight of these practices can prove impractical in states with several hundred districts. It is not realistic for state staff to go on site to review students' files to verify the exit data provided to the state by the schools and districts. Such practices would be too expensive in terms of time and staff resources to conduct on a widespread scale.

There are less cumbersome methods of validating data received at the SEA than on-site reviews of student folders. Some states have implemented a desk audit system that relies on reviewing statistical trends across schools or districts within a given school year or across years for given schools or districts.

For example, SEA staff can calculate the percentage of students who left a school or district within a school year (leavers) and then the percentages of leavers attributed to each exit code. These percentages can be compared to statewide or district-wide averages as a way to identify possible anomalies within the district. The trends in exit code usage across years can also be examined for possible anomalies. Once anomalies are identified, SEA staff can work with school or district staff to review and/or retrieve student data for validation purposes. These reviews may be done electronically, or depending on available

resources, by conducting on-site visits to schools or districts with particularly questionable data and reviewing student folders for a targeted sample of students.

Panel Recommendation: Establish a process by which the SEA reviews statistical trends of exit data within and across school years to identify potentially erroneous data. Establish a detailed review and validation process for samples of district, school, and/or student data. Establish clearly defined consequences for schools and districts that do not maintain clear and accurate documentation and validation processes that meet the states guidelines and for submitting erroneous data to the state. Clearly communicate each of the processes and consequences to districts and schools.

Students Without an Exit Code

In each state, a portion of the students who leave a school or district will likely not have an exit code easily attributed. Some schools and districts might consider identifying these students as a transfer out. However, without sufficient documentation that the student has indeed transferred to another school, that would be an invalid attribution.

Panel Recommendation: Students who 'vanish' (*i.e.*, cannot be found in another location, no documentation exists for where they went, etc.) should be counted as dropouts, not as transfers out.

Summer Graduates

While most students graduate in May or June of a given school year, some students graduate later in the summer but before the following school year. These students should be included in the cohort to which they were originally assigned.

Panel Recommendation: 4th-year summer graduates should be counted as graduates in the NGA rate.

Special Populations

Students Receiving Special Education Services

In some cases, students who receive special education services have Individual Education Plans (IEP) that provide them the opportunity to earn their diploma within five or six years rather than the traditional

four-year period. Other students receive special education services, but their IEP does not specify a longer time frame to earn a diploma. Also, some students can have an IEP that specifies the attainment of a special certificate rather than a standard diploma.

In most states, the decisions regarding awarding diplomas and certificates are administered by local education agencies, not the SEA. Thus, the SEA needs to collect data not only on which students graduate, but which type of diploma or certificate they receive, and the number of years specified in their IEPs to earn that credential.

The NGA graduation rate report states that students who receive special education services and graduate with a standard diploma within the timeframe outlined in their IEPs should be counted as on-time graduates. This is true whether the students are allotted four, five, or six years to graduate. The NGA compact recommends that a student with an IEP that allows the student extra time to graduate should be placed in the cohort with which that student is expected to graduate. Thus, a student who enters 9th grade in 2006-2007 but is allowed five years to graduate under his or her IEP should be placed in the 2012 graduation cohort.

This has two ramifications for SEAs.

- 1) Statewide data systems must have the capacity to flag students receiving special education services who are provided extra time to graduate in the IEP, the number of allowable years to graduate, and the type of diploma they are expected to receive. Currently, most state data systems do not have this capacity.
- 2) For purposes of consistency, states must assign students to the appropriate cohort when they enter 9th grade. Once a student is assigned to the cohort allowed by their IEPs, students should not be moved out of that cohort. This assumes that IEPs for high school students that allow more than four years to graduate are developed prior to, or early in, a student's first year of high school.

The technical panel cautioned against allowing too many exceptions in placing students within a strict four-year graduation cohort. Placing students in later graduation cohorts should only be done if the necessary documentation is available. As indicated above, the NGA Graduation Task Force suggested that multiple indicators are needed to get a true picture of high school graduation and completion rates. The technical panel supported that suggestion, and recommended that

states consider calculating a five-year rate to complement the focal four-year compact rate. The five-year rate would not be intended for any special population. States would calculate a four-year and five-year rate for the same cohort of students. All students who graduate with their designated four-year cohort would be in the numerator of the four-year calculation; those students would also be included in the numerator of the five-year calculation, along with all other students who graduated in five years.

Panel Recommendation: A student receiving special education services whose IEP allows an extra year to graduate should be placed in the cohort with which that student is expected to graduate. Thus, a student who enters 9th grade in 2006-2007 but has documentation showing that he or she is allowed five years to graduate under his or her IEP should be placed in the 2012 graduation cohort.

Students with Limited English Proficiency

Much the same as with students receiving special education services, if a state allows some students with limited English proficiency (LEP) to receive additional time to earn a regular diploma, then the state needs to allow for that data element to be collected from schools and districts. This allowance also needs to be clearly delineated in the reporting of the state's NGA graduation rate.

Panel Recommendation: Follow the same general guidelines used for students receiving special education services.

Incarcerated Students

Tracking data about services provided to incarcerated students is complicated within a state and leads to much incomparability across states. In some states, department of correction data for juveniles is incorporated in the SEA, while in others it is not. Some states require that adjudicated youth continue to receive public education instruction while incarcerated. Some states consider students who are in juvenile justice systems or prisons to be transfers out to another school, while others do not.

Panel Recommendation: Follow existing state policies and practices regarding tracking and accounting for incarcerated students, but be very clear in how those students are included in the calculation of the NGA graduation rate.

Retained Students

Many students are retained in 8th or 9th grade; consequently, staff at SEAs may be unsure as to which NGA cohort to assign these students. Since the basis of the NGA graduation rate is the cohort of first-time 9th graders, students who are retained in 8th grade should not be affected; they should not be assigned to a cohort until they attend 9th grade.

In states that already have longitudinal data systems, there are differing practices as to whether students who are retained in 9th grade remain in the same cohort or move to the cohort in Year X + 1. However, since the NGA graduation rate denominator is defined as first time 9th graders + transfers in – transfers out, to be consistent with the definition, states must keep students who are retained in 9th grade (or higher) in the same cohort. If they remain in school and graduate, they should not appear as graduates in the NGA graduation rate, but might appear in the five-year rate.

Panel Recommendation: Students retained in grades 9-12 remain in the cohort to which they were originally assigned.

Communication of Results

As mentioned previously, transparency of state policies and procedures is essential in order for each state's NGA graduation rate to be interpreted and used appropriately, especially when comparing rates across states. Given the variations in state laws and local policies across the country, it is difficult to imagine that any one performance indicator can be sufficiently designed and applied to every state without modification. However, the NGA graduation rate brings us closer to one cross-state standard than many other performance indicators.

The key to maximizing the usefulness of the NGA graduation rate lies in states being able to clearly document and define how the rate was calculated. The documentation must include a description of which students were included or excluded in a cohort, and why. For example, if one state includes incarcerated students and another does not, that should be clearly noted, and it would be helpful if the state could provide data on how many students that represents so that the impact on the rate can be estimated.

Panel Recommendation: States should clearly describe by component how they are calculating the rate. A national

organization such as CCSSO should consider reviewing state documents that explain how the NGA graduation rate was calculated in each state (or surveying states for that information if documents are not available). In addition, that organization should consider providing a resource document that outlines how states address special populations and circumstances in the calculation of the NGA graduation rate. Also, the DQC and CCSSO should incorporate the NGA rate in the Coordinated Data Ask (a system that coordinates requests for data from a variety of organizations in order to reduce the number of separate data requests made of states).

Find Out More

- For more information about the NGA graduation rate, go to www.NGA.org
- For more information about the Council of Chief State School Officers, go to www.ccsso.org
- For more information about implementing the NGA graduation rate, go to www.DataQualityCampaign.org for a copy of *Every Student Counted: Using Longitudinal Data Systems to Calculate More Accurate and Useful High School Graduation Rates To Improve Student Success*

References

¹National Governors Association. *Graduation Counts: a report of the National Governors Association task force on state high school graduation data*, 2005.

²List of Participants

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⁴National Forum on Education Statistics. (2006). *Accounting for Every Student: A Taxonomy for Standard Student Exit Codes* (NFES 2006-804). U.S. Department of Education. Washington, DC: National Center for Education Statistics.

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The Council of Chief State School Officers (CCSSO) is a nonpartisan, nationwide, nonprofit organization of public officials who head departments of elementary and secondary education in the states, the District of Columbia, the Department of Defense Education Activity, and five U.S. extra-state jurisdictions. CCSSO provides leadership, advocacy, and technical assistance on major educational issues. The Council seeks member consensus on major educational issues and expresses their views to civic and professional organizations, federal agencies, Congress, and the public.