JOHN W. GARDNER CENTER *for Youth and Their Communities*

School Accountability: Are Graduation and Dropout Rates Accurate Measures of School Success?

Today, accountability for school performance involves higher stakes than ever before. As a result, the question of *how* we measure performance is the subject of ongoing debate. Few such measures garner as much attention as graduation and dropout rates which are now commonly used as indicators of school success and failure. For this reason, it has become increasingly important to understand the tools being used to measure success and the ways in which they are, or are not, accurate.
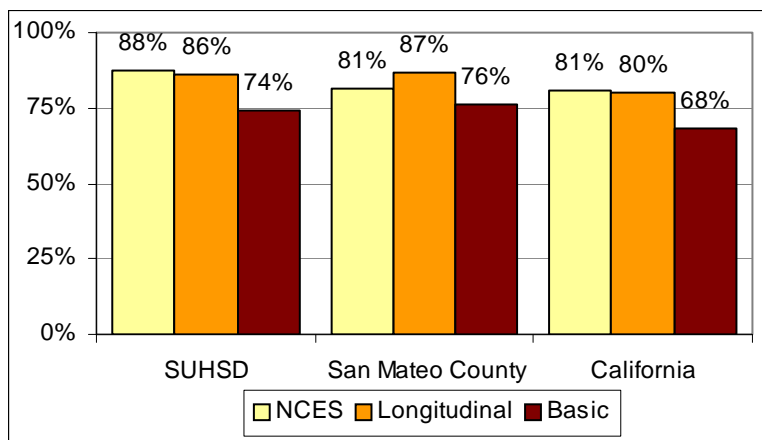
Graduation Rates

Since its passage in 2001, the federal No Child Left Behind (NCLB) Act has used graduation rates, defined as the percentage of ninth graders who graduate from high school four years later, as one of several factors in determining whether a school meets its Adequate Yearly Progress (AYP) targets. Because failure to meet AYP in consecutive years puts a school at risk for state intervention, accurate graduation rates are essential. NCLB allows each state to determine which graduation rate formula it uses, based on the type of data available to it; this makes cross-state comparisons difficult. The three most common formulas are:

NCES Rate	Longitudinal Rate	Basic Rate
The most commonly used for NCLB and used by California, this rate uses school-level data from five points in time: grades 9, 10, 11, 12 and graduation. The result is more accurate than the Basic Rate, but less accurate than the Longitudinal Rate.	The second most commonly used for NCLB, this rate uses the most accurate type of data–individual-level student data over time. The results tend to be similar to the NCES rate, but the use of higher quality data produces a more accurate rate.	Now rarely used for NCLB, this was the most common way states calculated graduation rates until recently. This formula uses school-level data from only two points in time, 9th grade and graduation, making this rate highly unreliable.

Figure 1 illustrates the differences in the rates produced by each formula for the Sequoia Union High School District (SUHSD), San Mateo County and California in 2006-07.[1] The basic rate is significantly smaller than the other rates because it includes students who transfer or who leave school for other reasons besides dropping out. The NCES and Longitudinal rates produce similar results, though each uses a different type of data. The NCES rate relies on snapshots of school-level data, while the Longitudinal Rate relies on student-level data, collected continually over four years. Use of this precise, longitudinal data makes this formula the most accurate of the three.

Figure 1: Comparing Graduation Rate Methods

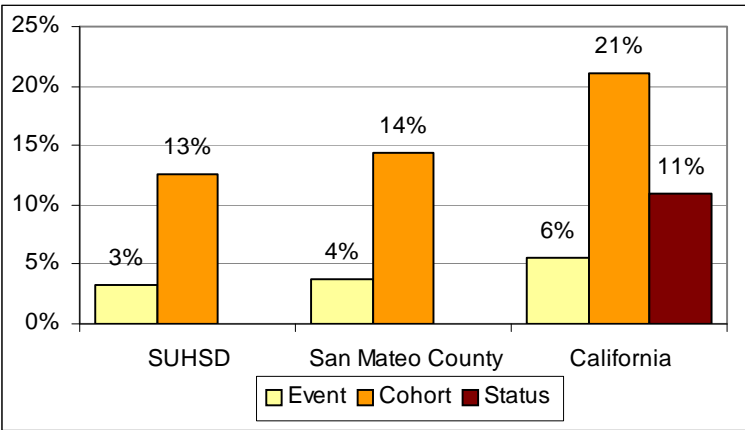[1] Figures compiled from Dataquest (http://data1.cde.ca.gov/dataquest/)

Dropout Rates

Dropout rates are not included in NCLB's AYP calculation. Nevertheless, because they are often considered the flip-side of graduation rates, many agencies report them. Like graduation rates, there are different formulas for calculating dropout rates. The NCES reports three separate dropout rates, each with a different definition of who is considered a "dropout," for each state:

Event (One-Year) Rate	Cohort (Four-Year) Rate	Status Rate
Defines dropouts as students who dropped out in a single year. The CDE reports this rate for individual schools, districts and counties. This formula produces the smallest rate because it reports dropouts from a single year only.	Defines dropouts as freshmen who do not earn a diploma four years later. The CDE currently uses a modified version of this formula to produce a four-year rate for schools, districts and counties. It will begin using a more accurate, unmodified formula once 4 years of statewide student-level data are available.	Defines dropouts as anyone between 16 and 24 years old who is not in school and has not earned a diploma. This rate is produced using data from the Census Bureau and can be accurately reported only at the state level. The status rate tends to fall between the event and cohort rates.

Figure 2 illustrates the drastic differences in rates produced by each of these formulas in 2006-07. Statewide these rates differ by as much as 15%. Like graduation rates, results across formulas differ because of differences in the type of data used. In addition, each formula defines dropouts differently, making it impossible to say which formula is most accurate. The event rate, for example, includes only students who left school in a single year and therefore may present an overly optimistic picture. The cohort and status rates more accurately reflect the conventional definition of a dropout as someone who leaves school at any point prior to graduation.

Figure 2: Comparing Dropout Rate Methods

Other Considerations

Though often presented as complementary figures—one is *either* a high school graduate or a high school dropout—the connection between graduation rates and dropout rates is much more complex. This "either-or" relationship is problematic for two primary reasons:

- Dropping out is not the only alternative to graduating from high school. Students who receive a GED or certificate of completion, or who take more than four years to graduate are excluded from both rates.
- It is notoriously difficult to track students as they move through the education system. Poor tracking results in counting some students as dropouts in one school and graduates in another, or in not counting them at all. Many states, including California, are only now implementing statewide tracking systems.

It is important to recognize the flaws inherent in the way these rates are calculated and to acknowledge that they do not account for all students. More advanced and accurate student tracking systems are one step in the right direction to making these rates more reliable but until these rates are reported using a universal definition and formula, they will remain imperfect measures.