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Education Policy Brief

# Calculating High School Graduation Rates

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## CONTENTS



## UPCOMING POLICY BRIEFS . .

- ✓ *Policies and Practices to Improve High School Graduation Rates*
- ✓ *Breaking the Mold: Virtual Education in the Digital Age*
- ✓ *Does Collective Bargaining Help or Hinder Student Achievement and the Efficient Funding of Public Education*

## INTRODUCTION

Recent reports have consistently demonstrated that the attainment of a high school diploma is not simply of value to the individual student, but that the benefit of a high school diploma is reaped by the graduate's community as well. Based on U.S. Census data, the organization for Postsecondary Education Opportunity found that people aged 25-64 without a high school diploma earned an average of $19,544 in 2005. For the same age group, high school graduates earned an average of $26,968 and college graduates with a bachelor's degree earned an average of $44,217 per year.[1] The direct positive correlation between level of education and individual earnings has been known for quite some time. New reports, however, also point out the effect that education has on one's household and community.

In February 2007, the Alliance for Excellence in Education published a report indicating that "households headed by a high school graduate accumulate ten times more wealth than households headed by a high school dropout."[2] Furthermore, the report goes on to say that the United States would have over $74 billion more in accumulated wealth if all heads of household had at least a high school diploma. The Milton & Rose D. Friedman Foundation looked specifically at Indiana in their October 2006 report, "The High Cost of Failing to Reform Public Education in Indiana." Researchers of this report estimated costs incurred through lost income tax, increased Medicaid costs, and increased incarceration costs associated with high school dropouts in Indiana. The Friedman researchers found that the annual public cost for one year's worth of dropouts is approximately $62.5 million.[3] This amount is $3,067 per student and is, according to the report, an underestimation of the true public costs. Even more striking, the Alliance for Excellence in Education reports that for the 24,700 students that did not graduate on time with their class in 2007, the lost lifetime earnings in Indiana if all these students remain dropouts would be $6.4 billion.[4]

Historically, one socially acceptable alternative to the high school diploma has been the General Equivalency Diploma (GED). Although one in seven high school graduates across the United States earn their diploma through the GED,[5] it has come to be regarded as an insufficient replacement for a high school diploma. The United States military no longer considers the GED and a high school diploma to be comparable following decreased Armed Forces Qualifying Test scores and increased military dropout rates from those holding a GED.[6] While the military may still accept a candidate with only a GED, a high school diploma is preferred and the lack of one is likely to limit opportunities.[7] Additionally, economists have declared that GED holders are "statistically indistinguishable" from high school dropouts.[8] Therefore, if the economic benefit for a high school graduate and their community is so immense, and a GED is no longer an adequate replacement for the high school diploma, there are significant reasons to pay attention to national and state graduation rates.

Graduation rate methodologies have varied over time and across the nation. Presently, there is still a wide variety of calculation methods in effect although some of these methods have proven to be inaccurate and misleading. This policy brief will examine various calculation methods, the history behind the use of particular methodologies, and the strong nationwide trend toward a cohort rate. Additionally, it will look specifically at Indiana legislation that has shaped the Indiana graduation rate methodology. Finally, the recent push for a uniform national methodology will be considered.

## CALCULATING GRADUATION RATES

Most educators readily acknowledge the importance of dropout prevention and the significance of a high school diploma. Another issue gaining attention in the past five years, however, is the accuracy with which dropout and graduation rates are calculated. It is important to recognize that the two rates combined typically do not equal 100 percent. If one school reports an 80 percent graduation rate, it does not necessarily indicate a 20 percent dropout rate. Students may not fall in either of the two categories for several reasons including students who are earning or have earned a GED, a special education certificate, or a non-diploma course completion certificate; or those students who are still enrolled in school but have not yet completed their education.[9] Federal law does not require states to calculate dropout rates specifically, but there are federal provisions that require the calculation of graduation rates.

The No Child Left Behind (NCLB) law requires that secondary schools use state-administered academic assessments as the primary indicator for Annual Yearly Progress (AYP). However, the law also requires that graduation rates be used as an additional measure of AYP at the secondary school level. The intent of this provision is to ensure that AYP shall not be met or exceeded based solely on a smaller cohort of graduates (passing assessment targets) due to an increased number of dropouts.[10] The NCLB law outlines some basic characteristics for defining and measuring graduation rates, but states presently have wide flexibility in how they calculate graduates. The lack of a congruent, uniform set of federal guidelines has led to a diverse array of calculating methods, and often inaccurate or misleading calculations.

## VARIOUS METHODS FOR CALCULATING GRADUATION RATES

### Completion Ratio

One of the most basic means of calculating a graduation rate is to divide the number of graduating seniors by the total enrollment of freshman four years prior; this is often referred to as a completion ratio. This basic calculation has many limitations. First, it does not indicate an on-time graduation rate, or the number of students who entered high school as a freshman and completed high school in four years without repeating a grade or taking time off from school. Secondly, the basic calculation does not account for movement in and out of a school. It is not uncommon for many students to transfer in and many students to transfer out of a high school during the four-year time period. A community may experience a large population decrease or increase, due to economic conditions, which would dramatically alter the graduation rate, using the completion ratio methodology. Finally, the calculation does not allow for any supplementary indicators, such as the number of students graduating in three years, five or six years, or the number of students graduating with a certificate of completion rather than a high school diploma.

### Leaver Rate

Many states have utilized a graduation rate previously recommended by the National Center for Education Statistics (NCES), called the leaver rate. This graduation rate does not calculate those who actually graduated, but rather those who did not drop out. To calculate this rate, the numerator is the number of students who graduate in a particular year, and the denominator is the number of students who graduate plus the number of students who dropped out over the previous four years.[11] This graduation rate method does not indicate an on-time graduation rate. Thus it does not account for the students who neither drop out of school nor graduate on time.

***The NGA found that the need for consistent, reliable, and comparable data far outweighed the arguments against cohort models***

### Cumulative Promotion Index

One calculation method which was used extensively earlier this decade was the Cumulative Promotion Index (CPI) developed by Christopher Swanson of the Urban Institute. This method determines graduation rates by evaluating the proportion of students who progress from one grade to the next from Grades 9, 10, and 11, multiplied by the proportion of seniors who graduate at the end of grade 12.[12] To do this, the number of students in the fall in Grades 10, 11, and 12 are compared to the number of students in the previous fall in Grades 9, 10, and 11. This gives a promotion rate. The number of students graduating at the end of Grade 12 is compared to the number of students in Grade 12 during the fall. The rate is the product of these four proportions (Grade 10 compared to Grade 9, Grade 11 compared to Grade 10, Grade 12 compared to Grade 11, and number graduating compared to number of stu-

dents in Grade 12 in the fall) multiplied by 100. While this number is able to give a more accurate measurement of graduation than a completion ratio or the leaver rate, it still does not separate out on-time graduation. Additionally, like other rates, the CPI is unable to account for fluidity within a community.

## Cohort Rate

Citing the Alliance for Excellent Education analysis, which concluded states could see annual earnings increases of $100 million or more if they cut high school dropouts in half,[13] the National Governors Association (NGA) Center for Best Practice developed the Task Force on State High School Graduation Data in 2005. The report resulting from the Task Force declared that states "should adopt a standard formula for calculating a four-year, cohort-based high school graduation rate."[14] Additionally, the report urged states not to be detoured by money or exceptional student cases (such as students who may graduate in three years instead of the traditional four years). The NGA found that the need for consistent, reliable, and comparable data far outweighed the arguments against cohort models. Furthermore, the report emphasized the need for public information; state leaders must help the public to understand "that it is important to obtain an accurate picture of the problem to address it more effectively."[15]

The cohort model recommended by the NGA, as well as by several other education institutions, calls for the progress of an individual student to be tracked throughout their years of high school. This individual tracking method would follow the students as they progressed (or were retained) through the four grades of high school. Because the method tracks individuals, it is also able to follow students as they move between schools; this helps schools have a more accurate idea of whether or not a student has transferred or dropped out. Moreover, using this method would not only allow schools to report an on-time graduation rate, but it also would enable schools to report complementary data such as three-year, five-year, and six-year graduation rates. Additionally, the number of students earning alternative completion certificates or GEDs would be reported. The specific four-year graduation rate and complementary data available from the use of a cohort method makes this method the most preferable graduation rate currently available.

In its fall 2006 progress report, the NGA noted that most states were behind in their pact to report cohort rates because of the five years of data required, with only 16 states presently using this method. Some states are not projected to be ready to report cohort data until 2012 or possibly beyond.[16] The progress report noted, however, that all states except North and South Dakota had plans in place to implement a cohort data tracking system. While states are amassing usable data, most non-ready states are still reporting the NCES leaver rate.[17] Table 1 lists the graduation rate formulas in use during the 2006-07 school year, as reported by *Education Week.*

## PROBLEMS WITH GRADUATION RATE CALCULATION METHODS

The problems of inaccurate or misleading data are evidenced in the 2003 state-reported graduation rates. The Education Trust used the Cumulative Promotion Index (CPI), considered by many academics to be a more accurate method for calculating graduation rates than other non-cohort rates because it focuses exclusively on enrollment numbers and not dropout numbers, to reveal stark differences between state-reported graduation rates and more realistic rates. North Carolina reported a graduation rate of 97 percent, the highest reported graduation rate in the nation. However, The Education Trust found that North Carolina's graduation rate was actually around 64 percent—a difference of 33 percentage points.[18] The state of Indiana reported a graduation rate of 91 percent in 2003, yet The Education Trust estimated it was actually around 72 percent. As The Education Trust noted, "Tallying diploma recipients is relatively easy. The hard part is accurately accounting for students who don't finish, distinguishing between

**TABLE 1. Various Methods for Calculating State Graduation Rates**

| Graduation Rate Formulas Currently in Use | Description |
|---|---|
| Leaver Rate (32 states) | 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. |
| Cohort Rate (16 states, including Indiana) | 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. |
| Completion Ratio (1 state) | 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. |
| Composite Rate (1 state) | 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 together the rate of persistence between grades 9 and 12 and the percent of completers who receive a diploma rather than another credential. |
| Persistence Rate (1 state) | Percent of students who remain in school from grade 9 through grade 12. Rate is calculated using information on the percent of students not dropping out at a specific grade level or the percent of students estimated to be promoted from grade to grade. This method does not measure high school completion. |

Source: Diplomas Count: The Graduation Project 2007, *Education Week.*

those who should be counted as dropouts and those who shouldn't."[19] Many states treated missing students, who do not report for school in the district they had been enrolled in, as transfers and not as dropouts. This categorization allowed many students to be lost by the system and inaccurately inflated the graduation rate numbers.

***Along with providing data on four-year graduation trends, Indiana is able to provide the number of students graduating in five years or more; the number of students earning a GED, special education certificate, or non-diploma course completion certificate; and a formal dropout/undetermined student rate.***

The Civil Rights Project at the University of California-Los Angeles (formerly of Harvard University) and The Urban Institute have highlighted the ways in which students lost by the system are overwhelmingly minority youth. Although the national graduation rate for Caucasian students has hovered around 75 percent, the percentage of African American, Hispanic, and Native American students graduating has been around 50 percent.[20] In a report by Orfield, Losen, Wald, and Swanson, the researchers claim that the lack of state and/or federal oversight has allowed some states to report dropout rates for African Americans to be around five percent, even though the accurate rate is approximately ten times more.[21] Moreover, the researchers found that if states and districts were held accountable for graduating at least 66 percent of minority students, 46 states and the District of Columbia would fail to meet such a standard. The inaccurate or misleading calculation of graduation rates glosses over the reality of the dropout crisis, and minority students and students in poverty are most adversely affected when true achievement disparities are overlooked.

## COHORT TRACKING SYSTEM

Although many stakeholders groups, including policymakers, researchers, and educators, now believe that the most accurate way to calculate graduation rates is by using a cohort method, there are barriers to implementing a cohort system. Cohort formulas involve tracking individual students across their years of high school. Statewide cohort systems tag each student with an identification number which allows the student to transfer schools and still be counted. This method also puts pressure on schools and districts to locate and assess the status of missing students; thus, students not reporting for school are not simply labeled as transfers. While the cohort rate is ideal, there are challenges to its implementation, including financial costs, longer implementation time frames, and community support.

The most immediate concerns center on the cost of implementing a cohort tracking system. Tracking systems require that school districts adopt new tracking-capable technology and absorb the cost increases associated with new technology. Time resources must also be dedicated in each school district in order for an entire state to begin tracking cohorts. States not only need money to implement the system, but they also need five years of data before they can begin reporting accurate graduation rates.[22] Finally, once the state has implemented the cohort system and gathered the necessary amount of data, the graduation data presented may be lower than state reported rates in previous years. This drop in the graduation rate, although it is a positive step towards accurate reporting, is alarming for many state residents. States must educate residents about the new reporting methods, and this information campaign can also be costly.

## INDIANA'S COHORT RATE SYSTEM

Indiana moved toward a cohort rate prior to the recommendation by the NGA. The Indiana General Assembly established the Indiana Student Test Number (STN) system in 1999 and the Indiana Department of Education piloted the program through 2002. Indiana Code 20-26-13 was established by the General Assembly in 2003 and required graduation rates to be calculated and reported in a cohort fashion based on the information available via STNs.[23] The 2005-06 school year was the first year with enough available cohort data to determine the graduation rate for the class of 2006. The new graduation rate accounts for the migration of students in and out of the cohort for a variety of reasons. Along with providing data on four-year graduation trends, Indiana is able to provide the number of students graduating in five years or more; the number of students earning a GED, special education certificate, or non-diploma course completion certificate; and a formal dropout/undetermined student rate.[24]

Indiana has worked to tighten transfer and dropout definitions so that schools may accurately account for individual students. Schools in Indiana now have an incentive to follow up with students who are missing. State law requires that all students that have not reported to the school in which they were enrolled, but also have not been proven to have graduated or transferred, must be reported as dropouts.[25] If students' whereabouts cannot be determined, the school must report the missing student to the Indiana Missing Children Clearinghouse.[26] A school may no longer assume a student has simply transferred; it must follow up with the student and prove a transfer before being able to report it as such. Indiana's methodology does account for exceptional cases which cause difficulty in reporting. Students with parents who work in Indiana on a seasonal basis are difficult for schools to track; these students may come in and out of a school and/or district multiple times throughout

*(continued on page 8)*

# Policy Perspective

## AIMING FOR HIGHER GRADUATION RATES

**Suellen Reed**

The stark reality that not all high school students graduate is by no means a new concern in America, but it was not until relatively recently that Indiana had a true picture of the challenge before us.

Indiana now has a new method of calculating high school graduation rates that is made possible through the use of unique identifiers (called Student Test Numbers) that can track individual student progress. This provides school communities with definitive information as students move into and out of the state; transfer between schools and districts within the state; become deceased; or remain in school but have yet to graduate and drop out of school (and potentially reenroll at a later date). The four years of data needed for the new rate first became available with the 2005-06 school year, making Indiana among the first states in the nation to calculate graduation rates based on student-level information.

The protocol for calculating Indiana's graduation rate, as passed by the 2003 Indiana General Assembly and later amended during the 2008 session under Public Law 45 (Senate Enrolled Act 111), identifies high school freshmen as members of a graduating class (or cohort) and follows them over a four-year period. To account for those students who take longer than four years to earn a diploma, five-year and six-year graduation rates are calculated as the data become available for each graduating class. Schools are obligated to help these students continue working towards a diploma, and published graduation rates should reflect those efforts.

Indiana's current graduation rate is a more meaningful measure than the cohort survival rate (also referred to as a Leaver Rate in this Policy Brief) used from 1988 until 2005, which estimated the graduation rate based on current data from students persisting in high school during a given year. Though the old cohort survival rate was based on a calculation recommended by the National Center for Education Statistics and adopted by many states, advances in Indiana's longitudinal student information systems have given us the ability to measure actual progress toward graduation. If a uniform nationwide measure for calculating graduation rates is adopted by the U.S. Department of Education, as has been suggested recently, Indiana is among those states that are well positioned for that eventuality.

**Graduation rates reflect larger issues**

Conversations surrounding methods for calculating high school graduation rates mark an important and necessary step, but the far greater challenge remains: How to best ensure that all students graduate and do so well-equipped to handle the challenges of postsecondary education and the demands of the workforce. That requires focusing the same degree of attention that has been placed on the graduation rate itself to furthering efforts that ensure students earn this essential credential.

State and national data reveal that students from low-income families, as well as African American students, Hispanic students, students with disabilities, and Limited English Proficient students are significantly less likely to graduate than their peers. Indiana high schools with the highest percentages of these student populations generally have the lowest graduation rates statewide.

Like many of the most pressing challenges in our education system, high school graduation rates reflect larger, societal issues that extend far beyond the classroom. Schools clearly have a crucial role to play, but success greatly depends on the extent to which local communities are engaged in the struggle.

**Early intervention and community support**

Studies show many contributing factors that prevent students from earning a diploma begin long before high school, underscoring the need for early intervention. Recent steps such as expanded state funding for full-day kindergarten programs, the upcoming statewide rollout of new computer-based teaching tools, and increased efforts to secure community assistance in mentoring programs and support can help address student learning needs sooner. Local community efforts are essential.

The Indiana Department of Education's High School Graduation Taskforce is working to support local communities in this regard by bringing together policymakers, educators, business leaders, and community members to see where underlying problems exist and to determine how these areas can best be addressed. Actions to date include promoting innovative high school redesign models, linking schools on academic probation to improvement resources, identifying state rules and regulations that might hinder dropout prevention efforts, and collaborating with organizations in local communities—such as the Indianapolis Chamber of Commerce, whose Common Goal Initiative is directly focused on improving graduation rates and reducing dropout rates.

We, as educators, as community members, must care and continue our work to see that more students graduate and that each student that does so possesses the skills to thrive and be successful in their lives and careers.

Dr. Suellen Reed is the Superintendent of Public Instruction for the State of Indiana

# Policy Perspective

## BETTER DATA WILL LEAD TO BETTER SOLUTIONS

**Derek Redelman**

After more than a decade of studies, newspaper coverage, and more, Indiana's debate over the accuracy of high school graduation rates may finally be coming to an end. It should not have taken this long nor proven so difficult to accomplish; but maybe now we can turn our attention to actually addressing the challenges that new data are helping to illuminate.

Much of this debate began with a simple observation by then-Mayor Steven Goldsmith and others in Indianapolis: How could it be, they asked, that Indianapolis Public Schools had 4,000 freshmen each year, graduated less than a thousand four years later and, yet, the State lists their graduation rate at nearly 90 percent? Only a handful of districts had data as stark as those at IPS; but additional study showed that few districts in Indiana could produce a set of numbers that made much sense.

This simple but completely legitimate question set off a debate that, at times, seemed as if those questioning the data had actually questioned the very existence of public schools themselves! Why, many school officials began to ask, were all these people so intent on "tearing down our schools?"

Today, all but just a few in our state finally recognize that the questions of Goldsmith and others were well-grounded. With continued dialogue, most will also realize, we hope, that the new data are being used to rally attention from the entire state, not as the club for hammering schools, as many in education have clearly feared.

There is probably no better example of this than the Common Goal Initiative that has been created and led by the Greater Indianapolis Chamber of Commerce. Business leaders in Indianapolis have not used the new data—as dismal as they are for most Indianapolis schools—to "bash" schools and their leaders.

Quite to the contrary, members of the Indy Chamber have committed their resources and their time to addressing the dropout issue as a community-wide challenge. They are working with schools, not against them; and they are so serious about the task that they have set measurable goals to hold themselves accountable—not the schools—for making progress with the issue. (For more, see www.commongoal-indy.org)

This is the kind of thing that can happen when we move past the monotonous and time-wasting debates over the accuracy of school performance data. Communities like Indianapolis have little motivation to get involved when schools tell them that "everything is fine." Indeed, the graduation rates that were cited previously for IPS would have ranked the district as having one of the very best graduation rates among all urban districts in the entire country. Thus, any attempts to get involved with the issue would have been fruitless, at best.

Of course, this issue has not been unique to Indiana. Studies from multiple organizations representing a wide range of philosophical spectrums have shown graduation rates to be a common source of flawed data.

Those nationwide concerns finally led the National Governor's Association to adopt a set of standards that, they hope, will create common definitions and comparable rates across districts and states. Indiana pledged to follow the NGA standards and is now one of the first states in the country to adopt a methodology that is consistent with those standards.

Nearly all involved—both at the state and national levels—are hopeful that better data will now lead to better work on finding solutions. What is happening in poor, urban communities where the graduation rates are better than expected? What is happening in communities where the rates are worse than expected? And how might these lessons lead to improvements in all communities?

These are the kinds of questions and productive dialogue that, we hope, can finally start to occur. We remain somewhat disturbed that parts of Indiana's new law have not yet been implemented and, thus, we will remain diligent in our encouragement to state officials to get this job done correctly. Yet, there is clearly a lot of progress from the dialogue that started more than ten years ago—and we remain optimistic that progress will continue.

All of us have an interest in finally getting this issue right. And as we do get this right, the Indiana Chamber looks forward to working with members of the education community to find strategies that will keep our young adults in school and help assure that they are well-prepared for additional education and for work. Certainly, that is a goal that all of us can share.

Derek Redelman is Vice President of Education and Workforce Development for the Indiana Chamber of Commerce

# Policy Perspective

## FOCUS ON "WHY?", NOT JUST "HOW MANY?"

**Ethan Yazzie-Mintz**

The principal of a high school in Boston (a very good high school, by a number of measures) struggling with school improvement issues, told me, "Our graduating class is half the size of the entering ninth grade class." My first question was, "Where did they go?", to which the principal responded, with both surprise and irritation, "We don't know."

This school's struggles with graduation rates highlight key challenges for high schools in the U.S.: keeping track of where students are and where they go, and stemming the tide of attrition as students move through their high school years. Most high schools would like to think that their missing students are "transfers," comfortably ensconced in another high school learning environment. The truth is schools and researchers by and large don't know where missing students are; the result is the reporting of a range of dropout rates so wide that it is impossible to believe the numbers are actually describing the same school or set of schools.

There are three important policy questions related to understanding the dropout problem:

(1) Who is classified as a "dropout"?
(2) What is the magnitude of the dropout problem?
(3) What factors drive a student to drop out?

The first question is key in defining the problem. There needs to be a common understanding—relevant to the experiences of students and not based on the needs of schools or researchers—of who is classified as a dropout in order to have an accurate measure of dropouts. How students with different experiences are classified will have a great impact on the graduation and dropout rate calculations.

The second question—despite being a primarily quantitative question—produces wide variations in responses, in part because the "objectivity" of the statistical data is filtered through the subjectivity of varying definitions, understandings, and political interests. Schools, districts, states, politicians, and researchers may choose to emphasize particular aspects of the data, define terms in a variety of ways, and utilize differing calculations, leading to widely divergent graduation and dropout rates.

The third question—what drives a student to drop out—is the most important, yet often gets lost in the policy discussions because of the continued debates about how to answer the first two questions.

A largely untapped and unacknowledged source of data for this question is the students themselves. The High School Survey of Student Engagement (HSSSE) surveys students across the country, investigating the attitudes, perceptions, and beliefs that students have about their work, the school learning environment, and their interaction with the school community. In spring 2007, nearly 65,000 students in 110 high schools across the United States completed the survey, providing a picture of what current students think about their schooling and their prospects for graduating.

Aspirations for graduation are not lacking among high school students. Only 1% of the respondents expect to leave high school without a diploma, a stark contrast to what much of the dropout data indicate. Nearly three out of four students state that the reason they go to school is to get a degree and go to college, and 86% expect to receive a college degree and/or an advanced degree.

If students want and expect to graduate from high school while they are in high school, what causes so many students to drop out before receiving the diploma?

A look at how students feel about their high school experience is revealing. Two out of three students are bored in class at least every day, if not every class. Why? Three out of four students are bored because the work is not interesting, nearly 40% because the work is not relevant, and one-third because they have no interaction with their teacher.

When given a choice of pedagogies, students indicate that the most engaging are discussion and debate, and group projects; the least engaging is teacher lecture. Students are looking for teaching methodologies in which they play an active role, and in which they learn by interacting with their teachers and peers.

More than 20% of the student respondents have considered dropping out. The most cited reasons are: not liking the school, not liking the teachers, and not seeing the value in the work. Of those who have considered dropping out, 16% believe that no adults in the school care about them, and nearly 10% indicate that adults in the school have encouraged them to drop out.

Too many students feel that they are being left behind and left out, experiencing school in a place that they feel does not value their ways of learning and where adults are not sources of support in the learning process. Only 58% of the student respondents agree with the following statement: "I am an important part of my high school community."

Students are very clear that they will learn best, persist, and succeed in school environments in which they are engaged, interacted with, challenged, and valued. While debate rages on among researchers and policymakers over the best and most accurate way to calculate graduation and dropout rates, many high school students wonder whether they will ever really be counted at all. While critically important for understanding the quantitative scope of the challenge, accurate calculations will not change either the graduation rate or the dropout rate. Understanding why students are dropping out—or thinking about dropping out—and creating more engaging schools and classrooms *will* point the way to creating more graduates and fewer dropouts.

Dr. Ethan Yazzie-Mintz is the Director of the High School Survey of Student Engagement (HSSSE)

*(continued from page 4)*

their education. Moreover, these students frequently have Limited English Proficiency, making documentation and provision of services more complicated. The Indiana General Assembly has attempted to address this and other problems by providing the Student Mobility Codes which help schools define the status of individual students. According to the mobility codes, students are not considered dropouts if they leave school during one academic year, yet return by October 2 of the following academic year.[27]

These guidelines for determining student mobility and transfers are detailed in state law and on the Indiana Department of Education's Web site. Students are categorized as dropouts if they are expelled, enter the military before graduation, are missing, have poor health and are not attending school for a sustained period of time (but have not provided specified proof from a physician), or have left school without meeting all graduation requirements. Students are not considered dropouts if they earn a GED or special education certificate of completion, but they are also not factored into the graduation rate. Students are also not classified as dropouts if they are temporarily suspended, deceased, have a physician-documented medical condition excusing school attendance, or have transferred to another public institution such as a juvenile detention center.

The Indiana STN system tracks a student who transfers to another school and/or district in the state of Indiana. However, if a student transfers out of the state of Indiana, the school from which that student transfers must request records from the receiving school in order to classify the student as a transfer. A transfer out of public school and to a non-public, non-accredited school (often a home school situation) must be verified and documented by both the parents of the transferring student and the principal of the public school. All of these tight definitions and verification procedures are attempts to prevent individual students from slipping through the cracks in the educational system.

**TABLE 2. Indiana's Reported Graduation Rates**

| Academic Year | Graduation Rate |
|---|---|
| 2006-07 | 76.5 |
| 2005-06 * | 76.5 |
| 2004-05 | 89.9 |
| 2003-04 | 89.8 |
| 2002-03 | 91.1 |
| 2001-02 | 91.1 |
| 2000-01 | 90.1 |
| 1999-2000 | 89.5 |
| 1998-99 | 89.7 |
| 1997-98 | 88.3 |
| 1996-97 ** | 88.2 |
| 1991-92 | 82.5 |
| 1986-87 | 77.6 |
| 1980-81 | 78.0 |
| 1976-77 | 78.7 |
| 1970-71 | 82.4 |

* The cohort rate was first reported in 2006 and it caused a drop in graduation rate because it is a more accurate method of calculation.
** Annual interval rates are illustrated from the 1996-97 school year forward.

## RESULTS IN INDIANA

While the new cohort rate system has allowed the state of Indiana to more accurately calculate the statewide graduation rate beginning with the 2005-06 school year, the calculations cannot be applied to past years. From the 1995-96 academic year through the 2004-05 school year, Indiana reported graduation rates that ranged between 86 and 90 percent. The first year for the cohort data (2005-06), however, reported a graduation rate in Indiana around 76 percent, and the 2006-07 data was almost identical (see Table 2 for trend data). Nearly 12 percent of students were reported as dropouts or unidentified in 2006-07.[28] As expected, graduation rates were lowest in urban areas and rural areas with high concentrations of poverty. African Americans, Hispanics, and Limited English Proficiency students are disproportionately more likely not to earn a high school diploma in Indiana. Nearly 80 percent of Caucasian students in Indiana graduated high school following the 2006-07 school year. Yet, only 70 percent of Native American students, 63 percent of Hispanic students, and 57 percent of African American students graduated in Indiana during the same year.[29]

The graduation rate legislation in Indiana has been modified multiple times since its initial pilot program. Most legislative concerns have centered on who is counted in the base total and who is not. Of particular concern to legislators is the tallying of students who have attended school in Indiana for less than one year and who have unknown locations after their departure from Indiana schools. As mentioned above, this is often of relevance to the children of migrant workers, who may only attend school in Indiana seasonally. House Enrolled Act 1794, passed in 2005, allowed students who had attended Indiana schools for less than a year and whose whereabouts were now unknown to be subtracted from the base cohort tally. However, House Bill 1647 passed in 2007 does not allow these students to be subtracted from the base cohort number. Other subgroup nuances have been the basis for most alterations

**TABLE 3. Indiana Legislation Regarding the Graduation Rate Formula**

| Legislation | Summary |
|---|---|
| 2001<br>HB 1971, PL 231-2001<br>Authors: Smith, Dillon, Klinker, Porter<br>Sponsors: Smith, Rogers, Wyss<br>Effective Date: 07/01/2001 | Multi-issued education bill. Section 3 established a pilot program, consisting of ten high schools, to test a cohort-based graduation rate formula. |
| 2003<br>HEA 1120, PL 31-2003<br>Authors: Porter, Scholer<br>Sponsors: Lubbers, Rogers, Kenley<br>Effective Date: 07/01/2003 | Replaces the limited pilot program and implements a cohort-based graduation rate formula for all Indiana public high schools. Defines key ideas associated with graduation rate calculation. |
| 2005<br>HEA 1794, PL 242-2005<br>Authors: Behning, Porter<br>Sponsor: Lubbers<br>Effective Date: 07/01/2005 | Includes additional groups of students into the graduation rate formula and definitions; defines high ability students graduating early and students attending Indiana schools for less than one year as subtracted from the total cohort number. Requires disaggregated education data. Additionally, requires categorized reasons for suspensions and/or expulsions. |
| 2007<br>HB 1647, PL 229-2007<br>Authors: Porter, Behning, Candelaria Reardon, Robertson<br>Sponsors: Lubbers, Alting, Sipes<br>Effective Date: 07/01/2007 | Verbalizes commitment to report data consistent with National Governor's Association guidelines; adds informational five and six-year graduation rate data requirement. Does not allow students attending an Indiana school for less than one year to be subtracted from the calculation. Provides student must be at least 18 years of age or withdrawn from high school with permission in order to obtain a GED. |
| 2008<br>SB 111<br>Authors: Lubbers, Charbonneau<br>Sponsors: Porter, Behning<br>Effective Date: 07/01/2008 | Specifies that students graduating as members of a cohort include students from the cohort who graduate during the expected graduation year or during a previous reporting year. Provides that students may count as graduating members of only one cohort. |

to the graduate rate law. Additionally, legislation since 2001 has required more data; House Bill 1647, for example, mandated five-year and six-year graduation rates in addition to the standard four-year graduation rate. For more information regarding graduation rate legislation, see Table 3.

## NATIONAL POLICY CONCERNS

NCLB not only requires states to report graduation rates, but the law also requires states to set annual targets for graduation rate improvement. However, similarly to the law's ambiguous requirements for calculating a graduation rate, the law is equally nonchalant about what sort of improvement in the graduation rate is necessary. Most states have set "any improvement" as their minimum requirement in order to avoid failure to meet AYP. Considering the current rate of improvement in California, it will take 500 years for the state to meet its graduation rate goal.[30]

In April 2008, U.S. Department of Education Secretary Margaret Spellings ended months of speculation when she announced that she would take formal administrative action to try and implement a uniform federal method for calculating high school graduation rates by 2013.[31] The new regulation would not take effect until at least November 2008, following a time period for public comment. A uniform graduation rate is supported by many states, education groups, and teachers unions.[32] Although, as we have noted earlier in this brief, the problem is deciding which method to use. A tough uniform rate may cause many schools in states which currently use less accurate calculation methods to fail to meet AYP. NCLB evaluates both standardized assessments and graduation rates as measures of AYP at the high school level, and some schools and states have reported higher graduation rates because they are using completion ratios or the leaver rate, which are often inaccurate. A transition to a cohort rate (which is likely) for these schools and states may cause the official graduation rate to drop, potentially causing the schools to fail to meet AYP.

In 2007, 16 states were utilizing a cohort method to calculate the state graduation rate.[33] The vast majority of states, 32 in fact, were still utilizing the leaver rate. The NGA reports, though, that most states are in the process of amassing cohort data and will soon be reporting cohort graduation rates.[34] Despite a state's ability to report cohort data, many states may still not use such data when reporting official numbers to the U.S. Department of Education. Fear of federal action will cause some states to report two sets of numbers, one for the federal government for AYP determination and one for a more accurate estimate.[35]

The original intent of the NCLB requirement to report graduation rate data was to ensure that lower achieving students

would not be pushed out in order to raise assessment scores. Nevertheless, this intent does not seem to have encouraged schools to increase graduation rates. Nationally, the graduation rate for the United States has hovered around 70 percent for over three decades,[36] and NCLB has not raised that number.[37]

## CONCLUSIONS AND RECOMMENDATIONS

### Conclusion

Nearly 80 percent of Caucasian students in Indiana graduated high school following the 2006-07 school year. Yet, only 70 percent of Native American students, 63 percent of Hispanic students, and 57 percent of African American students graduated in Indiana during the same year.

### Recommendation

The Indiana Department of Education has developed a High School Graduation Taskforce to evaluate the issues surrounding the graduation rate and high school dropouts. This taskforce should strongly consider initiatives aimed at targeting minority youth and youth in poverty. In a follow-up brief, the Center for Evaluation & Education Policy will consider dropout intervention programs in Indiana and nationwide.

### Conclusion

The cohort method for calculating the state graduation rate enables schools to report supplemental data such as three-year, five-year, and six-year graduation rates. Also, the number of students earning alternative completion certificates or GEDs is able to be reported.

### Recommendation

Indiana currently provides data on four-year graduation rates; five years or more graduation rates; the number of students earning a GED, special education certificate, or non-diploma course completion certificate; and a formal dropout/undetermined student rate. The state of Indiana should consider adding a three-year graduation rate. This rate would give educators and policymakers a better idea of the number of students who accelerated their secondary education in order to attend postsecondary institutions early. Providing such a rate would also provide schools with a uniformly positive data point to report each year.

### Conclusion

The NGA progress report noted that all states except North and South Dakota had plans in place to implement a cohort data tracking system. Although states are amassing usable data, 32 states are still reporting the NCES leaver rate.

### Recommendation

States should consider more accurate methods of reporting the state graduation rate in the interim. The CPI is one such method that has been considered by numerous research institutions to provide a more accurate graduation rate estimate if cohort data is unavailable.

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## WEB RESOURCES

**High School Survey of Student Engagement**
http://ceep.indiana.edu/hssse/

**The Indiana Commission for Higher Education: Indiana's High School Dropout Crisis**
http://www.che.state.in.us/dropout.htm

**Indiana Department of Education: Indiana's Graduation Rate**
http://www.doe.state.in.us/htmls/gradrate.html

**Education Commission of the States: Dropout Rates/Graduation Rates**
http://www.ecs.org/ecsmain.asp?page=/html/issuesK12.asp

**National Governors Association**
http://www.nga.org

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