

Dropping the Ball on Dropouts

by Richard P. Phelps

Given a choice between awarding high school diplomas to students when they are prepared for the rigors of college or work force training or when they have completed their fourth year of high school attendance (whether or not they are prepared), which would you choose?

Considering the probable consequences may make the decision more difficult. Choose the former option and many students will graduate “late,” that is, sometime after the end of their fourth year in high school. Some will never graduate.

Choose the latter option and more students will graduate “on time,” but they likely will not be prepared for the rigors of college or work force training; thus, their dropout date may only be postponed. Moreover, many will still drop out of high school because most drop out for non-academic reasons anyway: e.g., disliking school, becoming pregnant or a parent, caring for an ailing family member (Berkold et al. 1998, table 5; George-Ezzelle, Zhang, and Douglas 2006, table 4).¹

The U.S. Department of Education’s National Center for Education Statistics (NCES) has measured various types of high school graduation, completion, and dropout rates for decades. In 2006, NCES was directed by senior managers in the Education Department to reduce use of its standard graduation and completion rate measures² and instead promote the previously obscure *averaged freshman graduation rate* (AFGR) (Seastrom et al. 2005). The AFGR is an “on time” completion measure. Roughly, it estimates the proportion of high school freshmen who graduate in exactly four years within the same school or jurisdiction, and it ignores student in- and out-migration, which are substantial in some jurisdictions, particularly poorer ones (Seastrom et al. 2007).³

Some now inappropriately interpret this on-time-and-not-a-day-late graduation rate as *the* literal graduation rate—the proportion who *ever* graduate from high school (see, for example, Thornburgh 2006). Many students, however, graduate as soon as a day after their class’s official

graduation date, or they may do so a few weeks or months later, repeating a failed course in summer school or finishing course work missed due to accident or illness. Others may take another year to make up a year they were held back in school. Still others may need a few more years before they pass a General Educational Development (GED) test. Regardless, they *do* graduate (Hudson, Kienzl, and Diehl 2007, tables 1.1, 3.1; Ingels et al. 2002, 16; Reynolds 2006; U.S. Census Bureau 2007, table 2).

Moreover, most of those who graduate from high school late do so within no more than two years. According to Kolstad and Kaufman (1989, abstract), “That a substantial proportion of dropouts complete high school within a few years appears not to be widely known. Without understanding the nature and extent of this phenomenon, the severity and impact on society of the [high school] dropout problem may be overstated.”

The AFGR for the public high school senior class of 2003 was about 74 percent. By 2006, however, some 86 percent of the same cohort (i.e., all those now twenty years old) had obtained a regular high school diploma or a GED.⁴ Assuming past trends hold, another percentage or two will be added to the high school completion rate by the time the cohort reaches age twenty-eight (Hudson, Kienzl, and Diehl 2007, tables 1.1, 3.1; Ingels et al. 2002, 16; U.S. Census Bureau 2007, table 2).

Thus, within a decade of the original on-time graduation date, another 13 to 14 percent of Americans finish high school or attain an equivalency credential. The result is a high school completion rate that exceeds 87 percent, which may be near the upper limit possible: there are some who cannot and others who simply do not wish to complete high school (Day and Bauman 2000).

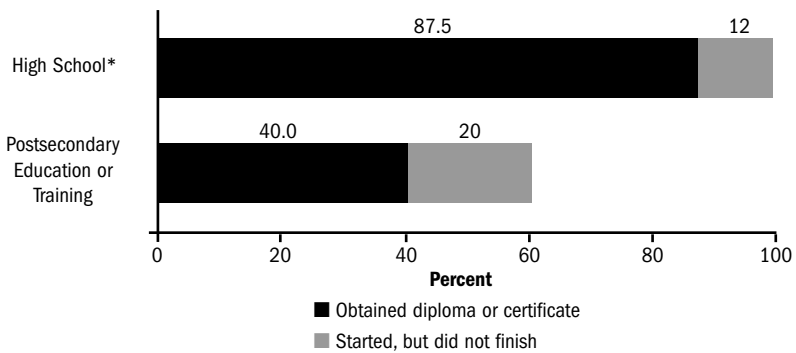
Additionally, some proportion of the remainder enrolls in post-secondary educational or occupational certificate programs despite failing to complete high school (Hudson, Kienzl, and Diehl 2007, iv).⁵ High school dropouts can even qualify for federal student loans in post-secondary programs by passing an “ability to benefit” test. The GED is only one of many qualified ability-to-benefit tests available.⁶

Are the alarms issued about the growing “dropout nation” (Thornburgh 2006), high school “dropout factories” (Balfanz 2008), and “America’s Leaky Education Pipeline” (Hunt and Tierney 2006) derived from misinterpretations of education statistics? In a word, yes.

In fact, considering that only about 40 percent of Americans have attained a college degree—either an associate’s or a bachelor’s—by their fortieth birthdays, it seems that the problem is more acute at that level. Between high school completion (more than 87 percent) and college completion (about 40 percent), almost half the U.S. adult population goes missing (U.S. Census Bureau 2007, table 2).

What happens to them? A sizeable number terminate their education with high school. Others earn postsecondary vocational certificates without taking credit-bearing higher education courses. Some 17 percent of adult Americans, however, begin credit-bearing course work in an institution of higher education and never complete a degree⁷ (U.S. Census Bureau 2007, table 2). Another few percent begin postsecondary occupational training and leave before obtaining a certificate (Hudson, Kienzl, and Diehl 2007, tables 1.1, 3.1).

This postsecondary dropout population in the United States exceeds thirty million adults. The number of adults who begin but fail to finish postsecondary education or training programs approaches twice that of high school non-completers (see figure 1).



*Total is less than 100 percent because a small proportion of U.S. adults do not finish middle or junior high school.

Sources: Berktoid, Geis, Kaufman, and Carroll 1998, table 5; George-Ezzelle, Zhang, and Douglas 2006, table 4; Hudson, Kienzl, and Diehl 2007, tables 1.1, 3.1; Ingels, Curtin, Kaufman, Alt, and Chen 2002, 16; U.S. Census Bureau 2007, table 2.

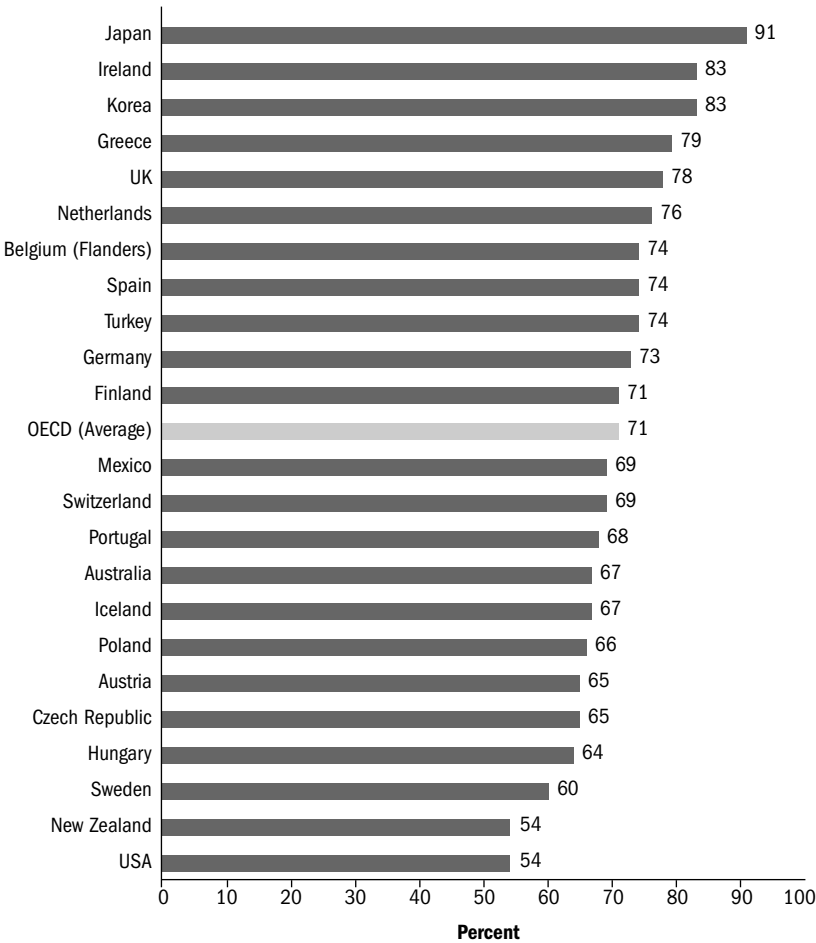
Figure 1. Educational Attainment of U.S. Adults Age 40, by Level of Education and Completion Status: 2006

Moreover, postsecondary dropouts may be more vulnerable than their high school counterparts in that, as adults, they have fewer claims on public resources and a greater likelihood of accumulating financial and familial responsibilities that limit their access to further education. In other words, their failure is more “final.”

Furthermore, postsecondary dropout rates are higher for disadvantaged minorities, despite their relatively smaller base populations. That is, students from underserved racial or ethnic groups enroll in college at lower rates, yet they are more likely to drop out from even this abbreviated number. Eight years after first enrolling in four-year colleges, degree-completion rates for Hispanic and African-American students (22 and 18

percent, respectively) are approximately half those for Asian-American and white students (40 and 48 percent, respectively) (Adelman 2004).

Such postsecondary dropout rates are not inevitable, however. Figure 2 shows that the on-time “survival rate” in U.S. university-level postsecondary institutions tied for *last* among Organisation for Economic Co-operation and Development (OECD) member countries in 2004. Only fifty-four of every one hundred students who started a four-year college program in the United States had finished it four years later (OECD 2007). Among similar higher education programs across twenty-three countries, only New Zealand’s rate was as low.



Source: OECD 2007a, table A3.6

Figure 2. Survival Rates for University-type Postsecondary Institutions in OECD Member Countries: 2007

Something seems askew in the Land of Opportunity. A college degree has become the point of entry for careers whose salaries can support a family in reasonable comfort. Yet large numbers of U.S. citizens who desire college success do not manage it. Why not?

A dropout occurring during the postsecondary years does not necessarily mean that its cause does also. Most postsecondary dropouts completed high school unready for the next step. The sense of accomplishment they might have felt upon completing high school can easily be replaced by a longer-lasting postsecondary sense of failure.

That begs the question: is it wise for education policymakers to pressure high schools to graduate their students *on time*, regardless of their levels of preparation for college or work force training? Or should the focus be directed toward preparing them for college or work force training, irrespective of graduation date?²⁸

Origins of the Current Preference for an “On-Time” Graduation Rate

Walter Haney is one of the last people anyone could have predicted would influence Republican Party education policy. Haney, after all, is the author of “The Myth of the Texas Miracle in Education,” a book-length journal article published during the heat of the 2000 presidential election contest between Governor George W. Bush of Texas and Vice President Al Gore (Haney 2000). For those who accepted the premise of the article, it represented a devastating indictment of Bush’s past and proposed education policies.



Haney defined a high school dropout as any ninth-grade student who did not graduate exactly three years later (i.e., on time and not a day late) in the same jurisdiction. This definition subsumes a large population of students who move during the intervening years or who graduate “late” for any reason whatsoever. Thus, students who graduate in June or August of their senior year instead of May are “dropouts,” even though they never in fact dropped out. A student graduating “late” after missing class due to ill health, expulsion, or natural disaster is a “dropout”—and a student graduating “on time” at a high school different from the one attended in ninth grade is likewise a “dropout.” Whether Haney’s politics led him to exaggerate the number of dropouts in Texas, his take on graduation and dropout statistics was soon accepted and widely disseminated in policy circles by Jay P. Greene (2001) of the Manhattan Institute. Greene adopted Haney’s method and apparently accepted Haney’s related assertions and assumptions: state and federal statisticians measured high school completion only one misleading way; state and federal statisticians

Federal Government Statistical Agencies on Graduation Rates

The statisticians in the U.S. Census Bureau (housed within the U.S. Department of Commerce) and the National Center for Education Statistics (housed within the U.S. Department of Education) are generally considered some of the world’s best at what they do. Careful, knowledgeable, and experienced, they consider all plausible rival hypotheses to explain a result and are rarely surprised. Moreover, they have ready access to many of the world’s other most-respected statisticians on contract, only a phone call or e-mail message away.

Perhaps only those who have worked in or with the Census Bureau and the NCES can fully appreciate the quality of these statisticians’ work. One such individual is Clifford Adelman; for many years NCES’s expert on high school course-taking patterns, he now works at the Institute for Higher Education Policy. In a recent article, written partly in response to the “Leaky Education Pipeline” (Hunt and Tierney 2006), he said, “Statistics on education issues get thrown around casually. . . . [O]f every one hundred ninth-graders, only eighteen will wind up with a bachelor’s or associate’s degree ten years later.”

Adelman continued:

Let’s get the distinction between official and unofficial statistics clear: Official statistics are, first and foremost, the responsibility of federal agencies—which happen to possess and deploy the extensive resources necessary to produce them.

hid information from the public; no one before Haney had thought of an on-time completion rate.⁹ (In fact, NCES had been calculating graduation and completion statistics calculated in any manner possible for years [see sidebar] and had made no secret of it [Hoffman 2002].)

With little apparent notice in the mass media, the Haney-Greene method of calculating high school completion statistics has been roundly criticized by statisticians and others (Adelman 2006; Chavez 2006; Clements 2007; Mishel and Roy 2006; Phelps 2003, 2005; Reynolds 2006; Sebring 2007; Solomon 2008a, 2008b; Warren 2005). Those with by far the most expertise on the topic are the statisticians working at the U.S. Census Bureau and NCES. Despite maintaining the AFGR in NCES databases long before Haney and Greene publicized it, these Ph.D.-level analysts had never promoted its use—*prima facie* evidence that they thought it not worth emphasis.

Meanwhile, the Haney-Greene method was accepted and promoted by some of the country's most influential commentators, including many

[Two] points about official statistics are critical: 1. They are impartial, but not value-free. 2. All official databases pass through a rigorous review process, governed by publicly accessible statistical standards, before the data are released.

Unofficial statistics are those generated by organizations, associations, think tanks, and interest groups outside the statistical-review processes of federal agencies. In presentations of unofficial statistics, it is extraordinarily rare to find rigorous reviews; public standards; disclosures of limitations; and full, transparent, accessible maps of variables. (Adelman 2006)

In the 1980s, the U.S. Census Bureau and the National Center for Education Statistics persuaded the U.S. Congress to fund improvements to both the Decennial Census (starting in 1990) and the ongoing Current Population Survey in order to collect representative demographic, employment, and income statistics for each of the more than twelve thousand school districts in the United States.

One result of this painstaking but successful effort was the district-level “completion ratio,” a measure of the number of those in an age band who had graduated from high school, divided by the number of persons in the age band. The completion ratio can be calculated for school district, county, or state; it cannot be manipulated by educators; and it offers them no incentives—either positive or negative—to “game” their graduation rates. This statistic, despite its imperfections, remains a more valid and reliable indicator of high school completion than some developed ad hoc over the past several years at great expense, in particular the averaged freshman graduation rate.

national and state think tanks (most, ironically, Republican Party-affiliated), the Bill & Melinda Gates Foundation, the Education Trust, the U.S. Secretary of Education, the National Governors Association (NGA), America's Promise Alliance, Civic Enterprises, *Education Week*, Music Television (MTV), and *Time* magazine.

As a result, despite the profound, multiple threats to the validity of the AFGR, it has been adopted as the official graduation-rate statistic for federal and state government use (NGA 2005). Of the three largest validity threats to the AFGR—student migration, delayed graduation, and community population growth or decline—an adjustment has been proposed only for migration.

Thus, students graduating even one day “late” are no longer counted as graduates and by implication categorized frequently as “dropouts.” In other words, though they graduate, they are not counted as graduates in the official graduation rate statistic. Moreover, even if they have never dropped out of school, they will be considered dropouts.

NCES researchers carefully inform their readers that the AFGR is an *on-time* high school completion measure. Others who cite the measure are not so careful, however. The Web site of the Gates Foundation provides just one of many examples. There one finds a bulleted phrase: “Nationwide, just over 70 percent of students graduate from high school” (Bill & Melinda Gates Foundation 2008).

There is no reason to doubt the sincerity of the Gates Foundation; chances are the phrase was intended literally. That another dozen percent of students do, in fact, graduate from high school becomes just another lost statistical nit—albeit a nit that represents more than half a million students a year.

Blaming the Victims, with Statistics

The rationale for holding schools accountable for graduation-completion rates makes them responsible for keeping students in school. That approach immediately raises validity concerns. Most who drop out of high school do so for non-academic reasons (Berkthold et al. 1998, table 5; George-Ezzelle, Zhang, and Douglas 2006, table 4; Mass Insight Education 2002). Schools are thus held responsible for behavior over which they exert no direct control.

Moreover, it would be difficult to imagine a graduation rate measure more *unfair* than the AFGR. Migration rates are strongly (and negatively) correlated with socio-economic status, so the poorest school districts are systematically disadvantaged by the AFGR. Thankfully, the National Governors Association has proposed adjusting for student migration (i.e., student transfers in or out of a school or jurisdiction between the freshman and senior years). The NGA, however, still retains the “on time” feature.

Given that most, and perhaps every one, of the more-frequently identified causes of graduation-date delays is more common in poorer communities, *any* on-time measure will be biased against those communities. Students there, more likely to arrive at high school behind academically, are thus more likely to fail one or more courses, retake the courses in summer school or later, and so graduate late. Students in poorer communities are more likely to “stop out” (i.e., leave school temporarily) to support the family financially or to help look after younger children, and thus they graduate late. Students in such communities are more likely to attend unsafe schools, stop out, and then graduate later from a different program.

There are at least two available policy alternatives superior to enforcing the AFGR:

- focus on reducing the rate of “permanent dropping out,” irrespective of educational level—a “permanent dropout” being one who gives up completely and never returns to school or work force training and “permanent dropping out” being more common at the postsecondary level (Entwisle, Alexander, and Olson 2004)
- increase academic achievement by increasing the rigor and alignment of courses from elementary through postsecondary education, which will better prepare students to meet the academic demands of the next level of education or training, whatever that may be

Discussion

The widespread acceptance of the averaged freshman graduation rate by policymakers despite its abundant flaws raises some troubling questions. For example, does exaggerating a problem through semantic distortion help to solve the problem, or does it misdirect attention, misplace priorities, and obfuscate public policy? Further, should education policies be based on the work of those who attract the most publicity or those with the greatest expertise?

What are the most critical threats to the quality of education in the United States? Among them, I would argue, two stand out for their neglect from the press and policymakers:

1. Much high-quality information and expertise on education policy topics are never seen or heard by policymakers, while too much poor-quality and biased misinformation is. For more than 99 percent of our citizens, and most of the country’s genuine experts, access to the eyes and ears of education policymakers is blocked by an impenetrable thicket of well-funded interest and advocacy groups.
2. American students arguably do not have to work as hard as students in many other countries, and current public policies in

effect support that lack of effort. The average yearly progress (AYP) of the No Child Left Behind Act as well as the AFGR hold schools, and not students, accountable for student behavior over which educators have no direct control.

There may be little that educators can do to evade NCLB's rules and sanctions. But gaming the averaged freshman graduation rate is simple—encourage students to take easy courses they are sure to pass and give diplomas to those who have not earned them.

Naturally, that will increase postsecondary and permanent dropout rates. But the grossly misleading averaged freshman graduation rate will also rise, and to many that will look like success.

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Notes

1. NCES solicited the reasons for dropping out among those in the NELS:88 cohort who had dropped out of school at any time within six years of completing the eighth grade. Each respondent could provide more than one reason. Less than half claimed “failing school” (39 percent) or “could not keep up with schoolwork” (32 percent). Thirty-four percent cited family reasons (including pregnancy or parentage); 32 percent cited job reasons. Forty-five percent said that they simply did not like school. Others left because they did not get along with teachers (29 percent) or other students (17 percent); they felt unsafe at school (10 percent); or they had been suspended (14 percent) or expelled (11 percent).

2. Traditionally, “graduation rate” was calculated as the number of high school graduates divided by the number of senior-year enrollees. “Completion rate” (or ratio) was calculated as the number of high school graduates divided by the number of people of the typical graduation age living in a jurisdiction.

3. Moreover, “Dropping out of high school is not an irreparable decision. Dropouts can and frequently do return to school later to earn a high school diploma or obtain an alternative credential by passing the GED test. . . . [E]arning a GED can open opportunities that dropouts largely lack, since most colleges and universities accept the GED as a basis for admission” (Ingels et al. 2002, pp. iv, 16).

4. Private high school graduates are counted in the latter measures, but not in the averaged freshman graduation rate. But excluding all private high school graduates from the latter measures makes only a 0.01 percentage-point difference.

5. Any high school dropout who ultimately earns an associate’s or bachelor’s degree ends up counted in the educational attainment statistics as a postsecondary education graduate, and not as a high school non-completer. Any high school dropout who obtains an occupational certificate, however, remains in the education statistics as a high school non-completer (i.e., dropout), even if the individual’s certificate is in a highly remunerative technical field.

According to the U.S. Census Bureau (2007, p. 3), “Field of training sometimes affects earnings as much as education does. In 2001, people with a bachelor’s degree in engineering earned 54 percent more than people with a bachelor’s degree in education. Vocational certificate and associate’s degree holders with a technical degree in computers or engineering earned as much as people who held a bachelor’s degree in liberal arts, education, or social science.”

6. The GED offers an option to students who wish to avoid schools overrun by violence, to escape bullying and pressure to use drugs, who are sick, who are pregnant, who must leave school in order to work to support their families, and to older adults. Along with their advocacy of the AFGR, some critics of traditional high school completion measures have shamelessly dismissed the value of the GED.

7. Another group of U.S. adults of indeterminate size drop out of higher postsecondary degree programs but are reported in the educational attainment statistics with the lower degree (e.g., they dropped out of a bachelor’s degree program after having completed an associate’s degree; they dropped out of a graduate or professional program after having completed a bachelor’s degree).

8. Venezia, Kirst, and Antonio (2003) identified several misconceptions that high school students have about college. Two are pertinent here. First, many students believe that meeting high school graduation requirements will prepare them for college. Second, they believe that getting into college is the highest hurdle in the path to college success. Even for two-year colleges with open admissions policies, for

example, many entering students fail to consider the course-placement policies, which are typically more rigorous than those for high school graduation.

9. In an article largely based on the Gates Foundation's promotion, *Time* magazine (Thornburgh 2006, p. 33) claimed: "In 2001, Jay Greene, a senior fellow at the Manhattan Institute, published a study that peeled back the layers of statistical legerdemain. Poring over raw education data, he asked himself a basic question: What percentage of kids who start at a high school finish? The answers led Greene and subsequent researchers around the country to place the national graduation rate at anywhere from 64% to 71%."

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