

Dropout Rates for High School Students

Eugene M. Lewit

In this, the second issue of *The Future of Children*, we introduce Child Indicators as a regular feature of the journal. Because key statistical indicators provide us with a picture of the well-being of children, we believe those indicators can be an important guide in developing and implementing effective policies. Our main goal is to foster, through review and analysis, a greater appreciation of the implications and limitations of specific indicators. Although the information conveyed in Child Indicators will be current, our purpose is not just to disseminate the latest statistics. Ultimately, as we seek to improve the lot of children and families, we need to measure what we value rather than value what we can measure.

Because this issue of the journal deals with school-linked services, this article examines a frequently discussed indicator pertinent to the subject: the dropout rates for high school students. The dropout rate is a critical consideration in the implementation of school-linked services as well as academic programs. Basing services in schools can only be effective to the extent that children attend school. Further, by expanding the delivery of an assortment of nontraditional services to meet the needs of children, program providers may help reduce the dropout rate by making it easier for students to successfully complete high school.

Dropout Rates for High School Students

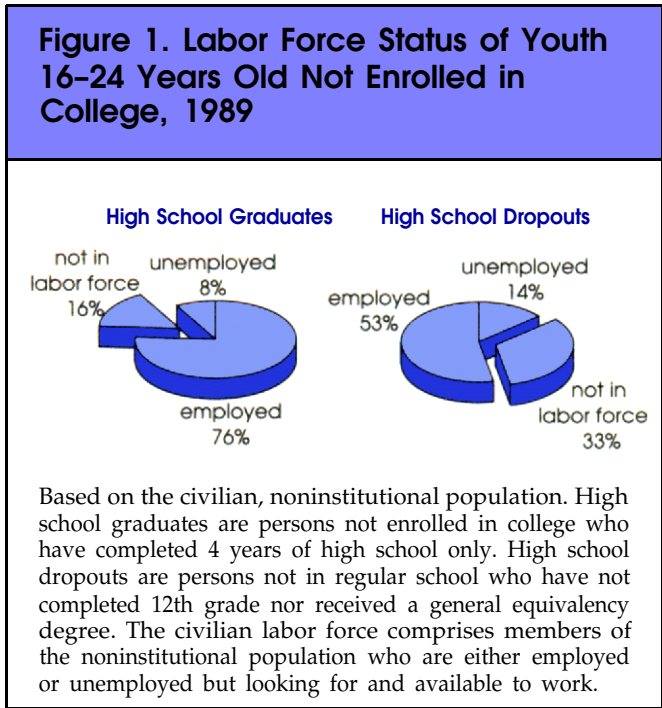
The consequences of dropping out of high school can be severe. School serves many essential functions for adolescents, including training in general education, vocational and life skills, and socialization. Youth who do not complete high school are far more susceptible to health, economic, and social problems. For example, compared to families headed by individuals who are high school graduates but have no additional education, families headed by dropouts are twice as likely to have in-

comes below the federal poverty level.¹ Moreover, the relationship between dropping out of high school and the risk of other problems is evident soon after youth leave school. Among 16- to 24-year-olds not enrolled in college, 76% of high school graduates are employed, compared with only 53% of high school dropouts (figure 1); in fact, one third of high school dropouts in this age group are not even in the labor force.

Because of concern about the problems posed by school dropouts, Congress mandated that, beginning in 1989, the National Center for Education

Statistics (NCES) report annually on dropout and retention rates. In addition, in 1989 the President and the state governors targeted completion of high school as one of six national education goals for the year 2000. In response to these mandates and policy initiatives, the NCES has moved to ensure the availability of improved data on both high school dropouts and graduates.² The data in this article reflect recent modifications in the reporting of high school dropout rates by NCES and others in an effort to improve the monitoring of the state of education in the United States.

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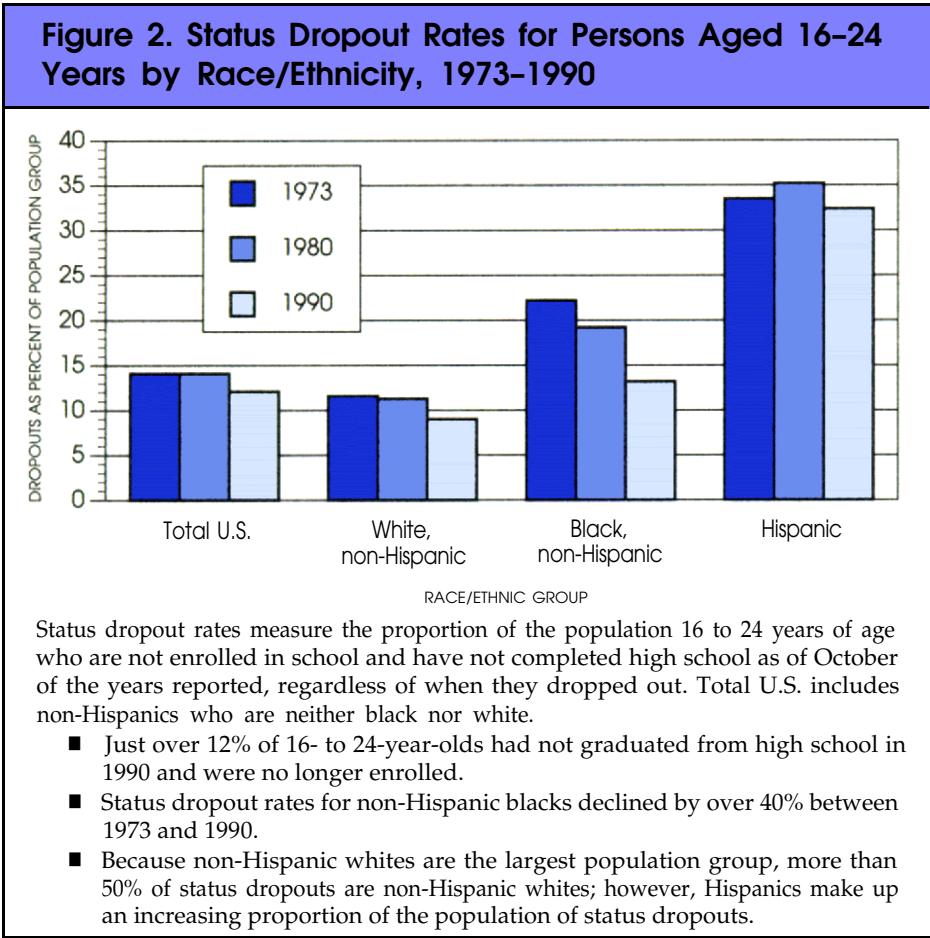
Source: U.S. Bureau of the Census, *Statistical Abstract of the United States: 1991*.

Many different statistical constructs and sources of data have been used to measure the success or failure of students to complete school. Conclusions drawn from these statistics depend on the definition of the measure, the sources of the data, and the level of detail at which the statistic is applied. Depending on the conclusion one wishes to support, the choice of different measures can be used to emphasize positive or negative aspects of trends in schooling status. For example, in 1989 over 87% of 16- to 24-year-olds were enrolled in or graduated from high school, but this also means that over 12% were dropouts.³

Status Dropout Rates

In statistics about schooling, a major distinction exists between status and event rates. Status rates (similar to prevalence rates in epidemiology) measure the proportion of the population of a given age or characteristic (for example, ethnicity) according to schooling status (that is, graduated, currently enrolled, or neither).⁴ Since a large number of students do not complete high school in 4 years, these rates frequently are calculated for age groupings that extend beyond the typical graduation age of 18.

Status dropout rates measure the magnitude of the dropout problem in the population at a point in time and can serve as an indicator of the need for further educational programs for individuals who have dropped out. A shortcoming of status measures (especially when they include individuals well over 18 years of age) is that they quantify events that occurred in the past. Thus, status rates react slowly to recent changes in the high school environment and may give a misleading picture of current trends. Similarly, they may be affected by events that have little to do with the function of the education system. An influx of immigrants with low levels of education, for instance, could increase status dropout rates, although there may have



Source: U.S. Department of Education, National Center for Education Statistics, *Dropout Rates in the United States: 1990*.

been no change in the education system.

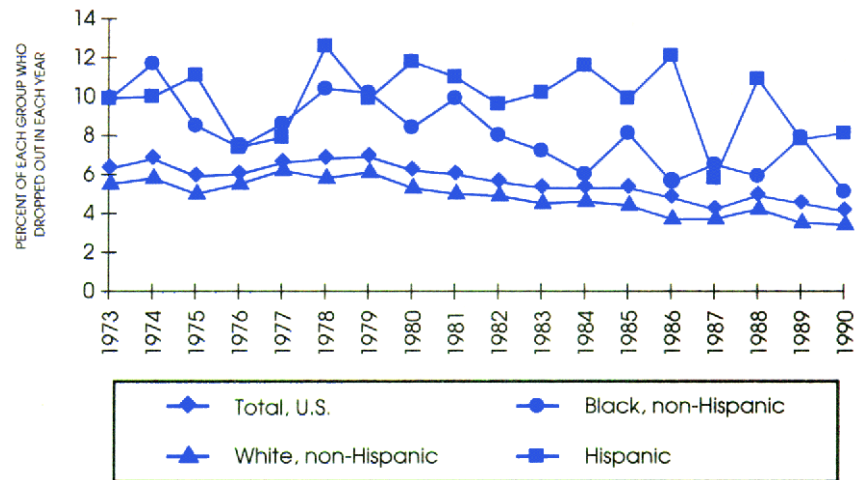
In figure 2 we present data on status dropout rates (defined as the proportion of the population 16 to 24 years of age who are not enrolled in high school and have not graduated). The rates are calculated using data from the Current Population Survey (CPS), a monthly survey of a nationally representative sample of the U.S. civilian population. Every October the CPS collects data on current and prior enrollment status and educational attainment.⁴ Data for Hispanics were first reported for 1973, and in 1991 data were first reported separately for three mutually exclusive racial-ethnic categories: white, non-Hispanic; black, non-Hispanic; and Hispanic.²

Status dropout rates for white youths have declined by 22% since 1973 and status dropout rates for black youth have declined by over 40% over the same period. As a result of these differences in trends, the difference between the rate for white youth and the rate for black youth declined by 6.4 percentage points over this 17-year period. The rate for Hispanic youth aged 16 to 24 years is more than twice the rates for white and black youth and has not declined appreciably since data for Hispanics were first reported in 1973. Despite having lower dropout rates than blacks and Hispanics, whites accounted for over half of all status dropouts in the 16- to 24-year-old age group in 1990.

Event Dropout Rates

In contrast to status rates, event dropout rates (similar to incidence rates in epidemiology) measure events that occur in a single calendar year. The event dropout rate² is the proportion of all students enrolled in school at the beginning of a 12-month period who leave school by the end of that 12-month period without graduating. This rate can be calculated for any grade and for students in the aggregate. Event rates measure the number of students leaving school

Figure 3. Annual Event Dropout Rates for Grades 10-12, Ages 15-24, by Race/Ethnicity, 1973-1990



Event dropout rates measure the proportion of students who drop out of school during a 12-month period. Rates for Hispanics and black, non-Hispanics show high levels of year-to-year volatility because they are based on relatively small samples. Rates are also sensitive to modifications in data editing procedures which were changed in 1986. These changes appear to have reduced rates slightly.

- On average, 4.5% of all 15- to 24-year olds in grades 10-12 dropped out of school each year between 1986 and 1990.
- For all groups reported, rates have declined over the last 10 years.

Source: U.S. Department of Education, National Center for Education Statistics, *Dropout Rates in the United States: 1990*.

in a given year and can be used to make comparisons between years to evaluate changes in programs to improve retention of high school students. In contrast to status rates, event rates are very sensitive to contemporaneous events and are sometimes averaged over several years to smooth out year-to-year fluctuations.⁴

But event measures also have shortcomings. Because they rely on enrollment statistics at the beginning and the end of a year, they do not distinguish between students who attend school continuously and those who drop out and re-enroll or are replaced by new enrollees during a year. They also fail to count students who do not appear in base period statistics—for instance, students who dropped out prior to beginning high school and high-school-age migrants who did not enroll.⁴

Event dropout rates, the proportion of all individuals enrolled in school in October of a particular year who left school without graduating by the next October, are reported in figure 3. Like the status dropout rates, these rates are also calculated from CPS data. Because of the small size of the Hispanic sample, its year-to-year variability is greater than the variability of the rates for the other groups. The overall and white dropout rates increased between 1973 and the late 1970s but have fallen since then. The rate for blacks fell by 48% between 1973 and 1990. On average, Hispanic youth had the highest event dropout rate during the period, although their dropout rate declined by over 30% between 1980 and 1990.

Status rates (reported in figure 2) are higher than event rates (reported in figure 3) be-

cause they represent the cumulative effect over several years of the annual event rates. A comparison of figures 2 and 3 shows how differences in event rates are reflected in status rates. Thus, the substantial decline in the status rate for black youth between 1973 and 1990 reflects the decline in event rates over this period, and the fact that Hispanic youth dropped out of high school at a higher annual rate than other youth during the period is reflected in the elevated status dropout rate for this group in 1990.

Conclusions

The news about high school dropout rates examined here is mixed. The data show that all groups experienced substantial improvement in event dropout rates in the last 10 to 15 years; however, the event dropout rates for Hispanic and black youth remain greater

than those for white youth. Although almost 60% of status dropouts in 1990 were white, Hispanics make up an increasing proportion of all status dropouts (almost 30% in 1990) because the proportion of Hispanics in the population of 16- to 24-year-olds has increased and because status dropout rates for Hispanics have not declined as have status rates for whites and blacks.

Should Americans be content with an annual event dropout rate that has fallen to almost 4%? Such a rate still means that almost 350,000 students dropped out of high school in 1990. Moreover, important differences in the dropout rates of different subgroups of the population persist: Rates are higher in central cities than in suburban areas, and there are a number of states and local school districts with dropout rates far above the national average. In addi-

tion, data from a special longitudinal survey reveal that almost 7% of a cohort of eighth graders, whose activity is not reflected in the event rates for the tenth through twelfth graders reported in figure 3, dropped out of school between 1988, when they were in eighth grade, and 1990, when they would have been in tenth grade.² Altogether, there are today in the United States more than 3.8 million 16- to 24-year-old high school dropouts who have concluded that our education system does not meet their needs. By and large, these teens will find themselves poorly prepared for adult society. Developing policies and programs to meet the needs of this group of dropouts and the large group of potential dropouts still enrolled in school is one of the most important challenges the American education system faces.

1. U.S. Bureau of the Census. *Statistical abstract of the United States: 1991*. 111th ed. Washington, DC: U.S. Government Printing Office, 1991.
2. U.S. Department of Education, National Center for Education Statistics. *Dropout rates in the United States: 1990* (NCES 91-053). Washington, DC: U.S. Government Printing Office, September 1991.
3. U.S. Congress, Office of Technology Assessment. *Adolescent health—Volume I: Summary and policy options* (OTA-H-468). Washington, DC: U.S. Government Printing Office, April 1991.
4. Kominski, R. Estimating the national high school dropout rate. *Demography* (1990) 27,2:302-311.