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ABSTRACT

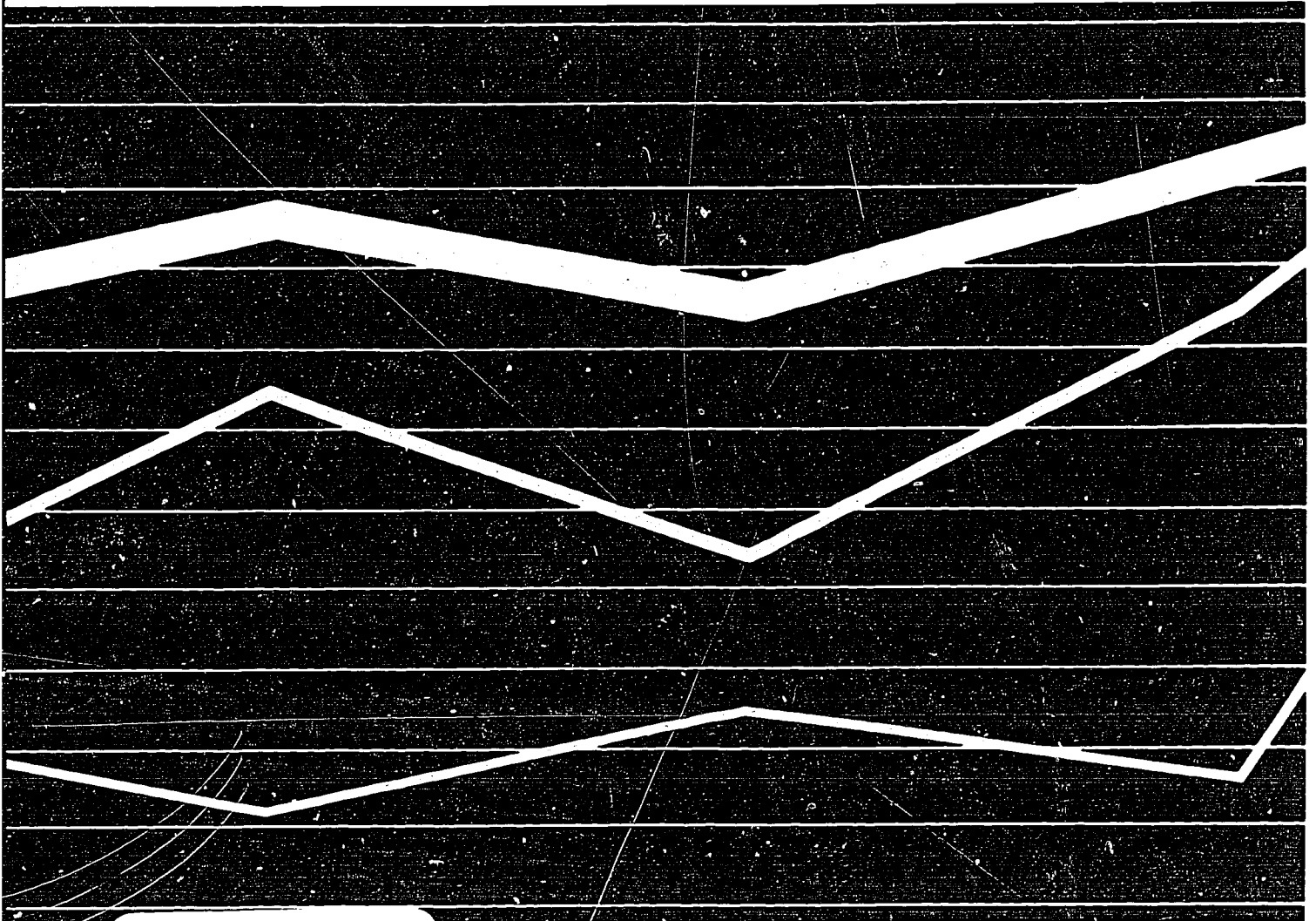
Students who drop out of high school before graduating are of concern to families, educators, and policymakers. To obtain information on the scope of the dropout problem, three sources of national data were reviewed: (1) the Bureau of the Census' Current Population Survey; (2) the Center for Statistics' Common Core of Data; and (3) the Center for Statistics' High School and Beyond study. The results of the review revealed that calculation of dropout rates is difficult because of definitional and data problems. National data over time on the incidence of dropping out do not exist. Poor academic performance was found to be the best predictor of who drops out of school. Many young women cite marriage or pregnancy as reasons for dropping out, and students who are rebellious, delinquent, or chronically truant drop out at higher rates than do other students. Dropouts have more difficulty finding and holding jobs and earn less money than do high school graduates. An estimated 40% of high school dropouts return to the educational system and an estimated 30% of dropouts eventually receive a high school diploma or an alternative credential. These findings have implications for educational policy and research, especially in the area of dropout prevention/intervention programs and programs offering alternative high school credentials. (Data sources are described in detail in the appendix.) (NB)

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School Dropouts in the United States



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U.S. Department of Education

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Center for Education Statistics

"The purpose of the Center shall be to collect and disseminate statistics and other data related to education in the United States and in other nations. The Center shall . . . collect, collate, and from time to time, report full and complete statistics on the conditions of education in the United States; conduct and publish reports on specialized analyses of the meaning and significance of such statistics; . . . and review and report on education activities in foreign countries,"—Section 406 (b) of the General Education Provisions Act, as amended (20 U.S.C. 1221e-1).

School Dropouts in the United States

by Aaron M. Pallas

Overview

Substantial numbers of students drop out before graduating from high school. Many never return to the educational system. Dropouts are of concern to families, educators, and policymakers for a variety of reasons. They may suffer economic and social disadvantages throughout their lives. For the Nation as a whole, the costs of the dropout problem are reflected in higher welfare expenditures, lost tax revenues, and increased crime and crime prevention costs (Catterall, 1985). The intangible costs to individuals and society are also substantial.

This paper presents a variety of information regarding school dropouts. It examines national data and trends related to dropouts, and the reasons for dropping out. In addition, it considers the consequences of dropping out, with particular attention to the frequency and results of later returns to the education system. The major findings are:

Dropout Rates

- Calculating dropout rates is difficult because of definitional and data problems.
- National data over time on the incidence of dropping out do not exist. The available annual national data instead measure related phenomena—high school graduation or completion rates.
- Nationally, slightly less than three-quarters of all 18- and 19-year-olds have completed high school.
- High school completion rates vary considerably across school districts and population groups. They are much lower than the national average in urban areas and for black and Hispanic youth.

Reasons for Dropping Out

- Poor academic performance is the best predictor of who drops out of school.
- Students who are rebellious, delinquent, or chronically truant drop out of school at higher rates than those who are not.

- Substantial numbers of young women cite pregnancy or marriage as reasons for dropping out.

The Consequences of Dropping Out

- Dropouts have more difficulty in finding and holding jobs. The estimated unemployment rate for dropouts shortly after they leave school is more than twice that of high school graduates of the same age.
- Those who do not finish high school earn less money annually than high school graduates. In 1985, among year-round, full-time workers 25 years old and older, the typical high school graduate earned over \$4,000 per year more than a comparable worker with 9 to 11 years of schooling.
- The estimated lifetime earnings of high school graduates who do not attend college are approximately \$200,000 higher than the earnings of those who do not complete high school.

Returning to the Educational System

- An estimated 40 percent of the students who drop out of high school subsequently return to the educational system.
- An estimated 30 percent of the students who drop out of school eventually receive a high school diploma or an alternative credential.
- National data show that the proportion of individuals who have not completed high school declines considerably with age. The noncompletion rate for 31- to 34-year-olds is approximately half that of 18- and 19-year-olds.
- The decrease in the noncompletion rate with age is due to the graduation of some who were still in school at age 18-19 as well as the return to school and completion by others who were out of school as 18- and 19-year-olds.
- Those who are more likely to return and complete include whites, those with higher test scores prior to dropping out, and those from families with a higher socioeconomic status.
- Alternatives to regular day school programs have become more prevalent in the past 20

years, and many people are using these routes to acquire high school credentials.

- Little is known about the social, economic, and educational consequences of obtaining high school graduation credentials outside of regular day school programs.

Implications

- A key to effective dropout prevention programs may be the early identification of potential dropouts, so that services can be provided to at-risk students prior to high school.
- Given the substantial proportion of dropouts who later return to the educational system, another approach to the dropout problem is greater efforts to bring young people back into the educational system after they have dropped out.
- Also helpful may be more flexible high school programs, such as those for expectant mothers and parents of young children, that allow youth to stay in school while meeting family or job responsibilities.
- It is important to know who receives alternative high school credentials, and what the consequences of obtaining these various credentials might be.

Data

Three sources of national data are used in this review: the Bureau of the Census' Current Population Survey (CPS), the Center for Statistics' (CS) Common Core of Data (CCD), and CS' High School and Beyond (HS&B) study. These are described in detail in the appendix to this paper.

Dropout Rates

Difficulties in Measuring Dropouts

How severe is the dropout problem? While the question is simple, the answer is not, because there is no standard definition of who is a dropout or how to calculate a dropout rate.

- Most education agencies (schools, school districts, and States) have their own unique ways

of calculating dropout rates. There are no consistent definitions of who is considered a dropout, or what the appropriate baseline population is on which to calculate a dropout rate.

- Because definitions of the dropout rate vary so much from one locale to the next, it is difficult to compare dropout rates across schools, districts, and States.

Even the two major Federal producers of education data, the Bureau of the Census and the Center for Statistics in the U.S. Department of Education, collect data related to dropouts in quite different ways.

Many of the discrepancies in reported "dropout rates" stem from the fact that the data being collected do not directly pertain to dropouts, but to other related concepts.

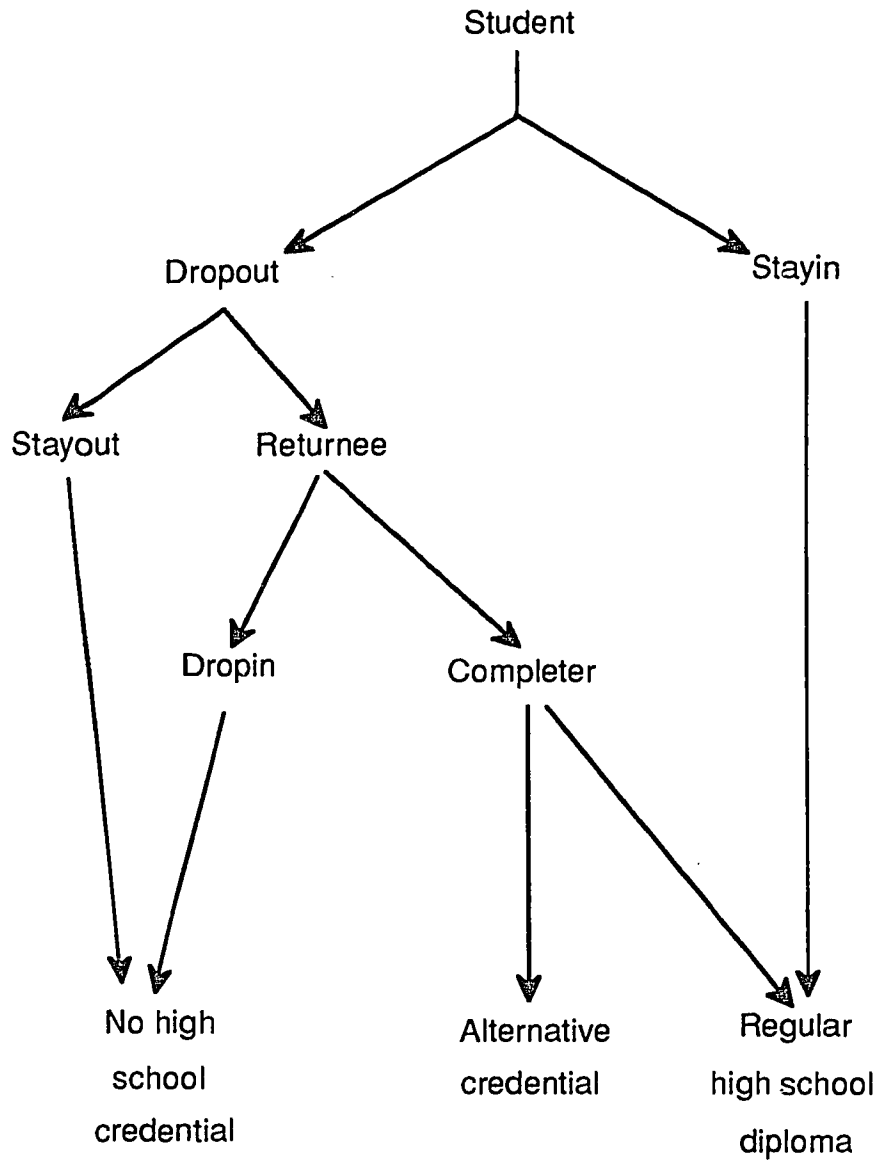
- National data on dropouts over time are not available. Data typically reported concern high school graduation or completion rates, which are not the same as a dropout rate.

The differences between a dropout rate and a graduation rate are illustrated by Figure 1, which traces alternative educational paths a student may pursue. Conceptually, a school dropout can be thought of as someone whose progress toward a high school diploma has been interrupted by a period of nonenrollment in school. All students, then, can be characterized as either dropouts or "stayins," with stayins having continuous school enrollment through high school graduation. However, some dropouts eventually do graduate from high school or obtain an alternative credential.

Dropouts can be classified as either "stayouts" or "returnees." Stayouts are those dropouts who have never returned to the educational system, while returnees are dropouts who have returned to the educational system at least once. The "educational system" here refers not only to the same school as was previously attended, but also to other schools and settings, including alternative and nonregular day education programs, and to other credentialing procedures such as the General Educational Development examination (GED) or specific State equivalency tests.

There are two types of returnees: "dropins," who have come and gone again (perhaps repeatedly) without receiving a diploma (or other credential), and

FIGURE 1 -- Alternative educational paths through high school



“returnee-completers,” who have returned and have eventually earned a diploma or its equivalent.¹ Included in the latter group are those students whose return to the system consists only of taking and passing an equivalency examination.

The Bureau of the Census publishes estimates of the proportion of different age groups who have completed high school (public and private) based on responses to a household survey. The Center for Statistics reports a graduation rate, derived from its Common Core of Data (CCD) collection, which represents the number of public high school graduates nationally in a given year as a fraction of the number of 9th grade students in public schools 3 school years earlier.

- Graduation rates are calculated from both Bureau of the Census and Center for Statistics data, based on the number of high school graduates in a given cohort (an age cohort in the case of the Bureau of the Census and a grade cohort in the case of the Center for Statistics) at a specific point in time.

In either case returnee-completers who have gained their credentials through several different paths are included along with stayins in the count of graduates. However, stayins making slower than normal progress are implicitly considered dropouts, since they are not yet graduates.²

The Center for Statistics does have national data on dropouts from the High School and Beyond study, but those data are only for a single cohort of students, high school sophomores in 1980. Furthermore, because the students were surveyed during their sophomore year, the dropout rate is underestimated since it does not take into account those who had left school prior to that time.

Dropout and Completion Data

Although the Bureau of the Census' and Center for Statistics' methods for calculating high school graduation rates are very different, they produce rates for a similar age group that are quite similar. For those at the age when students are expected to graduate, both methods reveal that:

- Nationally for the past decade, slightly less than three-quarters have completed high school, and

- High school completion rates improved somewhat after 1982 (Table 1).

Completion rates have increased substantially in the period since World War II. The completion rate for 18- to 19-year-olds was 43 percent in 1947 (U.S. Department of Commerce, 1948).

Dropout rates vary considerably across schools and population groups (Table 2).

- Students in urban areas are more likely to drop out than those in rural and suburban areas.
- Students in public schools drop out more than those in Catholic schools.
- Blacks and Hispanics are more likely to drop out than whites.
- Men are more likely to leave school before graduation than women.
- Students from lower socioeconomic backgrounds are more likely to drop out (U.S. Department of Education, 1983).

Reasons for Dropping Out

Knowledge about why young people drop out of school can help schools, school districts and States in developing effective policies and practices for encouraging them to stay in or return to school.

- Students drop out of school for a variety of reasons, which are related to both in-school and out-of-school experiences.

There is no one reason why students drop out of school. But the reasons for, and factors associated with, dropping out can be grouped into a few basic categories: academic performance, social adjustment, and early transition into adulthood (Pallas, 1984). The most current data on reasons for dropping out are from the High School and Beyond study.

Academic Performance

Students' marks in school and, to a lesser extent, performance on standardized tests are salient indicators of academic success or failure. Students who ex-

Table 1**High school completion rates using Bureau of the Census and Center for Statistics data:
1974 to 1985**

Year	Percent completing high school	
	Bureau of the Census ¹	Center for Statistics ²
1974	73.4	75.7
1975	73.7	74.7
1976	73.1	75.1
1977	72.9	74.7
1978	73.5	73.7
1979	72.8	72.6
1980	73.7	71.9
1981	72.5	72.1
1982	72.0	72.8
1983	72.7	73.9
1984	73.3	74.1
1985	74.6	—

—Not available.

¹ Proportion of 18- and 19-year-olds who have completed high school.

² Public high school graduates as a proportion of public school 9th graders three school years earlier.

SOURCE: U.S. Department of Commerce, Bureau of the Census, Current Population Reports, Series P-20, *School Enrollment—Social and Economic Characteristics of Students: October* (various years) and Current Population Survey, October 1985, special tabulations. U.S. Department of Education, National Center for Education Statistics, *The Condition of Education* (various years) and *Digest of Education Statistics* (various years).

Table 2**Dropout rates for 1980 high school sophomores by sex and selected background characteristics**

Background characteristic	Percent dropout rate		
	Total	Male	Female
All students	13.6	14.7	12.6
Race/ethnicity			
American Indian and Alaskan natives	29.2	27.2	31.8
Hispanic	18.0	18.1	18.0
Black	17.0	20.3	14.1
White	12.2	13.0	11.5
Asian American	3.1	3.5	2.7
Socioeconomic status			
High	5.2	7.0	3.2
Middle	9.0	9.6	8.3
Low	17.4	17.8	17.1
Unknown	31.6	32.3	30.9
Community type			
Urban	18.9	20.8	17.0
Suburban	11.8	12.5	11.0
Rural	12.8	13.6	12.0
Geographic region			
Northeast	11.3	13.4	9.0
North Central	12.0	12.2	11.7
South	15.2	16.4	14.0
West	16.6	17.0	16.3
School type			
Public	14.5	15.5	13.6
Catholic	2.3	3.2	1.6
Other private	—	—	—
High school program			
Academic	4.0	4.5	3.6
General	12.9	12.7	13.0
Vocational/technical	15.1	16.9	13.2

—Estimates not presented because of small sample size and high nonresponse in the base-year sample.

SOURCE: U.S. Department of Education, National Center for Education Statistics (1983), *High School Dropouts: Descriptive Information from High School and Beyond*, NCES 83-221b.

perience failure in school are more likely to drop out of the system.

- Poor academic performance is the best predictor of who drops out of school.
- Students with a "D" average are 5 times more likely to drop out than students with a "B" average (U.S. Department of Education, 1983).

Social Adjustment

Students experiencing difficulty negotiating the personal and social adjustments of adolescence are more likely to drop out of school.

- Students who are rebellious, delinquent or chronically truant drop out of school at higher rates than those who are not.

Truancy and getting in trouble in school frequently foreshadow dropping out of school. Among high school sophomores, chronic truants are 40 percent more likely to drop out of high school than regularly attending students, everything else being equal, and delinquent youth are 25 percent more likely to drop out than are comparable nondelinquent youngsters (Pallas, 1984).

Early Transition into Adulthood

Adolescents who assume adult responsibilities at an early age may find it difficult to cope with both school and adulthood. Teenagers assuming adult family and work roles are more likely to drop out of school than youngsters who postpone those roles.

Adult family roles. Substantial numbers of young women claim pregnancy or marriage as reasons for dropping out of school.

- Among young women, only poor academic performance rivals the importance of adult family roles as a reason for dropping out of high school (U.S. Department of Education, 1983).

Among female dropouts from the sophomore class of 1980, 31 percent claimed they dropped out because they married or planned to marry, while 23 percent gave pregnancy as a reason for dropping out (students could give more than one reason).

Adult work roles. Many dropouts report that they left high school to go to work (U.S. Department of Education, 1983; Rumberger, 1983). Dropouts report

leaving both because they had to support a family, and because they were offered jobs and chose to work (U.S. Department of Education, 1983).

- Working at a regular job while in high school increases by more than one-third the chances that a youth will drop out compared to youngsters who are not as involved in work (Pallas, 1984).
- High school students who work over 20 hours per week are more likely to drop out than those who do not work at all (D'Amico, 1984).

Working more than 20 hours per week may contribute to an increased likelihood of dropping out because of the drain on time and energy available for schoolwork. Alternatively, working may teach youngsters the importance of persistence and dependability, traits critical for successful schooling as well. This may account for the fact that those who work less than 20 hours per week are less likely to leave school than those who work more hours or do not work at all (D'Amico, 1984).

The Consequences of Dropping Out

Dropping out of school worsens the life chances of school leavers. Education is generally regarded as a means for social mobility, and youth who fail to complete high school tend to damage their chances of future success. Nongraduates do worse than high school graduates in the labor market and in overall economic well-being.

However, it is unclear how much of the differential between dropouts and stayins is attributable to dropping out as opposed to other factors, since dropouts have other disadvantages as well. They tend to come from disadvantaged families. They are disproportionately minority youngsters, and frequently have socially and economically deprived backgrounds (Pallas, 1984; Rumberger, 1983; Table 2). Furthermore, as was noted earlier, dropouts often have a history of academic failure.

Labor Market

School dropouts are less likely to participate in the labor force than high school graduates. Fourteen percent of male dropouts and about one-half of female dropouts age 16 to 24 were not participants in the labor force, that is, were neither employed nor looking for work, in 1985. Among high school graduates

not enrolled in college, much lower proportions—6 percent of males and 20 percent of females—were not in the labor force in 1985 (U.S. General Accounting Office, 1986).

Among labor force participants, noncompleters also have higher rates of unemployment than high school graduates.

- In 1985 the unemployment rate for men and women age 16 to 24 who had not graduated from high school was more than double the rate for high school graduates (U.S. General Accounting Office, 1986).
- Those with fewer than 12 years of schooling comprise a large part of the long-term unemployed (Feldstein & Ellwood, 1982).

Income

Among those who work full time, people who do not graduate from high school earn less money than high school graduates. The median annual income of year-round full-time workers is reported annually by the Bureau of the Census.

- Among full-time, year-round workers 25 years or older in 1985, earnings of high school graduates with no college experience were higher than earnings of those with 9 to 11 years of school—26 percent for men and 31 percent for women (U.S. Department of Commerce, 1986).
- This earnings gap between persons with exactly 12 years of schooling and those with 9 to 11 years had increased between 1970 and 1985. In 1970 it was approximately 12 percent for men and 20 percent for women (U.S. Department of Education, 1986).

These figures actually underestimate the income differential between high school graduates and noncompleters, in that some individuals do not even complete 9 years of schooling. The annual earnings of year-round, full-time workers who have completed fewer than 9 years of schooling are substantially lower than the earnings of those who have completed some high school. The gap between the earnings of high school graduates obtaining no further schooling and the earnings of those completing less than 9 years of schooling is even greater than the discrepancies noted above—approximately one-third for those with 8 years of school and about 60 percent for

those with under 8 years in 1985 (U.S. Department of Commerce, 1986).

The Bureau of the Census has reported estimates of lifetime (age 18 to 65) earnings by years of school completed, as of 1979 (U.S. Department of Commerce, 1983).

- The estimated lifetime earnings of high school graduates are approximately \$200,000 higher than the earnings of those who do not complete high school.

It is estimated that a male who completes fewer than 12 years of school (stayouts and dropins) can expect to earn \$601,000 between the ages of 18 and 65, while a male who completes exactly 12 years of school can expect to earn \$861,000.³ The difference in the expected lifetime earnings of male noncompleters and high school graduates who obtain no further education is thus \$260,000. The differential is not as large for women: \$170,000 (\$381,000—\$211,000).

In another sense, these income comparisons underestimate the cost of not finishing high school. High school graduates who attend college earn even more, both annually and over their working careers, than do high school graduates who obtain no further schooling. Comparisons between noncompleters and high school graduates not pursuing college do not reflect the sizable economic returns that many high school graduates derive from continuing their education in college.

Not all of the difference between the earnings of noncompleters and terminal high school graduates can be attributed solely to the presence or absence of a diploma. Noncompleters and graduates differ in many ways, with graduates showing more persistence, dependability and ability than stayouts and dropins.

- These and other factors that distinguish graduates from noncompleters are highly valued by employers, and account partly for the differences in earnings between the two groups.
- McDill, Natriello, and Pallas (1986) conclude that about one-half of the difference in lifetime earnings between noncompleters and graduates is due to differences between them in ability and other factors, and about one-half is due to dropping out.

Regardless of what adjustments are proposed, estimates of the economic consequences of not completing high school are substantial.

Nonmonetary Consequences

There are nonmonetary consequences of dropping out as well. While still in school, dropouts score considerably lower than stayins on standardized tests of cognitive performance (Pallas, 1984). There now is evidence that dropping out is associated with a further widening of the gap in achievement between dropouts and stayins.

- Students who drop out show less cognitive growth than students who persist to graduation.

A battery of cognitive tests was administered to High School and Beyond sophomores in the spring of 1980, and again 2 years later, when some had dropped out and the stayins were about to graduate from high school. Alexander, Natriello, and Pallas (1985) showed that, all else being equal, the students who had stayed in school improved their test performance during the 2-year period more than students who had dropped out. These tests were not closely linked to a specific high school curriculum, but tapped more general knowledge.

Other nonmonetary consequences of dropping out include poorer health, decreased political participation, and lessened social mobility. However, there are no recent and reliable estimates of these social costs of dropping out (Lyke, 1986).

Returning to the Educational System

Most dropouts, even when surveyed shortly after dropping out, believe that leaving school short of graduation was a poor decision (Peng, 1985). Many return to school at some point.

- An estimated 40 percent of high school dropouts return to the educational system (i.e., become returnees).

A recent study estimated that, of the approximately 100,000 dropouts from the California high school class of 1983, almost 40 percent either received a diploma equivalent or entered trade school or community college immediately after leaving high school (California Legislature Assembly Office of Research,

1985). California is somewhat unusual in allowing 18-year-olds without a high school diploma or the equivalent to enroll in community colleges, so the national proportion could be somewhat lower. On the other hand, the 40 percent in California refers only to returns immediately after leaving high school, rather than eventual return to the educational system.

Many of those returning to school ultimately complete high school or receive an alternative credential (returnee-completer).

- An estimated 30 percent of the students who drop out eventually receive a high school diploma or alternative credential (Kolstad & Owings, 1986).
- Students who drop out later in their high school careers are more likely to return to and complete high school than are early dropouts (Kolstad & Owings, 1986).

Based on data from the High School and Beyond study, generally the same groups of students who are most prone to drop out are the ones least likely to return and complete high school or receive an alternative credential within two years of the time most of them would have graduated from high school.

- Fewer black and Hispanic dropouts return and finish than white dropouts.
- Dropouts from low socioeconomic backgrounds are less likely to complete high school than those from more advantaged backgrounds.
- Low test scores make it less likely a dropout will later complete a high school education.
- Dropouts living in rural and urban areas do not complete high school as frequently as those from suburban areas.

While males drop out more than females, once they have dropped out they are more likely to return and complete than females (Kolstad & Owings, 1986).

Older returnees typically do not reenter regular day high school programs. Alternative programs have become more prevalent in the past 20 years. Many States and school districts have developed adult basic education programs to serve the needs of adults seeking secondary schooling. These programs lead to a variety of certification schemes, including passing an equivalency examination.

The most frequent way to obtain an equivalency credential is through the General Educational Development (GED) examination.

- The number of persons taking the GED examination increased more than tenfold from 1961 to 1985 (Figure 2).⁴
- The number of credentials issued has followed a similar course, peaking in the early 1980's at just over 500,000 per year.
- Over 440,000 persons met State requirements for passing the GED examination in 1985 (GED Testing Service, 1986).

The GED and other credentialing systems designed for adults help to explain age patterns in graduation and completion rates.

- National data show that the proportion of individuals who have completed high school increases considerably after age 18 (Table 3).
- The magnitude of the noncompletion problem differs substantially depending on whether one considers 18-year-olds or 30-year-olds. In 1985, the proportion of 31- to 34-year-olds who had not completed high school was 12.6 percent, as compared to 25.5 percent for 18- and 19-year-olds.

The increase in completion rates with age reflects several phenomena: students still in school at age 18-19 completing high school, plus dropouts returning to school and completing regular graduation requirements or passing the GED or other equivalency examination.

The effects of obtaining alternative high school graduation credentials have not been studied carefully.

Little is known about the social, economic and educational consequences of obtaining high school graduation credentials outside of regular day school programs. However, there is some indication that holders of alternative credentials may not do as well after high school as regular day school graduates.

- Researchers at the University of Wisconsin have found that GED holders who enrolled in college were much less likely to graduate than regular day high school graduates (Tugend, 1986).

A high school equivalency credential may represent an intermediate status between high school dropout and regular day school graduate. The Wisconsin data indicate that many GED recipients have serious academic shortcomings, and perform academically at relatively low levels. At the same time, though, obtaining a high school equivalency credential shows a degree of persistence and ambition exceeding that of the typical high school dropout.

Further research is needed on the characteristics and experiences of holders of high school equivalency credentials, and differences in the consequences of alternative routes to high school completion. While the alternative credential holder may not be as successful as a regular day school graduate, he or she may be more successful than a dropout who never returns to the educational system.

Implications

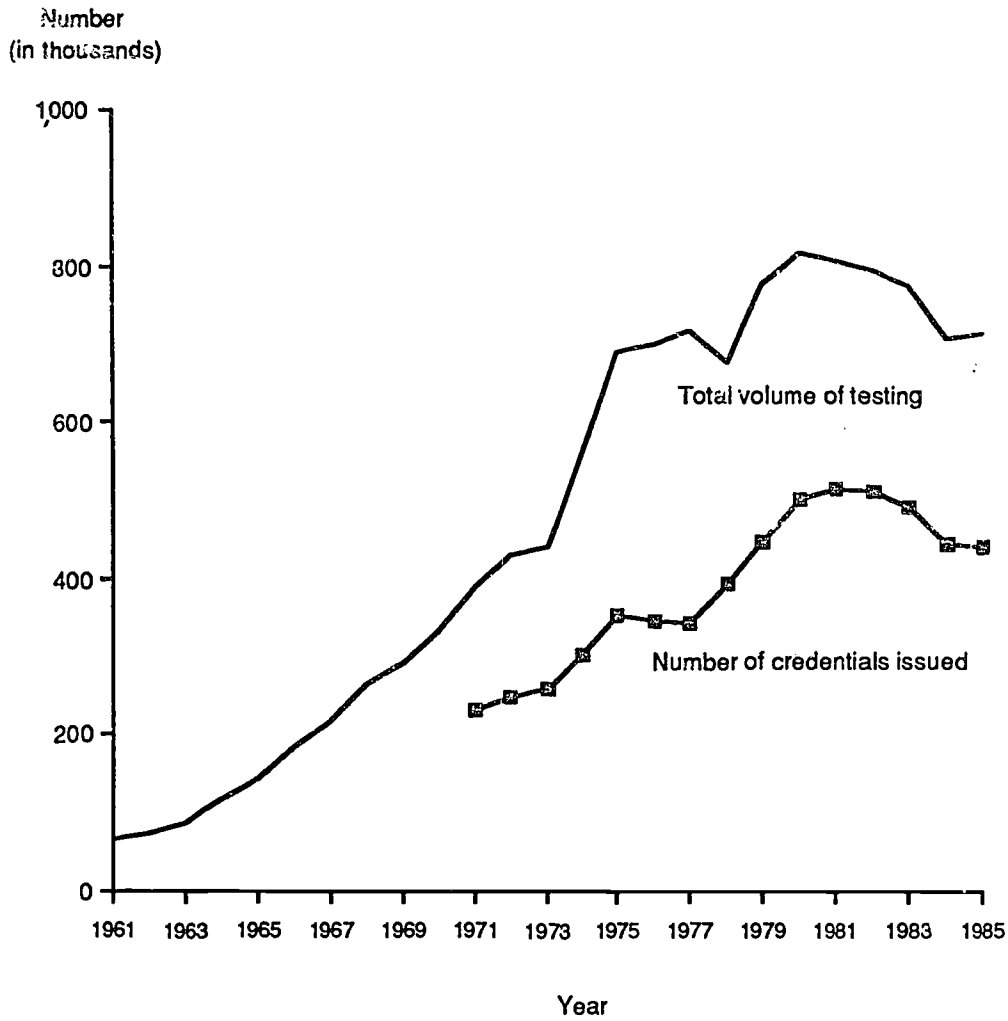
The analyses of high school dropouts reported here have several implications for educational policy and research. Two important issues informed by this discussion are dropout prevention/intervention programs and the significance of a high school diploma.

Table 3
Proportion who have completed high school by age, October 1985

Age	Proportion who have completed high school
18	67.6
19	81.5
20	84.7
21 to 25	85.4
26 to 30	85.8
31 to 34	87.4

SOURCE: U.S. Department of Commerce, Bureau of the Census, Current Population Survey, October 1985, School Enrollment Supplement, special tabulations.

FIGURE 2 -- Total volume of testing and number of credentials issued by the General Educational Development (GED) Testing Service: 1961 to 1985



SOURCE: General Educational Development Testing Service of the American Council on Education. *The 1985 GED Statistical Report.*

Dropout Prevention/Intervention Programs

Three key facts about the process of dropping out, which were highlighted earlier in the paper, are relevant to the implementation of dropout prevention and intervention programs.

- Many of the processes involved in dropping out, such as poor grades and delinquent behavior, begin long before the high school years.
- A substantial number of students drop out of school for reasons apparently unrelated to their schooling experiences, such as assuming adult family and work roles.
- Many dropouts later return to the educational system to complete high school.

Schooling is a cumulative phenomenon, and programs in the 10th or 11th grade may not counterbalance longstanding academic problems. Programs targeting high school-aged youth may be too late to have much of an effect on schooling plans. On the other hand, patterns of behavior in the elementary grades are good predictors of patterns in later grades (Bloom, 1964).

- Since poor academic performance and social adjustment are among the best predictors of who drops out of school, it is possible to identify youngsters at-risk of dropping out before the high school years.
- Dropout prevention programs may need to deliver services to at-risk youngsters in the early grades.

Not all students who drop out do so because of school problems, however. Many drop out because of economic and family considerations. For some of these students, dropping out may be a rational decision in the short term in the face of less desirable alternatives. The high school completion rate for these students may be raised by strategies that either allow them to stay in school while meeting their other obligations or facilitate their later return to the educational system. Examples of programs that might encourage such students to remain in school include:

- Cooperative arrangements that combine school with work experience or childrearing (Lotto, 1982), and

- Programs that allow for a more flexible use of time, perhaps by lengthening a 4-year program to 5 years (McDill et al., 1986).

However, a demonstration program that provided part-time jobs during the school year and full-time jobs during the summer to dropouts or potential dropouts on the condition they stay in or return to school did not decrease the likelihood of dropping out (Borus, 1985).

Since many dropouts come to believe that leaving school was a bad decision (Peng, 1985) and a substantial share of them return to school, another area where additional effort might be productive is alternative programs. The success of efforts to encourage dropouts to become returnees hinges on identifying the target population of out-of-school youngsters who lack a high school diploma, and understanding why they left school.

- Interventions designed to bring young people back to school need to be fashioned in light of the dropouts' previous educational histories as well as their current needs.

Alternative High School Credentials

In contemporary society a high school diploma signifies successful completion of a program of studies that many believe provides at least minimal preparation for adult roles and responsibilities. A high school diploma is also thought to certify certain levels of academic performance, persistence, and dependability. Employers may require a high school diploma of prospective employees as a screening device, to ensure minimum levels of these valued traits.

The ways of completing high school have expanded considerably beyond regular day school programs to include the GED examination and other equivalency examinations.

- Little is known about the implications of obtaining varying types of credentials.
- It would be desirable to understand better who receives which credentials, and what the consequences of obtaining these various high school credentials might be.

If different credentials signify different skills, aptitudes, and traits, then it is important for employers, policymakers, and school officials to be aware of these differences.

Footnotes

¹Figure 1 is drawn from the standpoint of the completion of the path (in other words, where an individual ends up). At any given time, an individual may be in progress, which means that an individual's status can change over time. The figure does not reflect an intermediate status for returnees, perhaps called "reenrollees," who are currently enrolled but whose eventual status is unknown. Returnee-completers may enter and leave the educational system more than once before completing.

²Other problems with Census and CS data are detailed in Pallas and Verdugo (1986) and Verdugo and Pallas (1985).

³The data were derived from earnings reported in 1979, but they have been converted to constant dollars based upon consumer prices in 1981.

⁴People of all ages take the GED, but approximately three-quarters are between 18 and 34 (GED Testing Service, 1986). That age group grew by about 80 percent between 1961 and 1985, while GED test-takers were increasing more than tenfold.

Appendix

Data Sources

Current Population Survey (CPS). The CPS is a household sample survey conducted monthly by the Bureau of the Census. The October CPS asks household informants about the school enrollment and educational attainment of household members. The education items of interest elicit the highest grade of school attended, whether that grade was completed, current enrollment status, and for high school graduates age 14-34, the year of high school graduation. The CPS surveys approximately 60,000 households each month, which represent about 150,000 household members.

Common Core of Data (CCD). The CCD program is a coordinated effort administered by the Center for Statistics (CS) to acquire and maintain data on States and local public school districts. The CCD program includes a universe survey of State education agencies and education agencies of the District of Columbia and outlying areas. The survey collects data on enrollments by grade and numbers of high school graduates in regular day programs each year for each of the State education agencies. The CCD collects data only from public schools. The data reported here refer only to regular day school graduates, and not to the GED or other nonregular day school credentials.

High School and Beyond (HS&B). HS&B is part of CS' Longitudinal Studies Program, which is designed to study the educational and career development of high school students. In the spring of 1980, CS surveyed more than 30,000 high school sophomores in more than 1,000 public and private high schools across the country. When properly weighted, the sample projects to the population of 3,800,000 high school sophomores enrolled in U.S. schools in the spring of 1980. CS subsequently has resurveyed a sample of these students in the spring of 1982 and again in the spring of 1984. The study also retrieved the high school transcripts of a large sample of respondents.

From these various pieces of information, it is possible to reconstruct fairly completely the enrollment histories of these youngsters. For those who left school at any time during the survey period, the study can identify when they left school, whether they returned, and whether they eventually obtained a regular high school diploma or equivalent. The major drawback to this study is that students were originally surveyed late in the sophomore year of high school, and hence it provides no information about those who had already left school by that point.

Reliability of Estimates

The data reported in Tables 1 and 3 of this report are from the Current Population Survey conducted by the Bureau of the Census. Because these proportions are derived from a sample survey, they are subject to sampling variability. The methodology for estimating the sampling errors for CPS data is presented in most of the publications in the Current Population Reports series published by the Bureau of the Census. All comparisons cited in the text are statistically significant at the 0.05 level of significance. This means that the difference between two sample estimates is greater than 1.96 times the standard error of the difference.

A generalized standard error has been estimated for the CPS percentages in Table 1. The approximate standard error for the estimated percentages is 0.8 percent. The chances are about 95 out of 100 that an estimate from the sample would differ from a complete census by less than twice the standard error, or 1.6 percent. This implies that, for 1985, the chances are about 95 out of 100 that the estimated percentage (74.6 percent) of 18- and 19-year-olds who have completed high school is within 1.6 percent of the result from a complete census.

Tables A.1 and A.2 show estimated standard errors for Tables 2 and 3 respectively. For Table 3, the chances are about 95 out of 100 that the estimated proportion (85.4 percent) of 21- to 25-year-olds who have completed high school is within 0.8 percent of the result from a complete census.

Table A1**Standard errors and sample sizes for Table 2: Dropout rates for 1980 high school sophomores by sex and selected background characteristics**

Background characteristic	Standard error in percent (Sample size)		
	Total	Male	Female
All students	.33 (28,119)	.48 (13,905)	.45 (14,214)
Race/ethnicity			
American Indian and Alaskan natives	4.22 (297)	5.65 (159)	6.34 (138)
Hispanic	.87 (5,039)	1.21 (2,589)	1.24 (2,450)
Black	.99 (3,712)	1.55 (1,721)	1.25 (1,991)
White	.38 (18,545)	.56 (9,162)	.53 (9,383)
Asian American	1.34 (426)	2.01 (213)	1.78 (213)
Socioeconomic status			
High	.45 (6,312)	.70 (3,356)	.52 (2,956)
Middle	.42 (12,139)	.61 (5,931)	.56 (6,208)
Low	.76 (6,318)	1.15 (2,819)	1.02 (3,499)
Unknown	1.29 (3,350)	1.76 (1,799)	1.88 (1,551)
Community type			
Urban	.78 (6,384)	1.17 (3,080)	1.05 (3,304)
Suburban	.44 (13,760)	.64 (6,799)	.60 (6,961)
Rural	.60 (7,975)	.86 (4,026)	.83 (3,944)
Geographic region			
Northeast	.64 (6,282)	.98 (3,092)	.81 (3,189)
North Central	.58 (7,986)	.83 (3,960)	.81 (4,026)
South	.61 (8,802)	.90 (4,303)	.83 (4,499)
West	.84 (5,050)	1.17 (2,550)	1.18 (2,500)
School type			
Public	.36 (24,611)	.52 (12,000)	.49 (12,411)
Catholic	.47 (2,616)	.82 (1,167)	.53 (1,449)
High school program			
Academic	.33 (8,831)	.52 (4,144)	.44 (4,687)
General	.50 (11,359)	.71 (5,608)	.71 (5,751)
Vocational/technical	.80 (5,119)	1.17 (2,622)	1.08 (2,497)

SOURCE: U.S. Department of Education, National Center for Education Statistics (1983), *High school dropouts: Descriptive information from High School and Beyond*, NCES 83-221b.

Table A2**Standard errors for Table 3: Proportion of high school completers by age, October 1985**

Age	Standard error in percent
18	1.1
19	.9
20	.8
21 to 25	.4
26 to 30	.4
31 to 34	.4

SOURCE: U.S. Department of Commerce, Bureau of the Census, Current Population Survey, October 1985, School Enrollment Supplement, special tabulations.

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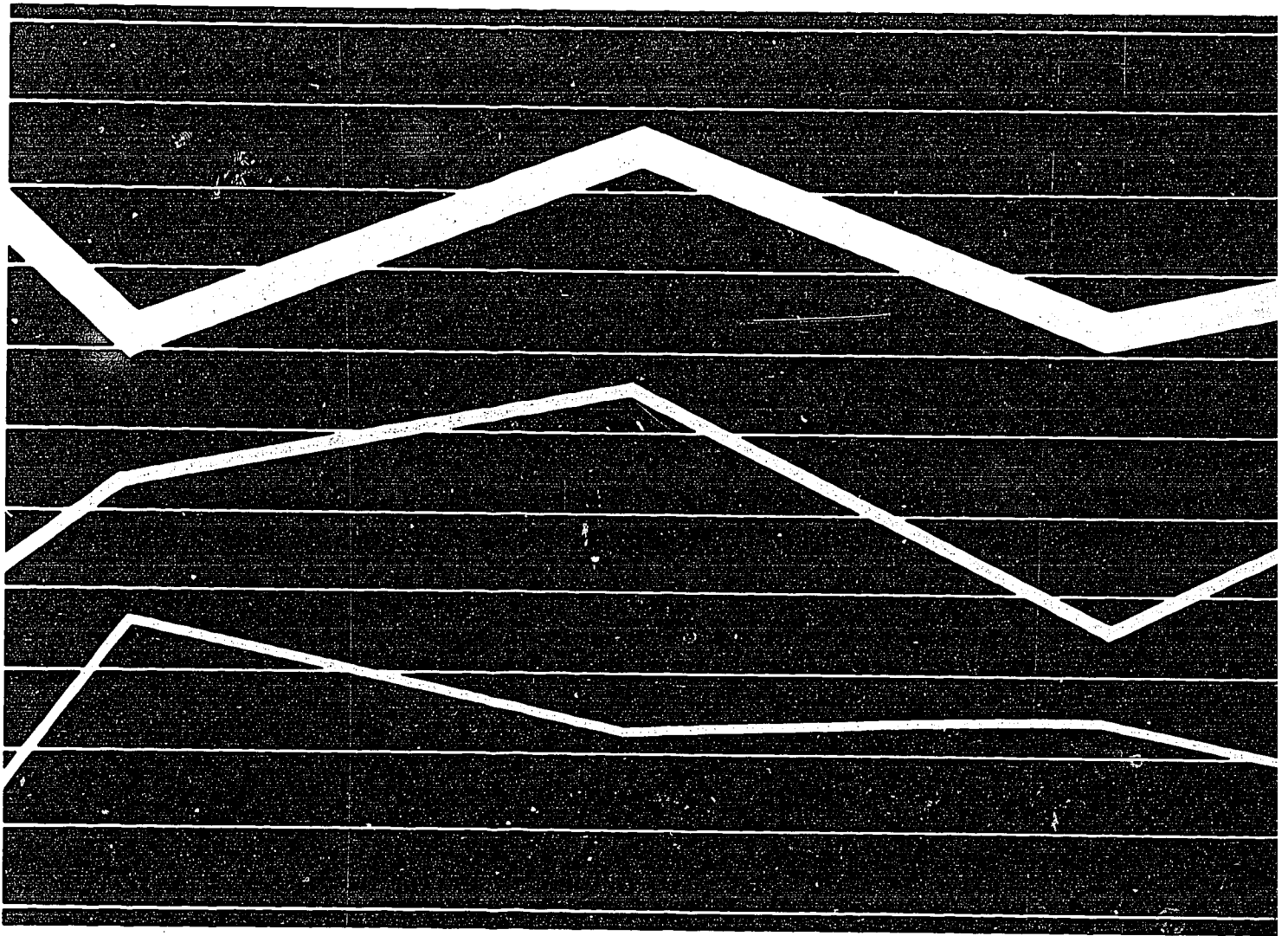
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