NATIONAL DROPOUT RATES:

SOURCES, PROBLEMS, AND EFFORTS TOWARD SOLUTIONS

**By
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Introduction

The reform of public education is one of the hottest national issues of this decade. According to Wittebols (1986), the high school completion rate ".. has become a commonly-used indicator of the condition of education in this country, (p. 4)." In 1984, nearly 500,000 students dropped out of grades 10-12 in US high schools (Bruno, US Bureau of the Census, 1988), adding to the 44 million citizens 18 years of age and older who are not high school graduates (Digest of Education Statistics, p. 19). Educators, public officials and business communities have become aware of the negative consequences to both the individual and to society of leaving school. Pipho (1988), director of the Education Commission of the States' Clearinghouse, emphasized this point by stating that, "Reducing the dropout rate has become the focal point of the push to help at-risk youth (p. 30)."

DEFINING DROPOUT RATES

Major problems arise when the question is asked, "What is the dropout rate in the United States?" There is no simple answer! **There is no single national dropout rate.**

The US Department of Education quotes one set of statistics, the Bureau of the Census another. Both sets are estimates of dropouts rather than direct measures. They are often not comparable because of the different methods used to compute them.

NEED FOR CONSISTENCY

A single, reliable national dropout rate is needed in order to:

- make meaningful comparisons among states;
- make valid judgements about treatment effects;
- target money where needed;
- instill public confidence in educational assessments about at-risk students;
- support appropriate educational programs.

This report attempts to clarify some of the confusion about dropout rates by (1) describing primary sources of data upon which current national rates are based; (2) describing three types of dropout statistics commonly cited in reports; (3) listing some of the difficulties involved in establishing a single rate; and (4) summarizing current efforts toward developing a standard national system for counting dropouts.

On this last point, it should be noted that this report does not address the variety of methods used by individual states to collect dropout data and compute state dropout rates. Activities of the Council of Chief State School Officers and the National Center for Educational Statistics which are helping states standardize collection procedures will be described later.

PRIMARY SOURCES

In recent reports, journal articles and newspapers, almost all references to dropout rates come from one of two primary data sources:

> The Current Population Survey (CPS) conducted by the US Department of Commerce, Bureau of the Census and;

> The Common Core of Data survey conducted by the US Department of Education, Center for Education Statistics.

Current Population Survey—Bureau Of The Census

Each month the Bureau of the Census conducts a Current Population Survey of approximately 60,000 households throughout the US. The survey excludes military personnel and their families living on posts and inmates in institutions.

Each October, the survey questions school enrollment status of household members, including the year they last attended school and highest grade completed. Data are obtained on recent graduates (those completing high school during the current calendar year) and recent dropouts (those dropping out of school between October of the previous year and the present).

The Bureau of the Census defines a dropout as: **one who is not enrolled in school and who is not a high school graduate.** An individual who received General Educational Development (GED) credentials is counted as a graduate. Numbers for enrollment, graduates, dropouts and dropout rates derived from these figures are estimates based on the CPS sample. Therefore, they may differ from actual counts obtained from a complete census.

These data are published in the Bureau's *Current Population Reports, Series P-20.* These reports are the basis for dropout statistics reported by the US Department of Education in the *Digest of Education Statistics* and by the US Department of Labor in the Bureau of Labor Statistics' *News* and *Monthly Labor Review.*

Common Core Of Data—US Department Of Education

The National Center for Educational Statistics, a division of the Office of Educational Research within the US Department of Education uses the Common Core of Data survey to acquire information related to noncompletion of school, in addition to drawing from data generated by the CPS. Every school year a survey instrument is sent to 57 education agencies in the 50 states, District of Columbia and outlying areas. This instru-ment gathers data on students, staff, revenues and expenditures for over 85,000 public schools and approximately 15,800 school districts, as well as state-wide information.

Regularly presented in the *Digest of Education Statistics*, these figures have been used to develop the "Secretary's Wall Chart," a comparison of state education statistics of student performance, resources, state reforms and population characteristics. It does not mention dropouts directly; rather it provides an **adjusted graduation rate** which has been widely used to extrapolate a "dropout rate."

TYPES OF DROPOUT STATISTICS

Asking the question "What is the national dropout rate?" assumes two things:

> (1) complete, accurate numbers of dropouts and,
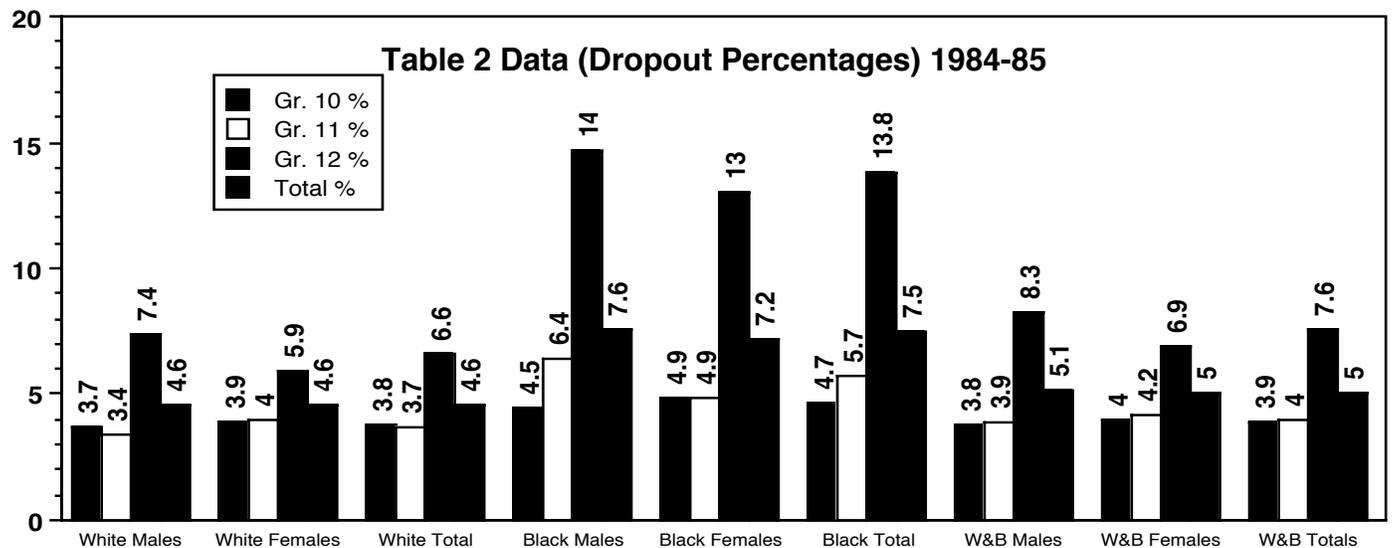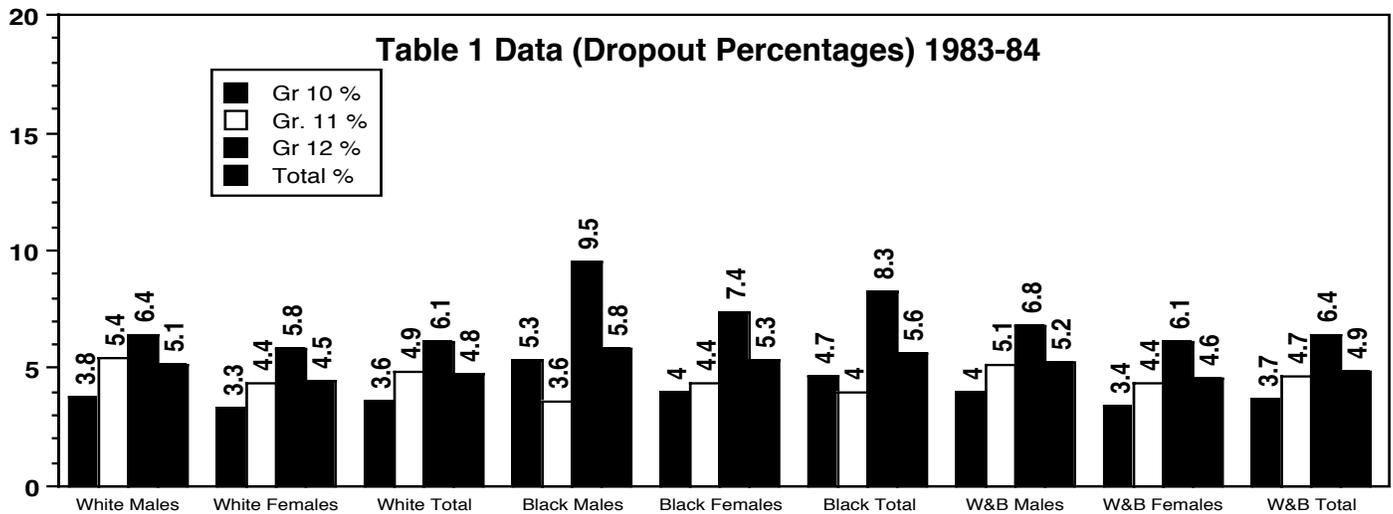> (2) a single method of calculating the statistic.

Unfortunately, neither of these is true!

The issues and technical problems regarding the establishment of an accurate national statistic have been addressed elsewhere (Olsen, 1988; Pipho 1989; US Bureau of the Census, 1987; Wittebols, 1986). Rather, what follows is a brief description and explanation of several dropout statistics cited in the publications of the US Department of Education, the Bureau of Labor Statistics and the Bureau of the Census. Its purpose is to help practitioners, researchers and policymakers understand these statistics in order to make more informed judgements about their appropriateness and utility.

Estimated Annual Rate

An annual rate indicates the proportion of students enrolled who dropped out during a given school year. This approach is called the event or incidence rate of dropping out—that is, an individual is counted as a dropout for the period when dropping out occurred. An accurate rate would require "...a longitudinal survey in order to see how many of the people who were in school at some beginning date were still enrolled at a later date (Kominski, US Bureau of the Census, 1987, p. 2)." In the absence of such data, however, the Bureau has developed a method using cross-sectional data from the CPS to approximate logitudinal data and estimate an annual rate (1987).

This method was used to calculate estimated annual high school dropout rates of 4.9 percent for 1983-84 and 5 percent for 1984-85. Tables 1 and 2 display rates by sex for blacks and whites in grades 10-12 for academic years 1983-84 and 1984-85. Computation of rates for students in other grades or of Hispanic origin was not possible due to incomplete data.

Table 1 Data (Dropout Percentages) 1983-84

Legend:
- Gr 10 %
- Gr. 11 %
- Gr 12 %
- Total %

Group	Gr 10 %	Gr. 11 %	Gr 12 %	Total %
White Males	3.8	5.4	6.4	5.1
White Females	3.3	4.4	5.8	4.5
White Total	3.6	4.9	6.1	4.8
Black Males	5.3	3.6	9.5	5.8
Black Females	4	4.4	7.4	5.3
Black Total	4.7	4	8.3	5.6
W&B Males	4	5.1	6.8	5.2
W&B Females	3.4	4.4	6.1	4.6
W&B Total	3.7	4.7	6.4	4.9

Table 2 Data (Dropout Percentages) 1984-85

Legend:
- Gr. 10 %
- Gr. 11 %
- Gr. 12 %
- Total %

Group	Gr. 10 %	Gr. 11 %	Gr. 12 %	Total %
White Males	3.7	3.4	7.4	4.6
White Females	3.9	4	5.9	4.6
White Total	3.8	3.7	6.6	4.6
Black Males	4.5	6.4	14	7.6
Black Females	4.9	4.9	13	7.2
Black Total	4.7	5.7	13.8	7.5
W&B Males	3.8	3.9	8.3	5.1
W&B Females	4	4.2	6.9	5
W&B Totals	3.9	4	7.6	5

Source: U. S. Bureau of the Census, Current Population Reports. Series P-20, No. 426, 1988.

Unfortunately, an estimated annual rate is not reported yearly in the CPS. It can, however, be calculated using the method mentioned above if one has access to the appropriate CPS reports. This rate underestimates the total number of high school dropouts because it does not include ninth grade, the military population and students in institutions. Yet, it is the only approach to deriving an annual national dropout rate currently available.

As with all estimates based on samples, this statistic is subject to variations because of sampling error. Therefore, one should exercise caution in drawing conclusions about differences between rates across groups and from one year to another. Information on the reliability of estimates is contained in the Current Population Reports and should be consulted before comparisons are made. Furthermore, this approach has not been used to establish rates for individual states because of the limitations in making fine-grained estimations imposed by small sample sizes.

Graduation Rate Residual

One of the most frequently cited "dropout rates" is the residual derived when the graduation rate reported on the Secretary's Wall Chart" is subtracted from 100 percent. The underlying assumption is simple: if a student enters the ninth grade in a given year and does not graduate four years later, then he must have dropped out. It is computed as follows: 1) determine the number of graduates in a given year; 2) determine the number of ninth graders enrolled four years earlier; 3) divide the graduates by ninth grade enrollment; 4) subtract the result from 100.

This residual "dropout rate" for all US public high school students was 29.2% in 1984, 29.4% in 1985 and 28.5% in 1986. Table 3 displays adjusted graduation and residual rates for 1984-1986.

TABLE 3
ADJUSTED GRADUATION RATES
AND RESIDUALS

YEAR	GRADUATION RATE	RESIDUAL
1984	70.8	29.2
1985	70.6	29.4
1986	71.5	28.5

SOURCES: US Department of Education, "State Education Statistics: Performance, Resource Inputs, State Reforms and Population Characteristics, 1982 and 1986" and "State Education Supplement: Student Performance and Resource Inputs, 1985 and 1986," 1987; *USA Today*, February 26, 1988, 5D.

The statistic generated by this method is considerably larger than an annual rate because it cumulates numbers across a four year period. This is a flawed method because it does not consider students who do not complete school in four years or graduate early, although the rate is adjusted for population migration and students not classified by grade. Furthermore, the rate is based on data reported from state educa-

tion agencies which do not count graduates in the same manner. For example, some states include GEDs as graduates, some do not.

Status Or Prevalence Rate

The status dropout rate is reported annually in the *Digest of Education Statistics* as the percentage of persons in the US who are not currently enrolled in school and who have not graduated at the time of the survey. This statistic represents all the dropouts at a given point in time irrespective of when they left school. An annual rate reflects the number of students who dropped out during a specific time period. Kominski claims that this prevalence indicator is not a true rate because it makes no reference to the time when a student might have dropped out of school (US Bureau of the Census, 1987).

The proportion of US population, age 18 and older, not completing high school was 26% as of spring 1984 (*Digest of Education Statistics*, 1988, p. 19).

As of 1986, an estimated 11.9% of the US population 14-34 years of age were dropouts (*Digest of Education Statistics*, 1988, p. 101). Table 4 represents proportions of dropouts in several age categories for 1985 and 1986.

TABLE 4

PERCENT OF HIGH SCHOOL DROPOUTS AMONG WHITES, BLACKS AND HISPANICS

FOR SELECTED AGE GROUPS

1985 AND 1986

		14-34	14-15	16-17	18-19	20-21	22-24
Total							
	1985	12.0	1.8	7.01	4.3	13.9	14.1
	1986	11.9	2.4	6.1	12.3	14.8	14.3
White							
	1985	11.5	1.8	7.1	13.8	13.4	13.3
	1986	11.3	2.2	6.5	11.9	14.3	14.3
Black							
	1985	15.5	2.1	6.5	17.3	17.7	17.8
	1986	15.5	3.4	4.7	14.9	18.1	17.3
Hispanic							
	1985	31.4	3.6	14.5	30.6	27.9	33.9
	1986	32.2	3.7	14.5	26.8	34.9	38.2

SOURCE: US Department of Education, Digest of Education Statistics, p.101.

DIFFICULTIES IN DEVELOPING A NATIONAL DROPOUT RATE

There are several reasons why no single, accurate national dropout rate currently exists.

- There is no standard, common definition of a school dropout throughout the US.

- Most states, and even school districts within the same state, use different methods to calculate dropout rates. For example, they use different grade levels for baseline population identification, vary pupil accounting periods and include a variety of different exclusion factors in determining who is a dropout.

- Some states may not require districts to collect specific dropout statistics.

- Lack of funding and expertise contribute to the inability to establish an effective tracking system required to obtain accurate data on dropouts.

EFFORTS TO ESTABLISH A RELIABLE NATIONAL DROPOUT RATE

The Council of Chief State School Officers' (CCSSO) task force on collecting national dropout statistics, cooperating with the National Center for Educational Statistics (NCES), has spent almost three years seeking ways to develop a standardized national dropout rate. This task force made a number of recommendations which, if implemented, will greatly improve the accuracy and reliability of dropout statistics. State-by-state comparisons will be more meaningful. As a start, the task force proposed the following general definition of a dropout, already adopted by a number of states:

> **A student who (for any reason other than death) leaves school before graduation without transferring to another school/institution (Wittebols, 1986, p. 7).**

Additionally, the task force recommended more detailed specifications for defining a dropout and students in other categories, as well as criteria for counting students and procedures for calculating an annual dropout rate.

In the fall of 1989, the NCES will incorporate these recommendations into a field test of dropout collection and reporting procedures in approximately 30 states as part of the National Cooperative Education Statistics System. If successful, the program could be implemented in all 50 states within three to five years.

The NCES implemented the National Education Longitudinal Survey of 1988 beginning with eighth grade students to collect a variety of educational information with a major focus on dropout statistics. Results of this should contribute to the development of a standard national dropout rate.

In addition to the work of the CCSSO and the NCES, the Center for Policy Research in Education (CPRE) has published a report (Williams, 1988) on standardizing dropout statistics based on a study of 21 large city school districts. A number of the CPRE recommendations are similar to those advocated by the CCSSO.

STATE AND LOCAL RESPONSIBLITY

In this country, education is thought to be a responsibility of the states and, through them, of local communities. State and local policymakers should not fear that the development of a standardized dropout data collection and computational system will detract from that responsibility. On the contrary, a standard approach cannot be developed without their cooperation and involvement.

An issue as serious as school dropouts affects every segment of our society and economy. It would seem prudent for state and local policymakers to heed Pipho's warning that "...unless dropout information can be made more uniform and reliable, state policymakers will continue to be at the mercy of whatever a given state or school district says their dropout rate is...., federal and state programs to reduce the dropout rate may succeed or fail, and their true impact on the dropout rate will remain largely unknown (1988, p. 30)."

If state policymakers, education leaders and local administrators make collection of standard dropout-related data a priority, it will permit more efficient distribution of educational resources toward resolving this problem. Additionally, practitioners and researchers can utilize standardized information to develop more effective dropout prevention programs.

CONCLUSION

Our society is very concerned about the impact of dropping out on the nation's economy and national security. Much confusion exists regarding the number of students who fail to graduate from school. This report describes two primary sources of data, three types of statistics available to summarize the incidence of high school dropouts and current efforts to develop a common national dropout rate. Although it will not eliminate **all** the confusion nor convince everyone that dropping out is a serious problem in this country, the development of a single, standardized dropout statistic will be a vast improvement over existing approaches.

TABLE 1

ESTIMATED DROPOUTS, ENROLLMENT, AND DROPOUT RATES FOR GRADES 10-12

BY SEX FOR WHITES AND BLACKS

(DROPOUT AND ENROLLMENT NUMBERS IN THOUSANDS)

1983-84

Grade

		10			11			12			Total	
	DO	ENR	%	DO	ENR	%	DO	ENR	%	DO	ENR	%
White												
Male	58	1,529	3.8	77	1,435	5.4	85	1,336	6.4	220	4,299	5.1
Female	48	1,438	3.3	60	1,376	4.4	82	1,413	5.8	190	4,227	4.5
Total	106	2,966	3.6	137	2,811	4.9	167	2,749	6.1	410	8,526	4.8
Black												
Male	16	304	5.3	9	251	3.6	19	200	9.5	44	755	5.8
Female	10	250	4.0	12	271	4.4	21	283	7.4	43	804	5.3
Total	26	554	4.7	21	522	4.0	40	483	8.3	87	1,559	5.6
Grand Total												
Whites and Black												
Male	74	1,832	4.0	86	1,686	5.1	104	1,536	6.8	264	5,054	5.2
Female	58	1,688	3.4	72	1,647	4.4	103	1,696	6.1	233	5,031	4.6
Total	132	3,520	3.7	158	3,333	4.7	207	3,232	6.4	497	10,085	4.9

Source: U. S. Bureau of the Census, Current Population Reports. Series P-20, No. 426, 1988.

TABLE 2

ESTIMATED DROPOUTS, ENROLLMENT, AND DROPOUT RATES FOR GRADES 10-12

BY SEX FOR WHITES AND BLACKS

(DROPOUT AND ENROLLMENT NUMBERS IN THOUSANDS)

1984-85

Grade

		10			11			12			Total	
	DO	ENR	%	DO	ENR	%	DO	ENR	%	DO	ENR	%
White												
Male	58	1,572	3.7	50	1,460	3.4	87	1,182	7.4	195	4,214	4.6
Female	57	1,474	3.9	56	1,386	4.0	75	1,266	5.9	188	4,126	4.6
Total	115	3,046	3.8	106	2,846	3.7	162	2,448	6.6	383	8,340	4.6
Black												
Male	14	310	4.5	17	265	6.4	27	183	14.7	58	753	7.6
Female	12	246	4.9	13	264	4.9	27	207	13.0	52	717	7.2
Total	26	556	4.7	30	529	5.7	54	390	13.8	110	1,475	7.5

Grand Total

Whites and Black

	DO	ENR	%	DO	ENR	%	DO	ENR	%	DO	ENR	%
Male	72	1,882	3.8	67	1,725	3.9	114	1,365	8.3	253	4,972	5.1
Female	69	1,720	4.0	69	1,650	4.2	102	1,473	6.9	240	4,843	5.0
Total	141	3,602	3.9	136	3,375	4.0	216	2,838	7.6	493	9,815	5.0

Source: U. S. Bureau of the Census, Current Population Reports. Series P-20, No. 426, 1988.

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