

DOCUMENT RESUME

ED 320 941

TM 015 204

AUTHOR Joffman, Lee McGraw  
 TITLE Issues in Developing Comparable National Dropout  
 Statistics through the Common Core of Data Survey.  
 PUB DATE Apr 90  
 NOTE 15p.; Paper presented at the Annual Meeting of the  
 American Educational Research Association (Boston,  
 MA, April 16-20, 1990).  
 PUB TYPE Reports - Evaluative/Feasibility (142) --  
 Speeches/Conference Papers (150)

EDRS PRICE MF01/PC01 Plus Postage.  
 DESCRIPTORS Data Analysis; \*Data Collection; Definitions; Dropout  
 Research; \*Dropouts; Elementary Secondary Education;  
 \*National Surveys; \*Research Problems; Statistical  
 Data; Student Attrition; Withdrawal (Education)  
 IDENTIFIERS \*Common Core of Data Program

ABSTRACT

Some issues in defining dropouts and reporting information about them are explored, with reference to the Common Core of Data (CCD) survey of the National Center for Education Statistics. There has not been any uniform national count of how many students leave school, and no commonly accepted definition has been developed that allows a number to be ascertained. The definition used in the 1989-90 field tests of dropout statistics collected for the CCD provides operational criteria for identifying dropouts. For example, deceased, incapacitated, or currently suspended students are specifically removed from consideration. Factors to consider include whether a student is engaged in an elementary/secondary program, as opposed to adult education, and whether a completed credential will be recognized by state or district officials. Those who conduct research or provide dropout statistics need to make their definitions explicit. One figure shows the CCD "decision tree" for classifying dropouts, and one table illustrates a classification worksheet.  
 (SLD)

\*\*\*\*\*  
 \* Reproductions supplied by EDRS are the best that can be made \*  
 \* from the original document. \*  
 \*\*\*\*\*

U.S. DEPARTMENT OF EDUCATION  
Office of Educational Research and Improvement  
EDUCATIONAL RESOURCES INFORMATION  
CENTER (ERIC)

This document has been reproduced as  
received from the person or organization  
originating it.

Minor changes have been made to improve  
reproduction quality.

• Points of view or opinions stated in this docu-  
ment do not necessarily represent official  
OERI position or policy.

ED320941

**ISSUES IN DEVELOPING COMPARABLE NATIONAL DROPOUT STATISTICS  
THROUGH THE COMMON CORE OF DATA SURVEY**

Lee McGraw Hoffman  
General Surveys and Analysis Branch  
Elementary and Secondary Education Statistics Division  
National Center for Education Statistics  
U.S. Department of Education

Paper presented at the annual conference of the American  
Educational Research Association, April 16, 1990  
Boston, Massachusetts

## Introduction

The current commitment to national action on raising the school graduation rate and ensuring that three-quarters of those who drop out of school later complete a degree (White House, 1990) raises questions of how dropouts will be defined, how their numbers will be reported, and how the resulting information will be interpreted. At present, there is no exhaustive national count of students leaving school without completing a program of study.<sup>1</sup> The Common Core of Data Survey (CCD) conducted annually by the National Center for Education Statistics collects figures on public school completers from the administrative records of State education agencies. These completers are reported under categories that represent regular diploma recipients, other diploma recipients who have satisfied diploma requirements through an alternative program, high school equivalency recipients, and other completers who have been awarded some credential such as a certificate of completion or attendance in lieu of a high school diploma (NCES, 1989). When the proportion of students awarded a regular high school diploma is publicized in reports such as the State Education Performance Chart (the Secretary of Education's "Wall Chart"), a dropout rate is often erroneously inferred as the complement. It is wrong-- but easy-- to assume that if 71 percent of our twelfth grade students graduated in 1987 (U.S. Department of Education, 1989), 29 percent of this cohort had dropped out.

**Variations in reported numbers.** The National Center for Education Statistics has worked for several years to develop the means for reporting dropout numbers and rates through the CCD. Action was initiated in part by a commissioned study of the CCD that identified variations in existing State dropout definitions and collection practices, and strongly urged that the CCD collect standard national figures (Wittebols and Triplett, 1986).

That report echoed the general agreement that, in addition to our having no uniform count of how many students leave school, there is no commonly accepted definition that would allow us to ascertain that number by pooling existing reports. Dropout figures from different sources are not comparable (GAO, 1986;

<sup>1</sup>This is not to say there are no national dropout estimates. The U.S. Bureau of the Census collects annual dropout data from a national sample. Several longitudinal NCES studies-- such as "High School and Beyond"-- provide detailed information about the school dropout and completion behavior of their participants.

Hamby, 1989; Morrow, 1987; Pallas, 1988). When figures from different sources are aggregated to a higher reporting level, these variations can distort the data, adding more and more noise to the system (LeCompte and Goebel, 1987). National estimates based on different understandings of what comprises a dropout "rate" may vary from one another by as much as a factor of five (Kominski, 1989).

**Reasons for variations.** Williams (1987) examined local definitions of dropout and found several points on which they differed, particularly in how they treated grade levels, student age, the time period over which rate was calculated, days of absence required to define a dropout, and approval of alternative educational settings. Similar issues were identified by Casserly (1986) in analyzing data from large city school districts. He attributed differences in rates in part to variation in how enrollment (the basis for the rate) was counted and how dropouts were defined. Johnson found that State definitions varied in whether they counted as dropouts or transfers students who transferred to nonpublic schools (accredited or nonaccredited), received a General Education Development (GED) examination-based credential, or joined the military (1988). States might or might not report in their totals those dropping out from special education programs, those who dropped out during the summer, those who completed Grade 12 without satisfying all graduation requirements, and students who were expelled from school.

Beyond inconsistencies in various definitions, there are broader conceptual distinctions that lead to different numbers. Rumberger identified six major factors affecting dropout rate computations (1987). The cohort used as the denominator for dropout rate can be based upon age or class in school. Determining initial membership status in this cohort is a second factor. A third is determining whether or not an individual is a dropout-- for example, how are GED or certificates of attendance considered? A fourth factor is the time interval applied as a criterion for determining dropout status. The source of information (family- or self-report for the Census' Current Population Survey, administrative records for some States) is a fifth factor. Finally, the level for which dropout statistics are computed is a factor in comparability. Rumberger feels that district comparisons may be inappropriate since districts enroll students with different likelihoods of dropping out.

Pallas (1987) sketched the alternative school completion paths that can lead to variations in rate when the differences between status ("are you a dropout?") and event ("did you drop out within the past...?") definitions are not recognized. Students who drop out may not stay out. They can return to complete a regular diploma (and be excluded by completion rates that assume on time graduation) or an alternative credential, or they can simply "drop in" to eventually leave school without having obtained a

degree.

How dropout rate is conceptualized greatly affects the size of the statistic (Kominski, 1989). Typical approaches include assuming dropout is the complement of graduation, when that rate is the proportion of twelfth graders in a fall count who graduate the following spring. Alternatives are to compare ninth graders from a given year with graduates four years later, to report dropout rates for specific ages or grades (14-year-olds, tenth graders), or to use longitudinal data.

### CCD Dropout Definition and Its Effects

The foregoing discussion was brief, but it should make the point that there is no "right" definition of a dropout, nor single means for computing a dropout rate. Definitions will be driven in part by value judgments (e.g., is attaining a GED-based degree success or failure? on the part of the student or the schools?) and in part by logistical constraints (e.g., using a single membership count as the basis for dropout rate versus using something like average daily membership, which adjusts for enrollment fluctuations; counting those who drop out during the summer).

Defining dropout for the CCD. The dropout definition used in the 1989-90 field test of dropout statistics collection through the Common Core of Data (CCD) was developed over a period of several years through extensive discussion with State and district education agency staffs and others concerned with dropout research. At least two points should be kept in mind when examining this definition: it attempts to address all of the sources of variation found in pre-existing State definitions, and it is intended for an annual national collection of universe data from State administrative records systems. The definition is "official" only within the CCD.

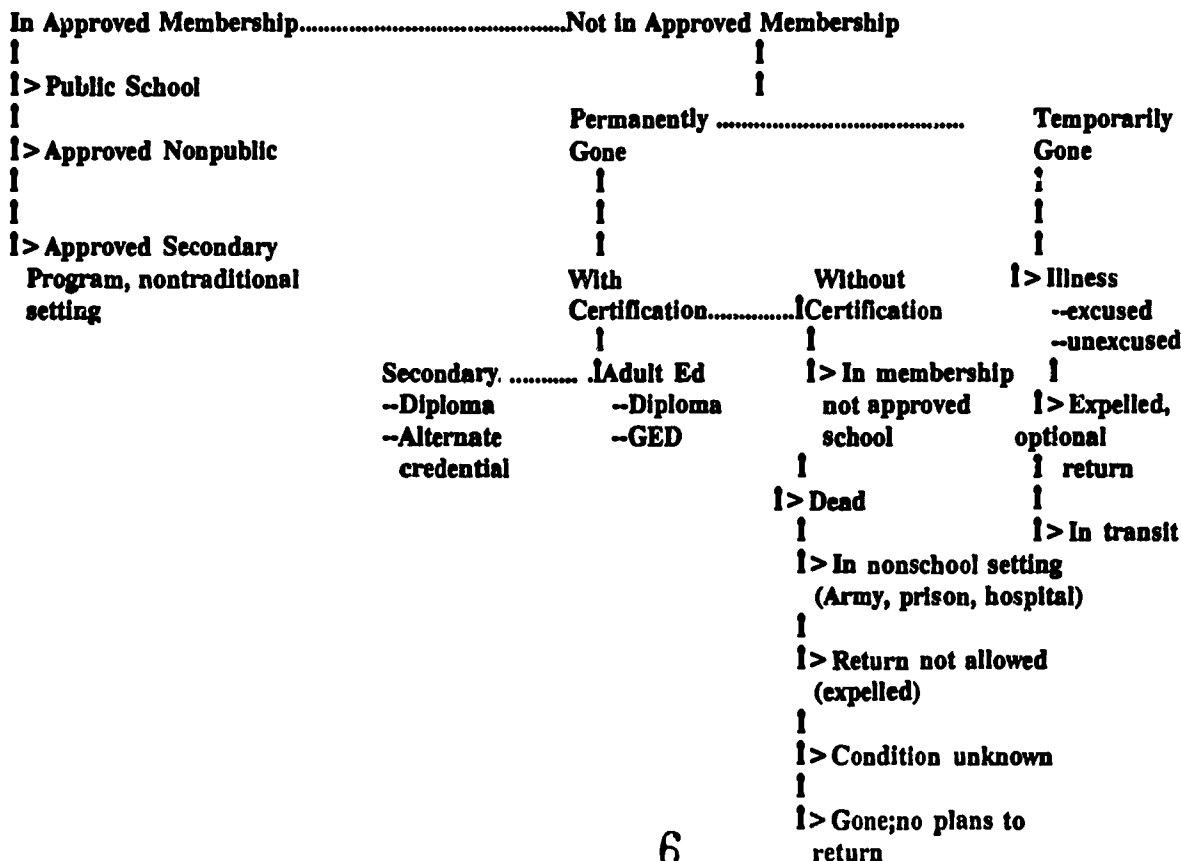
The CCD field test defines a dropout as follows:

- A. A dropout is an individual who:
- (1) was enrolled in school at some time during the previous school year;
  - (2) was not enrolled at the beginning of the current school year;
  - (3) has not graduated from high school or completed a State- or district-approved educational program, and
  - (4) does not meet any of the following exclusionary conditions:
    - (i) transfer to another public school district, private school, or State- or district-approved education program;

- (ii) temporary absence due to suspension or school-approved illness, or
  - (iii) death.
- B. For the purposes of this definition:
- (1) A school year is the 12-month period of time beginning with the normal opening of school in the fall;
  - (2) An individual has graduated from high school or completed an approved education program upon receipt of formal recognition from school authorities;
  - (3) A State- or district-approved program may include special education programs, home-based instruction, and school-sponsored GED preparation.

Figure 1 depicts the various conditions in which a student or school leaver might be found under this definition. This classification matches the CCD definition, and is very much school-driven. The first level of distinction is between students who are in membership in some kind of approved elementary-secondary program, and those who are not. Subsequent steps ask whether a student who has left school has done so temporarily or permanently; if permanently, the question is whether or not the departure was sanctioned through award of some certification.

**FIGURE 1. DECISION TREE FOR CLASSIFYING SCHOOL LEAVERS**



**Effects of definition on classifying students.** Table 1 lists more fully the educational conditions that could arise from these various possibilities. The Table also compares the probable dropout classification decision for each condition that would be made by the CCD, NCES's *National Household Education Survey* and *National Educational Longitudinal Study of 1988 (NELS:88)*, and the Bureau of the Census' annual *Current Population Survey*. The comparison illustrates first, that the dropout decision for individual cases would vary across several current reports. Only the CCD consistently considers as dropouts those who receive an exit credential by passing the GED in an adult education program. Only the CCD counts as dropouts those school leavers whose status is unknown; in studies that do not rely on education agencies' administrative records, the question is moot.

There are three operational factors in identifying dropouts through this definition. The first is to remove from consideration students who are dead, physically incapacitated, or who are currently suspended, on the argument that such students cannot attend school and thus cannot be dropouts.

The next factor to be considered is whether a student is engaged in an elementary/secondary program, as opposed to an adult education program in which a student might enroll after dropping out of school. Currently, the least ambiguous means of making the distinction appears to be asking whether or not State minimum foundation funds are received for the student. Or, if a student is in a nonpublic setting, would the school district receive State funds for this student if it provided the same program?

The third factor is whether a completion credential will be recognized by State or school district officials. This factor includes students admitted to a baccalaureate program before completing high school on the argument that the traditional academic progression has not been interrupted.

### Issues in Implementing the CCD Dropout Statistic Collection

The 1989-90 CCD field test extends from about October 1, 1989 to September 30, 1990; the entire process is being monitored through a contracted evaluation. To date, the participating States and territories have not reported insurmountable problems in abiding by the prescribed definition or required school leaver tracking and reporting procedures. However, many of the questions they have raised point out remaining issues in collecting comparable, uniform dropout statistics across States and school districts.

**Variation in definitions of related concepts.** The CCD dropout definition relies on the State's determination of whether a

**TABLE 1. CATEGORIZING STUDENTS AS DROPOUTS/NONDROPOUTS**

DRAFT: Discussion Only

Condition	CCD	NHES	NELS:88*	CPS
<b>A. In Approved Elementary/Secondary Membership</b>				
A.1. Public School	N	N	N	N
A.2. Approved Nonpublic	N	N	N	N?
A.3. Approved Program, nontraditional setting (early college admissions; home school; hospital/homebound; etc.)	N	V	N	N?
<b>B. Not in Approved Elementary/Secondary Membership</b>				
<b>B.1. Permanently Withdrawn</b>				
B.1.a. With Certification				
B.1.a.i. Secondary certification:				
--Regular Diploma	N	N	N	N
--Alternate Credential	N	N	N	N
B.1.a.ii. Adult education certification:				
--GED or other credential	Y	N	N?	N
B.1.b. Without Certification				
B.1.b.i. Membership, unapproved elementary/ secondary school or program	Y	V	?	V
B.1.b.ii. Nonschool setting (e.g., military)	Y	N/A	Y	Y
B.1.b.iii. Expelled, return not allowed	Y	Y	Y	Y
B.1.b.iv. Dead or incapacitated	N	N	N/A	N
B.1.b.v. Gone; no plans to re-enroll	Y	Y	Y	Y
B.1.b.vi. Gone; condition unknown	Y	N/A	N/A	N/A
<b>B.2. Temporarily Withdrawn</b>				
B.2.a. Ill				
B.2.a.i. Excused illness	N	N	S	?
B.2.a.ii. Unexcused illness	Y	Y	S	?
B.2.b. Expelled or suspended, option to return	N	Y	S	?
B.2.c. In transit (e.g., good cause to expect late enrollment)	N	N/A	S	N/A

Y= yes, dropout N= no, not dropout

N/A: not applicable; students in this condition not included in the collection.

S: "stopout," whose eventual dropout/nondropout status will be determined by subsequent action.

V: varies in this collection; e.g. may differ between event and status definitions.

?: Unknown or not yet determined.

Students: Population from which dropouts derive differs across surveys. E.g., CCD includes public school membership, grades 7--12; NHES includes persons aged 14--21 in membership during last 12 months.

Approved: School or program defined as elementary/secondary and approved by State or its delegated authority.

\*Many classification decisions remain to be specified for this collection.



elementary/secondary rather than adult. This can mean that a youth considered a dropout in one State would be considered still in school by another. The following problematic situations have been brought up by State field test coordinators; the list is not exhaustive.

- In some States the youth corrections system constitutes a special school district; in other States the public schools accept credits earned in a corrections setting; and in others, correction education is considered adult education. Some States consider Job Corps programs adult education while others treat Job Corps as a secondary program.

- States vary in their stance toward approval of nonpublic schools. The CCD definition uses a default for States that do not require nonpublic school approval, saying that students who leave for these schools are transfers. This makes it possible for a student enrolled in a nonpublic secondary curriculum that will not lead to a diploma to be not counted as a dropout. The same issue arises with home schooling.

- Determination of whether a program leads to a completion credential is not consistent across States. A State may grant a single exit credential, and that one a diploma for accomplishment of all course work and performance requirements. Students who complete an alternative program (such as a special education IEP), or who persist in school until they are 19 or 20 without meeting these requirements, are counted as dropouts. Other States may also grant a single credential, but offer it to all students who complete approved programs, incorporating the nontraditional students considered dropouts in the first State cited. It is possible in at least one case for a student to fail the State's high school competency test, be counted as a dropout, and enroll in the public university system.

- The Status of the GED. The American Council on Education, which manages the General Education Development (GED) testing program, does not allow students enrolled in elementary or secondary school to take the test. Technically, a student could be granted a diploma on the basis of the GED test only as a dropout. Practically, however, some school districts sponsor dropout prevention programs directed toward attainment of a GED-based diploma.

Logistics of collecting and reporting. Other issues are related more to logistical problems in collecting and reporting data than to conceptual differences in definition. These are instances in which it may be difficult for a State to abide by the requirements of the statistic. Several examples are the following.

● **Reporting Underage Dropouts.** The field test involves grades 7 through 12, possibly including dropouts as young as 12 years of age. Some States have legislation that forbids or discourages reporting school leavers under the age of compulsory attendance as dropouts, calling them instead something such as "chronic truants." Other States have or are considering sanctions against underage dropouts or their parents that raise the question of field testing a statistic to the level of accountability. One State withdrew from the field test after deciding that its State laws did not allow collecting information about underage dropouts. In other States, the field test coordinators question whether districts will perceive reporting such students as self-incriminatory.

● **Fall Collection Issues.** The field test defines as a dropout one "who was not enrolled at the beginning of the current school year." If October 1 is considered "the beginning of the school year," (as it is for the CCD membership count) there is the possibility that traditionally late enrollers such as migrant students and special education students may be erroneously counted as dropouts. (With special education students it is not sure whether counts are typically higher by December because these students are late in coming back to school or because classifications of handicapped status may not be completed until late in the fall semester.) Further, there is some concern that local definitions applying a time out of school criterion may confuse reporters. For example, if a local rule requires eight weeks' unbroken absence before a student is classified as a dropout, students not in membership by October 1 could be dropouts for the CCD reports but not dropouts for State or local purposes.

● **Drop-Ins.** It is logically possible for a student to appear in school one day a year and not be counted as a dropout. A more likely problem is that students may report to school periodically to avoid sanctions or qualify for benefits (such as reduced price public transit tickets) and never be considered dropouts. The whole issue of conceptualizing and reporting the various stages or degrees of "dropoutness" cannot be treated in a collection such as the CCD.

● **Transfer of Responsibility.** The State coordinators envision a number of problems in determining whether or not a student has left school in situations involving split or transferred responsibility for the student. These situations include movement from feeder schools to high schools, which may involve a change in school districts. With the 12-month definition proposed for the CCD, a dropout should be reported by the sending school. Logistically,

however, it is often the receiving school that is alerted to expect the student and can judge whether he or she has dropped out. There are other complex situations in which a student is counted in membership by one district and participating in a special program in another, generating more than one FTE. Which program should be responsible for reporting a school leaver is ambiguous.

● **Tracking Considerations.** Several points have been raised about expected difficulties in tracking school leavers to determine their status as dropouts or not. One is that the field test includes grades 7 and 8. Receiving schools are less likely to request transcripts from students in these pre-Carnegie unit grades, making it likely that dropout will be overestimated among this group of school leavers. A second possibility has been raised by special education data specialists. There is a concern that handicapped students may wish to hide their special education status when they transfer to new schools and may give incorrect information about their prior schools in order to accomplish this. If this is the case, handicapped students may be overrepresented in the dropout figures. Finally, coordinators from States with large Hispanic student populations have expressed concern that the proposed dropout statistics collection may not truly depict school attendance among such students. The coordinators feel that sizable numbers of Hispanic students move back and forth between the continental United States and Puerto Rico or Mexico; they may enroll in a Spanish-speaking school for several months without notifying the stateside district, or may stop out of school while in a country that traditionally does not extend public education into the high school years.

● **Burden and Technical Sophistication.** It has become clear in the first months of the dropout field test that determining whether a student who leaves school is a dropout is not a simple task. States and districts within them vary in technical sophistication, from automated tracking systems that are updated daily, to paper records compiled periodically. Whatever effect this variation has on the consistency of data quality, it is expected to be even stronger in reporting those who drop out over the summer. The precise trade-off between the burden and utility of dropout data has not yet been determined.

Issues in analyzing and reporting data. There are also a number of questions or problems to be resolved in how the dropout statistics information will be used. Not all of these are limited to the dropout definition or CCD.

● **Complementary Treatment of Dropouts and Completers.** Data users expect dropout and completion rates to sum to 100

percent, and one frequent complaint against the "Wall Chart" is that readers infer State and national dropout rates from the completion figures. In fact, the Wall Chart's completion rates reflect only those students receiving a traditional high school diploma (Clements, 1990). Students receiving an alternative credential, students who have completed a nontraditional secondary program or an adult education secondary program (e.g., GED-based diploma recipients, night school completers), and students still enrolled in high school after four years are not included in the graduation rate. The choice of whom to include or exclude has implications for education policy and accountability. Until the various routes through which students can leave school are clearly reported-- and add up to something like 100 percent--trust in, and the resultant usefulness of, dropout statistics will be limited.

- **Grade to Which Dropout Attributed.** Comparability with other reports will also affect the acceptance (and usefulness) of the CCD statistic. There is at least one point at which CCD dropout counts by grade may differ from those reported through the U.S. Census' Current Population Survey (CPS). The CPS assigns a dropout to the grade following the last grade he or she reports having completed, while the CCD statistics will assign the dropout to the last grade attended. That is, if two students dropped out of school after having gone through the ninth grade together, with one failing and the other promoted, the CCD would count both as ninth grade dropouts while the CPS would consider one to have dropped out of tenth grade.

- **Controlling for the Effects of Transfer on Rate.** Dropout rate is traditionally computed as the proportion of students with the opportunity to drop out who do so. Students who transfer during the school year or summer raise the question of, "opportunity to drop out from where?"

Using Average Daily Membership (ADM) as the denominator for dropout rate would solve this problem, in that it would apportion a student's membership to each district in which he or she was enrolled during the year. ADM was rejected for the CCD statistic, however, on advice from States that achieving a standard and accurate ADM figure across States would be quite burdensome. Membership (number of students on the roll at a specified time) was selected instead as the denominator. Three different membership counts are being examined in the field test.

Fall membership in the year for which the dropout rate is calculated does not take into account student transfers in and out of the district during the school year. Using this method, districts with declining enrollments could appear to

and out of the district during the school year. Using this method, districts with declining enrollments could appear to have lower dropout rates than warranted: imagine 1000 students beginning the year; 300 transferring to another district; and 50 dropping out. Is the correct dropout rate 5 percent (50/1,000) or 7 percent (50/700)? This problem is avoided by using [membership in the subsequent fall plus dropouts] as a denominator, but that method raises an identical difficulty in apportioning the effect of summer transfers. A district losing students over the summer would appear to have a higher dropout rate than a district gaining students, and thus inflating its second fall membership count.

A denominator based on membership at the close of the school year, before summer migration, avoids both of these problems. This denominator consists of [spring membership plus regular year dropouts] and reconstructs the number of students with the opportunity to drop out of school. This method is undoubtedly more burdensome than one based on a fall membership count. All districts take a fall count for the CCD; not all report membership at the end of the school year. All three methods are being field tested in 1989-90. The final selection of a denominator will consider both accuracy and burden.

- **School Reform and the Bulge.** States may report significantly greater retention rates at some grades than others. The grade with a higher retention rate may be that immediately preceding State competency testing, the last year of elementary/middle school, or the first year of high school. If this bulge is the base year upon which a longitudinal dropout rate is calculated, as it is when twelfth grade graduates are compared to ninth grade membership four years earlier, States feel that the denominator for graduation rates is inflated. The denominator for dropouts would also be inflated, resulting eventually in a situation in which the sum of all possible student outcomes accounts for less than 100 percent of the students. One State has proposed basing graduation (and presumably, dropout) rates on only students enrolled in ninth grade for the first time. However, separating out the repeaters could be extremely difficult for most school districts to report.

### Conclusions

This is a descriptive presentation, and there are no conclusions per se. The conditions described here do illustrate that there are alternative ways of defining who is a dropout, and that these alternatives meet different needs. These distinctions can tailor

thereby limit the usefulness of our work. It is recommended that those who carry out research on dropouts, or who provide general purpose dropout statistics, make the choices and implications of their definitions explicit. A shared taxonomy of definitional categories for classifying dropouts and computing counts and rates, should simplify researchers' work and make their results more accessible to users.

### References Cited

- Casserly, M. (1986). Draft #1. Preliminary technical analysis of dropout statistics in selected great city schools. Washington: Council of the Great City Schools.
- Clements, B. (1990). Reporting high school graduation and other high school completer statistics. Unpublished manuscript.
- General Accounting Office (1986). School dropouts. The extent and nature of the problem. Washington: U.S. General Accounting Office.
- Hamby, J.V. (1989). Solutions and strategies: Number 1. Clemson, South Carolina: National Dropout Prevention Center, Clemson University.
- Johnson, F. (1988). Dropout statistics: An update of state definitions and collection practices. Unpublished report. Washington: U. S. Department of Education, National Center for Education Statistics.
- Kominski, R. (1989). What is the national high school dropout rate? Unpublished paper.
- LeCompte, M. & Goebel, S. (1987) Can bad data produce good program planning? An analysis of record-keeping on school dropouts. Education and society, 19 (3), 250-268.
- Morrow, G. (1987). Standardizing practice in the analysis of school dropouts. In, G. Natriello (ed.) School dropouts. Patterns and policies. New York: Columbia University Teachers College Press, 38--51.
- National Center for Education Statistics (1989). Instructions for completing the nonfiscal surveys of the common core of data. Washington: U.S. Department of Education, National Center for Education Statistics.
- Pallas, A. (1987). School dropouts in the United States. Washington: U.S. Department of Education, (National) Center for Education Statistics.

- Pallas, A. (1988). Conceptual and measurement issues in the study of school dropouts. Chapter in preparation for publication.
- Rumberger, R.W. (1987). High school dropouts: A review of issues and evidence. Review of educational research, 57 (2), 101-121.
- U.S. Department of Education, (1989). State education performance chart. Washington: U.S. Department of Education, Office of Planning, Budget and Evaluation.
- Williams, P. (1987). Standardizing school dropout measures. New Jersey: Rutgers University, Center for Policy Research in Education.
- Wittebols, J. & Triplett, S. (1986). Collecting national dropout statistics. Washington: Council of Chief State School Officers.
- White House (1990). National goals for education. Office of the Press Secretary, February 16, 1990.