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CAN BAD DATA PRODUCE GOOD PROGRAM PLANNING? An Analysis of Record-Keeping on School Dropouts

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This article suggests that missing from any attempt to address the problem of increasing numbers of dropouts is a coherent and easily accessible source of data on the actual and at-risk population of young people. It describes problems in record-keeping that are common to most school districts in the United States, and whose solution is a necessary precondition to effective dropout or pushout prevention. Our basic premise is that existing data sources are biased and skewed as a consequence of the way they are compiled and maintained. Hence, evaluators, policy analysts, and university-based researchers make statements about dropouts that are misguided, and ask questions that are impossible to answer. They also design programs that do not match the needs of the actual dropout population, because the characteristics of that population have been badly described.

During the 1960s and 1970s, the number of students who failed to graduate from high school became a major educational issue. Conventional wisdom held that dropouts primarily were low-income minority students. A variety of programs were developed to help retain potential dropouts in school and to recruit back into the educational mainstream those individuals who had already dropped out. Subsequently, the Carnegie Council on Policy Studies and Higher Education (1979)

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reported that while the national dropout rate had declined steadily from 40% in 1960 to 25% in 1965, it had not changed substantially since then (Steinberg, Blinde, and Chan, 1984). Changes in educational policy during the 1980s shifted from compensatory programming to an emphasis on higher standards, but the dropout problem remained, and may even have been exacerbated (Archer and Dresden, 1986). There is even some evidence that dropout rates are increasing and that capable nonminority students are leaving school (Ritter, 1985), although the bulk of the dropout population still consists of minority students from economically and socially disadvantaged homes. In part, this derives from the fact that there has been little real innovation in strategies for addressing the problem in the last 30 years. It also is a function of general misconceptions about the overall characteristics of the population and what really puts students at risk. These issues, how they developed and why they persist, are the focus of this article.

The article begins by describing the inadequacies of current attempts to measure the size of the problem, and identifies sources of bias in record collection, maintenance, and aggregation. It suggests that since current data lead to narrow and inadequate descriptors of the age, aptitude, socioemotional, ethnic, and economic characteristics of atrisk students, programs for intervention based upon them will fail to reach many students because they are implemented too late, for the wrong kind of students, or are inadequate to touch the real needs of students. Fundamentally, the article questions whether good planning can be done with bad data.

ISSUES IN COUNTING THE KIDS

Statistics on dropouts are notoriously unreliable (Barber, 1984). On one hand, fairly stable estimates suggest that during the past decade, approximately 25% of all 18-year-olds failed to graduate from high school (McDill, Natriello, and Pallas, 1985). These estimates are based on cohorts; and are considerably higher in urban areas, where as many as 40% to 50% of the school-aged cohort fail to complete high school (Tugend, 1985; Holley and Doss, 1983; Rohter, 1985; Wehlage, 1985: 16). Among minority populations, dropout rates are said to be even higher. Estimates for Hispanics, for example, range from 35% of the cohort to as high as 88% (Orum, 1984).

On the other hand, individual school districts and state education agencies consistently report dropout rates in urban areas which range between 4% and 15% (Mann, 1985). In the following paragraphs, the sources of these variations are discussed, both as a means of providing to users of such data some guidelines and caveats regarding their interpretation, and as a way to suggest better ways to define and count the students who depart from school before graduating.

HOW DEFINITIONS AFFECT DROPOUT RATES

The size of the dropout population depends in large part upon the way dropouts are defined. Since there is no uniformity among school districts as to the definition of the type of student who constitutes a dropout, interpretation of dropout statistics is difficult and comparisons of dropout rates across school districts often are invalid. Districts may count as dropouts students who transfer to another district; who join the military; go to prison; or enter business, trade, or vocational institutes; or who are sufficiently talented to skip their junior year and enter college. Most districts categorize as dropouts students who leave school before graduation but who successfully pass a high school equivalency examination. Still another category consists of "involuntary dropouts," or students who have been suspended or expelled from school for disciplinary reasons. To the extent that these students are counted as dropouts, the percentage of early school-leavers is inflated.

Dropping out also can be disguised for certain populations. Because they do not fit the profile associated with students traditionally characterized as at-risk for early school withdrawal, middle-class students may, in fact, be able to engage in cutting classes, lengthy absenteeism, and long periods of failing grades or truancy—behavior that ordinarily would result in their suspension or in their designation as dropouts—for a much longer period of time than can minority students or traditional troublemakers.

THE PROBLEM OF SELF-DEFINITION

Most students who drop out do not bother to inform school officials that they are leaving. Many are so alienated that not identifying themselves is a final act of defiance. Others simply fade away, until their increasing rate of absenteeism accomplishes withdrawal by default. Those who do tell school personnel that they are leaving may not indicate why if they do-social pressure may cause them to lie. For example, it is easier for an alienated student to tell school staff that he or she is transferring to another school or entering the military than to admit that he has no intention of continuing his studies. Since those who self-identify as dropouts probably represent less than half the actual dropouts, generalizations from those known to be dropouts to the entire population are probably misleading. Even attempts to study all students known to be dropouts are fraught with difficulty. If studies are not to be based upon school-based enrollment data alone, dropouts must be located before they can be interviewed or surveyed. However, only a small minority usually are found. By definition, dropouts are not in school where they are easily accessible; they often have no wish to be tracked down by an "Establishment" they view as hostile or indifferent. They move, have no phones, give false addresses, or leave no forwarding information. Thus, information is available only on that minority of students who first define themselves as dropouts by making their departure known, and who subsequently can be tracked down for follow-up.2

THE MEANINGLESSNESS OF ADMINISTRATIVE CATEGORIES

The utility of dropout data is further reduced by administrative practice. School districts lump students whose reasons for not being in school are unknown into categories for administrative convenience, rather than descriptive accuracy. These ambiguous catchall classifications, such as "whereabouts unknown," "nonattendance," and "dropped out of school," are assigned by school officials to students who have given no reason for leaving or simply have disappeared (Hargroves, 1986; Goebel, 1985). Such categories are used widely; often they were originally created by and mandated for use by state education agencies. Since many students simply disappear from school, these categories are useful as part of an estimate of the number of students who really are out of school. Despite their limited utility, they may be used rather consistently by large numbers of districts, because they make possible aggregation of data. This is critical, because these administrative categories often account, as they do in Boston and Houston, for more

than 50% of the students who are designated as dropouts each year (Hargroves, 1986; LeCompte and Goebel, 1985), and the data tell us nothing of the real reasons why the students they subsume leave school. This makes suspect any generalizations from the existing data base about motivations for dropping out, and complicates planning of programs designed to match student needs and aspirations.

ADDING RETURNEES BACK IN

Another issue relates to whether dropping out behavior is recorded on the basis of individual students or separate acts of leaving school. To the extent that dropout statistics are based upon *acts* of dropping out and are not diminished by the number of reentries, they overcount the number of school-leavers. Some individuals drop in and out of school repeatedly over a period of time. Each time they drop out may add one unit to the dropout statistics. Similarly, students who "drop back in," or reenter school after having taken a period of time off, may never be subtracted from the dropout roles.

THE PROBLEM OF TRANSFERS

HOW MANY "DROPOUTS" ARE TRANSFERS?

Many students who say they are transferring actually plan to drop out of school. Others are counted as dropouts because they have disappeared from attendance records, but they really are enrolled someplace else. Laws in some states mandate that schools obtain official academic transcripts from sending schools for each incoming transfer student. In these cases, the number of transcript requests can be used as an indicator of the number of students who actually transferred. However, there are many pitfalls in using these figures as a proxy. First, the practice of requesting transcripts is not universal, and it often pertains only to public schools within a given state. Private schools and those in foreign countries or out of state often do not request records; parents or students also can circumvent the process by picking up their own copies of records from cooperative school officials and presenting them in person at their new schools. In the absence of a system for

centralized maintenance of formal requests for documents from one school to another, it is impossible to verify how many students who left one campus or district actually enrolled in another one.³

Even where transcript requests are made routinely, schools do not always maintain this kind of information on a computerized or easily accessed student data base. Where computerized systems do exist. compliance with record-keeping procedures is often spotty. This occurs for many reasons. First, requests for transcripts may arrive only at the point when information to establish eligibility for graduation finally is needed, months or years after a student has withdrawn. Second, many schools lack user-friendly equipment or sufficient staff with training and adequate time to enter the data into the system or respond to requests. As a consequence, businesses and other schools requesting transcripts may have to wait for months before receiving records needed to hire a student, admit him or her to college or an alternative program, or even verify his or her presence in school (Valverde, 1986; Bishop, 1985). This may introduce substantial error in dropout statistics. For example, in a small pilot study performed in one major school system, a list of students who had been designated as dropouts because they had disappeared from school was computer-generated from the district's student masterfile, and compared against cumulative folders of the same students on their last known campus. In 25% of the cases, students had been erroneously counted as dropouts, because transfer requests had never been entered into the data base. The requests were, in fact, still located in their cumulative folder on the home school campus (Goebel and LeCompte, 1985).

A MODEL FOR INTERDISTRICT LONGITUDINAL TRACKING OF STUDENTS

Because no means exist for monitoring the movement of students from district to district, from public to private schools, and to other states or countries, the actual number of students who say they are transferring and who actually enroll in another school cannot be determined. A model for such a tracking system exists in the Migrant Student Record Transfer System (MSRTS), a computerized data bank that assists children of migrant workers to keep abreast of their studies. Because of their parents' seasonal employment, migrant students often move from city to city many times within a school year. The MSRTS data bank maintains demographic, achievement, language proficiency,

and social service eligibility data for each qualified migrant student, enabling schools who enroll these students to obtain rapidly information needed to place them in appropriate instructional programs. The MSRTS is, however, a relatively small system; it includes neither all students whose parents are migrant workers nor all students who move a great deal for reasons other than the employment status of their parents. Its utility is also limited by its source of funding; it is expensive, and because it is federally supported, neither consistency of resources nor longevity is assured. Thus its expansion to a nationwide system for coping with student mobility probably is not feasible. Whitford (1986) gives an excellent description of the negative impact of funding sources on innovative programs such as the MSRTS.

In summary, dropout statistics probably are inflated by the number of transfer students erroneously classified as dropouts, as well as by the number of students who drop out repeatedly and are counted more than once. They are underestimated by the number of actual dropouts who falsely state that they plan to enroll in another school. These inaccuracies are generated at the campus level; aggregating data across districts to create state- or nationwide statistics only compounds the error in reporting.

THE FAILURE TO EXAMINE COHORT ATTRITION

ANNUAL VERSUS LONGITUDINAL ENUMERATION

Error in computing dropout statistics is also created by the time frame used in school district reporting structures. Because of annual promotion and funding cycles, the school "year" is a nine-month period. Until recently, the only student data considered critical to the overall functioning of school districts were student grades, achievement test scores, and the attendance and enrollment data used to generate state funding. These data were kept only on an annual basis, and usually were aggregated only for the nine-month school "year." Pupil accounting and record-keeping procedures have not always changed to reflect increasingly complex data needs, such as those needed to identify and track dropouts, and the rather primitive state of many accounting procedures affects the accessibility and accuracy of dropout data.

A common practice among districts that disregards attrition from an intact school-aged cohort aggregates data only from September to June. This reflects historical and practical realities of record-keeping in school districts. Each academic year customarily is treated as a discrete unit of nine months' duration, wherein enrollment is opened in the fall and closed in early summer at the end of the school year. Even returning students are reenrolled at the beginning of each year. Enrollment data, including dropout statistics, are calculated for that nine-month period only. This introduces two sources of error. First, dropout statistics usually represent only that percentage of students who left school from September to June of a given year. Where nine-month accounting periods are used, summer dropouts—those children who decided during June, July, and August not to return to school—do not enter into the figures, and the actual number of school-leavers is underestimated. This group may constitute as much as one-third of the students who drop out. Second, counting students simply on an annual basis rather than longitudinally makes much more difficult determination of the attrition from an age-cohort of students over the entire 12 years of their schooling.

Calculated, although probably not actual, dropout rates are lowest in school districts that determine and report statistics within a single academic year. They are highest where longitudinal accounting practices are followed as well as procedures that permit accurate accounting for summer dropouts, transfers, and those who fall into the "whereabouts unknown" category.⁴

In defense of school districts, these patterns of record maintenance were not instituted deliberately to obscure the size of the dropout problem. In addition to the historical and practical considerations mentioned earlier, they represent not only holdovers from an era that predated computerized record-keeping, but the seasonal nature of public schooling; building-level personnel frequently are not on duty during the summer months. Even if potential dropouts did want to report their departure, there would be no one home at the schoolhouse to whom they could announce their intentions. A less-benign tendency is for schools to reduce their dropout rates simply by not reporting all their dropouts to school or state officials. To the extent that awards of merit pay for teachers and principals are affected by changes in dropout rates, this practice could be accelerated.

FAILURE TO PURGE OR CLEAN DATA FILES

Many school districts are making valiant efforts to institute up-to-date record management systems. Lack of trained staff, equipment, and capital, however, as well as entrenched bureaucratic resistance to change in clerical procedures, hamper these efforts (LeCompte and Anderson, 1984; Hemphill and Sumartojo, 1985). Even where school districts have made a strong commitment to modernizing procedures, the reality of actual implementation may lag far behind the hopes of administrators. In every case, the initial stages of conversion to a new system generates more paperwork for teachers and staff rather than less; hence, there is resistance to the change.

Some large school districts, for example, have no centralized way to purge from the enrollment of an individual school the records of a student who has left the school district or transferred to another school within the district. Lack of such file-cleaning capacity results in duplication and inflated enrollment figures, not only on individual campuses, but for districts as a whole.

Failure to clean up files serves one function for those who practice it; it increases the student head count for state funding purposes. It creates other problems, however, in that many students who appear still to be enrolled may, in fact, be dropouts. It also causes the percentage of graduates from a district to appear smaller than it really is, when comparisons of an inflated total enrollment figure are compared against the size of the graduating class.

CHAOS IN THE DATA BANK: PROBLEMS OF DATA INTERPRETATION

VARIATIONS ACROSS GRADE LEVEL

Dropout rates vary across grade levels, but interpretation of gradeby-grade dropout rates needs to proceed with caution. The largest number of students (although not a majority of all dropouts) who drop out of school do so near the time that they exceed the age of compulsory school attendance or approximately grades eight through nine. However, the size of the ninth grade is artificially inflated. Ninth grade is the first grade level in which students are required to pass courses in order to accumulate credits toward graduation. The ninth-grade class, and perhaps the tenth-grade class as well, is larger than it should be if age alone were a consideration, since students are held back in those grades, repeating courses until they have passed a sufficient number of requirements for reclassification into a higher grade level. Hence, dropout rates expressed as a percentage of these grade levels may be misleading. Some students classified as ninth- or tenth-graders may have been in those grades for a long time.

COMPOUNDING ERRORS: ISSUES IN AGGREGATING DATA

It is important to remember that all dropout data originate from individual campuses. Statistics for school districts are usually calculated by aggregating raw numbers of dropouts reported each year by each individual campus. Errors initiated there affect all subsequent aggregation at the data base.

School districts generally have access to relatively accurate demographic, achievement, and other data, including reasons for dropping out,⁵ on students whose identification numbers are known. Student identification numbers are used to match individuals with whatever types of data are maintained by the school district on its centralized, although not always computerized, record-keeping system. Most commonly, where they are available, frequencies for sex, ethnicity, and other characteristics such as achievement are reported separately for each year, based again upon reports of numbers from each campus rather than upon cross-tabulations from some centralized computer data file. This is because identification of individual student characteristics depends both upon obtaining identification numbers of students who drop out and upon matching of yearly enrollment files to create a longitudinal record. This often is difficult to do for school districts.

Historical data files are maintained somewhat haphazardly by school districts. Sometimes, desired data simply is missing; whole years of data may be absent or so garbled that the student-to-student matches over time, which are necessary to track an academic cohort and determine which students dropped out, are impossible to execute. Definitions of dropouts may change from year to year, so that the units of analysis to be compared are no longer comparable. Similarly, demographic and

other categorical descriptive data, such as eligibility for certain programs, which were deemed important one year may not be preserved in the next, or they may be defined by different criteria. The most acute problem is the ponderous nature of record-keeping; desired data may exist but not in an easily accessible form or in units that are useful to researchers. It may be stored, as is most detailed information on disciplinary actions, on three-by-five cards in drawers at each campus. Access to such data requires prior computerization. If computerized, it may be maintained in files separate from the general student master file. For school staff working with special populations such as handicapped or limited-English-proficient students, maintaining separate files of their unique student group may be a convenience, and is, in fact, the genesis of many such separate record-keeping systems. However, rendering such files useful even for simple research questions like determining the overlap between a specialized population and dropouts requires much costly and cumbersome manipulation of data files and accompanying computer programming.

AGGREGATING ERROR TO THE STATE LEVEL

Working with dropout data requires constant awareness of the level of noise in the data base. It has already been stated that data from individual campuses are replete with errors from a multitude of sources, all of which need to be assessed. Incautious aggregation of data from individual campuses, while giving larger numbers, only generates more noise. There is as little uniformity among school districts in procedures for maintaining records as there is uniformity in the definitions used or type of data preserved. Combining data from different districts to obtain statewide statistics on dropouts often results in adding apples to oranges. More concretely, when rates from districts that calculate dropout rates from September to June are combined with those that maintain twelve-month files, the rates will not be comparable because they derive from different bases.

Adding to the confusion often is the vagueness of categories into which data are lumped. Where ease of data handling mandates aggregation into only a few categories, much information is tossed into an "other" category that obscures both meaning and diversity. At other times, broad general answers to questions, such as "why did you drop out of school," generate a very large number of idiosyncratic responses that are equally difficult for a researcher to analyze.

"BUT ALL THEY HAVE TO DO IS ..."

Investigators who hope to track the dropout rates of certain kinds of students may naively think that it is relatively easy for school districts to single out a given population—urban Appalachians, for example, who could be identified by the birthplace of their parents or grandparents—for special scrutiny. The process, especially in large districts, is not as simple as it might appear. At the very least, the following steps must be taken.

Reliable and valid means for identifying the population need to be selected and a paper document with airtight instructions for its use needs to be created for initial recording of the information. A person (or persons) at the campus must be designated to collect the data; procedures and persons must be provided to enter the data into the computerized data base. The data base itself may have to be altered to make room for additional information; sometimes this is not easy if much information already is filed. Even where space is available, districts whose student records are maintained by a regional service center or a proprietary concern rather than on their own computer will have to negotiate several more layers of bureaucracy before change can be initiated. Errors can occur at every step.

NEW TYPES OF DROPOUTS

THE VERY YOUNG DROPOUT

There is increasing evidence that the dropout population is beginning to include groups of students hitherto not considered to be at risk and hence for whom no appropriate programs exist.

Current dropout statistics fail to depict accurately the number of students who drop out of school before reaching high school. This is because dropping out traditionally has been viewed as a secondary school problem. Dropping out is defined as failing to graduate; therefore, statistics have most commonly been reported for grades nine through twelve. However, there is increasing, if scattered, evidence that large numbers of elementary and middle school children also drop out of school (Hirano-Nakanishi, 1984). In Houston, for example, almost one-sixth of the students who were known to be dropouts in a given year

left school during middle school (Goebel and LeCompte, 1985).

One marker pointing to the attrition of younger students is the decrease in the size of the enrolled school cohort at critical transition points—from elementary to middle school and from middle to high school. While the phenomenon could be attributed to population shifts within a geographic area, this explanation is belied by concomitant decreases in the number of minority children in higher grade levels, despite their predominance in the lower grade levels of urban school districts. Some evidence suggests that these early dropouts are among the least well-equipped to succeed in school (Goebel and LeCompte, 1985). Their reading and math achievement scores are lower than those of high school-aged dropouts. They probably become discouraged earlier and thus begin to drop out even before they exceed the age of compulsory school attendance. They include those whose proficiency in English is limited or whose achievement record, for whatever reason, is dismal. They may include many students currently labeled as "slow learners" or "learning disabled," who are, in fact, among the largest percentage of special education students known to be dropouts.

Current dropout intervention programs do not address the needs of very young dropouts, because the programs usually are vocationally oriented and based upon the assumption that immediately, or at least within a very short time, the potential or actual dropout will be old enough to enter the work force. The very young dropout is, however, not even old enough for on-the-job training programs, whose youngest clients are 14 to 15 years old. Regardless of their reasons for dropping out, these students, marked as they are by academic, social, emotional, and legal immaturity, are among the most-disadvantaged competitors in the game of life.

THE "GENTRIFICATION" OF DROPPING OUT

While it is true that in actual numbers, the majority of students who drop out are low achievers from minority groups, a surprising number of white and nonwhite students whose achievement test scores exceed the 75th percentile drop out of school (Goebel and LeCompte, 1985). Some of these students have poor grade point averages despite their high test scores because they are alienated from school or have other problems that interfere with their performance (Elliott, Voss, and Wendling, 1966). Others are students who may even have good grades,

but who also have socioemotional problems, including drug use, pregnancy, and intolerable family conditions that make continuation in school difficult. Conventional characterizations of the dropout population minimize the number of dropouts who are academically competent and/or from middle- and upper-middle-class backgrounds, but it is clear that like the very young dropout, these students need different program offerings from the standard remedial vocational fare usually available.

SUMMARY

In the preceding pages, we have described a number of the contingencies that lead to the production of very dirty data on secondary school dropouts. They range from inconsistency in definitions to problems in maintenance of even the most-elementary forms of records in a uniform manner. Taken together, they call into question the legitimacy of using existing data bases for anything other than the most general identification of what is clearly a major educational issue in the United States: the failure of a very large proportion of eligible students to complete high school. They also call into question the legitimacy of using any existing dropout data as a means for fine-tuned program planning and development or evaluation of program effectiveness. If at-risk students can't be identified, tracked, or described, how can programs be developed for them? Furthermore, if programs are developed, how can students be followed to determine if the programs are effective?

CONCLUSION AND RECOMMENDATIONS

A CAUTIONARY NOTE

The preceding discussion is not intended to indict school systems or to discourage dropout research, but to suggest that good ideas for research and program development in the area must be tempered by realistic notions of what actually can be accomplished under current conditions, and the hard constraints under which all concerned must labor. The real issue, both for would-be researchers on dropouts and for school administrators or districts who wish to address the problem appropriately in their schools, is that even when data exist, they often are misleading and difficult to access. Even what appear to be the simplest questions about dropouts or types of students who drop out often are not easy to answer. In order to achieve more-accurate knowledge about dropouts and, as a consequence, develop programs more attuned to the realities of the current population, a number of changes must be made.

First, the amount of error in accounting procedures must be reduced so that accurate identification and enumeration of dropouts can be accomplished. In this way, school administrators can begin to have a realistic idea of the size of the problem they are facing—which in many cases may be far larger and diverse than they had expected. An obvious suggestion is that more up-to-date centralized record-keeping and clerical procedures must be put into place. Where resources can be found, this is an obvious solution, especially in larger districts. However, a real obstacle to such a plan is the lack of human and financial resources required to change existing antiquated procedures. In an era of shrinking local and nonexistent federal resources, it will not be easy to find additional funds or support for redirection of funds for something as prosaic and far distant from instruction as record-keeping. In addition, much will have to be done with limited, obsolete, or nonexistent computerization, since many school districts simply will not be able to provide staff and hardware beyond what they already have. Given these limitations, a major step would be the establishment of simple but uniform procedures for defining and identifying dropouts. for calculating dropout rates, and for recording the reasons that students drop out.

Second, there is need of a federal mandate for such uniformity, since only in that way could there be ensured cooperation among the various states and districts. As a start, a uniform nationwide definition of a dropout should be adopted, as well as twelve-month annual reporting procedures so that summer dropouts are not omitted from statistics and students who drop back in to schools are not included. Several such systems have been detailed in Goebel (1986) and Morrow (1986). However it is designed, any new program must be set up so that while it can easily be computerized, it does not absolutely require sophisticated equipment or training at either the building or district levels. Simple procedures spelling out what must be done, such as those described earlier in this article, also must be put in place.

Third, a more-systematic means for tracking students who transfer from one school to another needs to be created. A nationwide system might be modeled after the Migrant Student Record Transfer system described earlier in this article. To do so would not only recognize the reality of extreme mobility in our society and assist in accurate enumeration of those who leave school, but would facilitate accurate and rapid placement of students new to a school into appropriate programs. However, the cost of implementing this system, as well as the civil rights implications of creating a national system of identifying students, might prove to be insurmountable. A low-tech alternative might involve using an adaptation of the procedures used in Austin, Texas, whereby carbon copies of the transfer request received and filled out by building-level personnel are sent for entry into the centralized system to the department—in this case, the Research Department which maintains the pupil data records. Were all districts required to request transcripts from transfer students—and to respond to the requests they receive in a uniform manner—the beginnings of a uniform system could be put in place.

Fourth, campuses and districts must be monitored to ensure that they do report dropouts and that those statistics appear to be reasonable and consistent with characteristics of the population served. For example, schools with high minority enrollments that reported few, if any, dropouts should be considered suspect and investigated, as should those that show great fluctuation in dropout rates from year to year. It is unlikely that the present political climate will make possible on-site monitoring teams such as those once organized by the Office of Civil Rights. However, systems of self-monitoring and reporting under uniform and mandatory guidelines could provide a beginning, especially if the data were reported to a central data bank. In this way, some uniformity might be imposed upon the present chaotic system, and it certainly would give state and local officials as well as the public a more viable means for making comparisons among districts.

Fifth, researchers interested in the dropout problem also must be assured that their figures are not missing important, if nontraditional, segments of the population, either by deliberate omission or unconscious oversight. One such group consists of middle-class and nonminority students. Another consists of very young dropouts, for whom better procedures for identification must be initiated. In the first place, dropout statistics must be aggregated for lower grades, at least including junior high and middle school students. Procedures for following up truancy and extended absenteeism need to begin earlier, to be oriented

to non-English-speaking minorities where necessary, and to be structured differently. For example, serious attention needs to be paid to the ways in which middle and elementary school children are turned into failures by the differential treatment they receive: repeated placement in slow tracks and "pull-out" remedial programs (LeCompte and Goebel, 1985; Bennett, 1986); failure of school personnel to accommodate to cultural differences in cognition, interaction, and communication of their students (Bennett, 1986; Erickson, 1984); and by lack of timely and sympathetic intervention by school personnel who do not feel that their efforts will bear any fruit with students already designated as potential failures.

Finally, data need to be examined with the realization that all students are potential dropouts and the dropout rates may increase if new means for addressing the reasons students become disaffected from school are not found. For example, while the problems of middle-class students may differ from those of working-class parents, they may be equally alienated from schools. Reducing the dropout rate will require a more careful examination of the reasons more advantaged students, as well as traditionally disadvantaged students, become at risk, so that a wide variety of appropriate programs may be organized.

NOTES

- 1. For example, researchers in Cincinnati planned a study of dropout rates among Appalachian students. Since Appalachians are not identified as an identifiable minority in school district records, they planned to identify their population by tracing the birthplaces of parents and grandparents of the students. However, none of this data had ever been collected by school districts and hence could not be retrieved. Similarly, although data on suspensions and disciplinary action would be useful as a means for identifying students in danger of dropping out, data on individual students often are maintained only at the school level in card files; centrally available data, if it exists, consists of tabular summaries enumerating general categories of punishment, suspension, and expulsion. It often is impossible to do a study that matches individual students to their disciplinary records without going through original student folders on a case-by-case basis. These procedures obviate all but small-scale studies.
- 2. Many students can be classified as "pushouts," either because they fell between administrative cracks and never finished school (e.g., gave up when transfer of records and red tape needed to enter a special program became too onerous) or because they were pressured, for legitimate or other reasons, to leave school (e.g., told that after a long illness, during which age eighteen was reached, that they were too old to reenter school—Valverde, 1986; Williams, 1986). We do not address motivations for leaving school in this

article, although the number of students for whom only a little help or encouragement would have provided the impetus to graduate is, no doubt, very large.

- 3. Austin Independent School District, in Austin, Texas, has implemented a system whereby transcript requests are routinely sent to the records management office, so that accurate counts of actual transfers can be maintained.
- 4. Dropout rates often appear to rise dramatically upon implementation of new and better procedures for counting school-leavers. This is, however, an artifact of improved record-keeping (Hargrove, 1986).
 - 5. With, of course, the limitations described earlier in this article,

REFERENCES

- ARCHER, E. and J. DRESDEN (1986) "The impact of excellence: new achievement standards, attendance policies, failure rates, and retention." Presented at the American Educational Research Association, San Francisco, April.
- BARBER, L. (1984) Dropouts, Transfers, Withdrawn and Removed Students (unpublished technical report). Bloomington, IN: Phi Delta Kappa Center on Evaluation Development and Research.
- BENNETT, K. (1986) "Reading ability grouping and its consequences for urban Appalachian first graders." Ph.D. dissertation, Department of Educational Foundations, University of Cincinnati.
- BISHOP, J. (1985) Preparing Youth for Employment. Report for U.S.D.O.E. National Institute of Education Project: "School Effectiveness for Employability." Columbus: Ohio State University National Center for Research in Vocational Education.
- Carnegie Council on Policy Studies and Higher Education (1979) Giving Youth a Better Chance: Options for Education, Work, and Service. San Francisco, CA: Jossey-Bass.
- ELLIOTT, D. S., H. L. VOSS, and A. WENDLING (1966) "Capable dropouts and the social milieu of the high school." J. of Educ. Research 60, 4: 180-185.
- ERICKSON, F. F. (1984) "School literacy, reasoning and civility: an anthropologist's perspective." Rev. of Educ. Research 54, 4: 525-546.
- GOEBEL, S. (1986) "Counting all the kids: testing a model for computing accurate dropout rates." Presented at the American Educational Research Association, San Francisco, April.
- GOEBEL, S. G., and M. D. LeCOMPTE (1985) "HISD's Dropouts." Dropout Report No.3. Houston, TX: Department of Planning, Research and Evaluation, Houston Independent School District.
- HARGROVES, J. S. (1986) "The Boston compact: a systems approach to school dropouts." Presented at the American Educational Research Association, San Francisco, April.
- HEMPHILL, H., and E. SUMARTOJO (1985) "Computerized data management in educational settings: six case studies." Presented at the American Educational Research Association, April.
- HIRANO-NAKANISHI, M. (1984) "Hispanic school dropouts: the extent and relevance of pre-high school attrition and delayed education." Report. Washington, DC: National Institute of Education.

- HOLLEY, F. M., and D. A. DOSS (1983) Mother Got Tired of Taking Care of My Baby. Publication #82.44. Austin, TX: Office of Research and Evaluation, Austin Independent School District.
- LeCOMPTE, M. D., and J. A. ANDERSON (1984) "Problems of implementing large scale computerized instruction programs in urban school districts." Presented at the American Anthropological Association Meetings, November.
- LeCOMPTE, M. D., and S. G. GOEBEL (1985) HISD Dropout Study #1: Issues in Defining and Enumerating Dropouts. Houston, TX: Houston Independent School District Department of Planning, Research, and Evaluation.
- MANN, D. (1985) Report of the National Institutional Conference on Holding Power and Dropouts. New York: Teachers College, Columbia University.
- McDILL, E. L., G. NATRIELLO, and A. M. PALLAS (1985) "Uncommon sense: school administrators, school reform, and potential dropouts." Prepared for presentation at the National Invitational conference on Holding Power and Dropouts, Teachers College, Columbia University, February.
- MORROW, G. (1986) "Standardizing practice in the analysis of school dropouts." Teachers College Record 87, 3: 342-355.
- ORUM, L. S. (1984) "Hispanic dropouts: community responses." Washington, DC: Office of Research Advocacy and Legislation, National Council of LaRaza.
- PUTNAM, J. F., and G. G. TANKARD, Jr. (1964) Pupil Accounting for Local and State School Systems. State Educational Records and Reports Series: Handbook V, Bulletin No. 39. Washington, DC: U.S. DHEW, Office of Education.
- RITTER, M. (1985) "The myth of the gifted." Houston Chronicle (January 20).
- ROHTER, L. (1985) "City schools found to make no progress in reducing dropouts." New York Times (May 24): 10.
- STEINBERG, L., P. BLINDE, and K. CHAN (1984) "Dropping out among language minority youth." Rev. of Educ. Research 54, 1: 113-132.
- TUGEND, A. (1985) "Half of Chicago students drop out." Education Week (March 6):10.
- VALVERDE, S. A. (1986) "A comparative study of Hispanic LEP and non-LEP high school dropouts and Hispanic LEP and non-LEP high school graduates in an urban school system in the southwestern United States." Ph.D. dissertation, Department of Educational Leadership, University of Houston.
- WEHLAGE, G. (1985) "School factors associated with dropping out." Presented at the American Educational Research Association, April.
- WHITFORD, B. (1986) "Effects of organizational context on program implementation," in W. T. Pink and G. W. Noblet (eds.) Schooling in Social Context: Qualitative Studies. Norwood, NJ: Ablex.
- WILLIAMS, S. B. (1986) "A comparative study of black dropouts and black high school graduates in an urban public school system." Ph.D. dissertation, Department of Educational Leadership, University of Houston.