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ABSTRACT

Four essays and associated introductory text constituting the proceedings of a symposium on dropout research issues are presented. The introduction by Glynn Ligon makes a call for considering what is known about dropouts, what is needed to be known about dropouts, and how these findings can be communicated to educators, the public, and lawmakers. The papers include: (1) "Are the Very High Dropout Rates Being Reported Greatly Exaggerated?" (George H. Olson); (2) "Can We Predict Which Students Will Graduate or Drop Out?" (Linda Frazer); (3) "Can We Legislate Students To Stay in School?" (Sylvia Garcia); and (4) "Does Private Industry Have a Role in Keeping Students in School?" (Jeff Cole). The first paper purports that: much of the confusion concerning national dropout rates (estimated at 25% to 50%) is due to recordkeeping problems; and if student accounting methods are improved, dropout rates will decrease. The second paper reviews three studies conducted at the Austin (Texas) Independent School District on predicting dropout and graduate rates, and describes characteristics of effective dropout prevention programs. The third paper describes legislative efforts in which new social policies related to schooling are used to convince parents and their children that all students must graduate from high school, and considers educational reform and school restructuring. The fourth paper takes the perspective of the Texas Research League, and considers the multifaceted role of private industry in preventing school dropouts. Audience questions and comments are included. (TJH)

# *Diplomas or Dropout Statistics: Alternatives for At-Risk Students*



***A Symposium***
***Presented at the***
***Annual Meeting of the***
***Southwest Educational Research Association***

*January 25, 1990*
*Austin, Texas*

# *Diplomas or Dropout Statistics: Alternatives for At-Risk Students*


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# *Diplomas or Dropout Statistics: Alternatives for At-Risk Students*

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# Introduction

*Glynn Ligon, Austin Public Schools*

I would like to make a few introductory comments about the state of the art in dropout research and the overall condition of communicating our research and evaluation findings about dropouts to the public.

I have been frustrated for years by the misreporting and misuse of educational research in this country—and especially in Texas. Let me cite some specific examples.

- When SAT scores rose the year after the *Nation at Risk Report* was published, President Reagan attributed the improvement to the focus placed on reform as a consequence of the report. In reality, those SAT scores were influenced by events that occurred well before the Nation at Risk report was drafted—in fact some of the scores that Reagan commented on were for tests taken by students before the report was published.

- The well publicized West Virginia "no class, no car" law was reported to have reduced dropouts in that state by 30% in its first year. In reality, their rate changed from 17.4% to around 16%. (12.2% would have been -30%).

- The Texas Legislature approved a very expensive class size cap of 22 for grades K-4 and cited the research on class size. However, a cost-benefit ratio would have shown this to be very expensive, and probably of no consequence above grade 1.

- Texas "no pass, no play" rule had no research base when it was passed..

*...did the Legislators fail to enact other measures because they thought they had solved a third of the dropout problem already?*

Would laws and statements like these have occurred if the research had been available and known? Probably, but in the case of the driver's license law, did the Legislators fail to enact other measures because they thought they had solved a third of the dropout problem already?

- Just last week, the National Center for Policy Analysis published a report that concluded:
  - The more time minority students spend in school the greater the performance gap between white and minority students.
  - The 56 school districts designated as best are the districts in which at least 85% of the ninth graders taking the TEAMS passed all three subject areas.
- Cannel accuses educators of cheating by using old test norms, but fails to understand that if national achievement levels were declining that using old test norms would result in spuriously lower test results, not higher ones.

Clearly, some of these conclusions involve technical issues that we cannot expect the public to understand. However, I believe strongly that we as educational researchers need to take a more active role in challenging some of these misrepresentations or misunderstandings. Possibly groups like SERA or the Texas Research and Evaluation Network can address this challenge. There should be a mechanism for the educational researchers to be part of the process by which statistics and research findings are reviewed and accurately represented to the public.

*...consider what we really know about dropouts, what we need to know, (and)*

*...how to communicate those findings to educators, the public, and especially lawmakers.*

Today in this symposium, I would challenge the presenters and the audience to consider what we really know about dropouts, what we need to know; and when we know it, how to communicate those findings to educators, the public, and especially lawmakers.

## Are the Very High Dropout Rates Being Reported Greatly Exaggerated?

*George H. Olson, Dallas ISD*

It is virtually inarguable that the United States has a serious problem with respect to students dropping out of school. But, media headlines in recent years have insinuated a dropout crises with reports that our nation's youth are quitting school in droves. It is not unusual to see headlines proclaiming that as many as 25 percent, 40 percent, even 50 percent or more of our students are leaving school prior to graduation.

Such statistics have not been the invention of the media. In 1985, Samuel Peng authored a paper for the Business Advisory Committee of the Education Commission of the States in which he estimated the national dropout rate at 25 percent. Within the nation's urban school districts the rate was put at 50 percent. Essentially identical statistics were reported in a study conducted by the Government Accounting Office (GAO, 1986). At about the same time, Hess and Lauber (1985) reported the dropout rate among inner-city Chicago schools to be over 50 percent. These three studies are representative of findings which received considerable coverage in secondary reviews published a year or so later (e.g., an article by Lefkowitz, 1987, a book by Orr, 1987; a monograph by the Institute for Educational Leadership [Hahn, Danzberger, & Lefkowitz, 1987]; a monograph by the OERI Urban Superintendents Network [OERI, 1987]; a major report on dropouts by the Department of Education [Pallas, 1987]; and numerous newsletters from a variety of national organizations). Additional support for high estimates of dropout rates has come from research reports issued by large school districts (e.g., Hurst & Donahue, 1988; Olson, 1988a; Stephenson, 1985; Strother, 1986).

*Reports ... have demonstrated that dropout rates are highly susceptible to vagaries in ... computation.*

Reports published in recent years have demonstrated, adequately, that dropout rates are highly susceptible to vagaries in the ingredients going into their computation. Morrow (1986), for instance, identified three factors that influence the computation: the time frame (annual, or longitudinal), range of grade levels included (grades 9-12, 7-12, K-12), and the student accounting procedure used (average daily membership, average daily attendance, or all students ever enrolled). Rates based on longitudinal (cohort) analyses will always yield larger rates than those based upon annual counts (Olson, 1988b; Stephenson, 1985). Because the likelihood of dropping out increases with age, high school rates (grades 9-12) will nearly always be higher than secondary rates (grades 7-12) which in turn will be higher than district rates (grades K-12). The student accounting procedure employed is particularly influential because it determines the number of students comprising the denominator of the rate being tallied. Using average daily attendance (ADA) will generally yield a smaller count, hence a larger rate, than will average daily membership (ADM) (Morrow, 1986). Still lower dropout rates will be obtained by including in the denominator all students ever enrolled within the time frame analyzed (Olson, 1988b).

Several other factors affect the computation of dropout rates. The choice of definition of dropout employed is one of the more important factors causing problems (Olson, 1988b). Poor record keeping is another (LeCompte & Goebel, 1987). Still other, more subtle, factors are discussed by Horst and Donahue (1989), whose paper should be required reading for anyone doing research in this area.

To be fair it should be pointed out that virtually all the sources of high (40 percent or more) dropout statistics include conscientious discussion of many of the problems involved in estimating dropout rates. In virtually every study cited, it was pointed out that the high rates resulted from a cohort analysis spanning four or more years. Readers were cautioned that such rates are usually confounded with attrition rates. Furthermore, most of the studies reported annual dropout rates that were much lower than the cohort rates, as expected.

Yet the general perception persists that dropout rates are soaring. When the

press reports the results of dropout studies it tends to report only the highest figures available, without concomitant explanation concerning how the statistics were computed or what they actually mean.[1] Thus the public (politicians included) is informed simply that this or that district's dropout rate is in the neighborhood of 50 percent! This figure, in turn, ends up being interpreted as an annual rate — half the students are dropping out each year (Tugend, 1985)! We all have no difficulty in imagining where this perception leads.

My objective in this presentation is to help quell the misperception that one-fourth to one-half of our high school students are quitting school prior to graduation. My premise is that much of the confusion is due to difficulties in record keeping. I believe that if we had better student accounting we would have lower dropout rates. I also report the results of two studies, recently conducted in Dallas, that give credence to my believe. But first, it is informative to show the effect of a rather simple improvement in student accounting.

*My objective ... is to help quell the misperception that one-fourth to one-half of our high school students are quitting school prior to graduation.*

## THE EFFECT OF A NEW STUDENT ACCOUNTING PROCEDURE ON 1988-89 DROPOUT RATES

In 1987 the Texas legislature enacted into law new requirements for reporting dropout statistics beginning with the 1987-88 school year. In particular, a dropout was defined as any student:

1. Who does not have a high school diploma,
2. Who is absent for 30 or more consecutive days, and
3. Whose attendance at another public, private, or parochial school within the 30-day time period cannot be established.

An additional requirement was that students who failed to return to school in the fall when expected (i.e., the noshows) were to be counted as dropouts from the school they had attended the previous spring.

Concerning the third requirement, a formal request for a child's transcript, from either the parent or an accredited educational institution, was allowed as evidence that the child had transferred to another school. Unfortunately, the district was unable to take advantage of this exclusion for another year.

At the beginning of the 1987-88 school year, the Dallas ISD had no formal procedure in place for centrally collecting transcript requests. Consequently, we were unable to exclude these students from our dropout counts until the following year, 1988-89, when procedures for collecting such information at the school level and for coding the information on the district's centrally located computer database were developed and implemented. In all other respects, the districts accounting procedures agreed closely with those newly mandated by the state. Once the new procedures were installed, however, the result was striking. For several years prior to 1988-89 the district's official annual high school dropout rate had hovered in the neighborhood of 19 to 21 percent (Table 1). For 1988-89 the rate dropped five percentage points to 16 percent. Virtually all the improvement (in the DISD dropout rate) could be attributed to the new accounting procedures. Before these procedures were used, students who transferred to other school districts without having first informed their old school of their intentions were coded on our database as withdrawn "for reasons unknown." Since we had no (collected) evidence of their matriculation elsewhere these students were subsequently counted as dropouts. A new system for recording incidences of transcript requests netted almost a 24 percent reduction in the drop-out rate we were required to report to the state education agency. In the next section we will see that, given enough resources, additional improvements in accounting for withdrawn students' whereabouts can net much greater reductions in dropout rates.

*Virtually all the improvement could be attributed to the new accounting procedures.*

## TWO FOLLOW-UP STUDIES OF WITHDRAWN STUDENTS

In 1988 the Dallas school district initiated two efforts aimed at recovering dropouts. The first effort (Olson, Anderson, Taite, & Babu, 1989) targeted students who did not return to the Dallas schools, as expected, in fall 1988. These students are typically referred to as summer no shows, or simply, "noshows." The second effort (Taite, 1989) was aimed at students who left the district during the fall 1988 semester for reasons that suggested they might be dropouts. These students will be referred to as "potential dropouts." While the primary focus of these two efforts was to re-enroll dropouts, the studies afforded an excellent opportunity to obtain typically unavailable data on the whereabouts of students otherwise classified officially as dropouts.[2]

**Table 1: Annual Dropout Rates for the Dallas ISD**

| | 83-84 | 84-85 | 85-86 | 86-87 | 87-88 | 88-89 |
|---|---|---|---|---|---|---|
| Baseline Enrollment | 65,385 | 65,290 | 63,205 | 63,318 | 62,292 | 61,396 |
| Dropout Rate | 17% | 19% | 20% | 21% | 21% | 16% |
| Known Dropoutsa | 3% | 3% | 4% | 4% | 5% | 5% |
| Assumed Dropoutsb | 14% | 16% | 16% | 16% | 16% | 11% |

a. Known dropouts are those students who formally withdraw from school giving a reason that implies a clear intent to discontinue the pursuit of education.

b. Assumed dropouts are those students who either (a) withdraw from school informally giving no reason), or (b) withdraw formally giving a reason that neither implies that they intend to enroll elsewhere or that they are clearly giving up a pursuit of formal education.

### Procedures

Specific details of the procedures followed in these studies are described elsewhere (Olson, et al., 1989, and Taite, 1989) and are summarized only briefly here (see Exhibit 1). For convenience the two studies will be referred to as the summer project and the fall project.

**Target Populations.**
For the summer project, 7,105 secondary school noshows were identified by scanning the district's student database the second week in September, 1988 for secondary-school students listed as having not yet returned to school. The students targeted for recovery in the fall project were those identified on the district's database as having been enrolled in a district school by the end of the second week in October (six weeks following the beginning of school), and as having withdrawn from school by the middle of February, 1989 (three weeks into the spring semester), for a withdrawal reason that classified them as a potential dropout. Excluded from being counted were any students for whom requests for transcripts had been recorded. This resulted in 3,400 students being identified as potential dropouts.

**Data Collection Instrument.**
From the lists of students identified, computer-generated rosters were prepared that served also as the primary instruments for data collection (a copy is given in an Appendix). These rosters provided a response protocol for data collectors on the search teams (see below) to record the (then) current status of those students they were able to locate. Thus, for each student identified as a member of a target population, a data collector was to assign the student to one of the following 10 categories[3]:

1. **Not Located** (NotLoc): This category was to be used only when all attempts to locate the student were unsuccessful.
2. **Private School** (PrvSch): Students were assigned to this category when it was learned that they were currently attending a private school.
3. **Alternative School** (AltSch): Students assigned to this category were known to be attending some form of alternative educational program other than a recognized public or private school.
4. **Public School** (PubSch): This category was used for students currently known to be attending a public school outside the Dallas ISD.
5. **Moved Out** (MovOut): When it was learned that a student had moved out of the area served by the district, but it was not known whether the student was still attending school, the student was assigned to this category.
6. **Dropped Out**: (DrpOut): A student was assigned to this category when it was learned that he or she, voluntarily, was no longer attending school and had not graduated.
7. **Pushout** (PshOut): This category was assigned to students who were suspended, expelled, incarcerated, institutionalized or otherwise involuntarily forced out of the educational system.
8. **Health/Death** (HthDth): When it was learned that a student was no longer attending school due to illness, or because he or she had died, the student was assigned this category.
9. **District** (DSTRCT): When students were found to be attending school elsewhere in the district they were assigned this category.
10. **Other** (OTHER): This final category was used as a catchall when none of the other categories applied.

**Exhibit 1: Summary of Procedures and Data Collection**

**POPULATIONS TARGETED FOR RECOVERY**

| | |
|---|---|
| Secondary students not enrolled as expected by September 12, 1988. | Secondary students enrolled by October 13, 1988, but presumed to have dropped out by Feb. 17, 1989 |

**DATA COLLECTION**

Computer-generated rosters.
Utilization of local school staffs.
Fieldwork performed by central administration staff.
Training sessions for classifying and coding students.
Follow up database searches.

| | |
|---|---|
| Data collection time span: September 12 to October 4, 1888. | Data collection time span: February 21 to March 17, 1989. |

**NUMBER OF STUDENTS INCLUDED IN STUDY**

| | |
|---|---|
| Initially identified on Sept. 12, 1988: **7,105 students** | Initially identified on Feb. 17, 1989: **3400 students** |
| Remaining by October 4, 1988: **5,276 students** | Remaining by May 4, 1989: **2,770 students** |

### Search Teams and Data Collection.

In both studies secondary school principals were instructed to utilize their own staffs in making an initial attempt at classifying the students identified on their schools' rosters. It was expected that the bulk of the work of accounting for students' whereabouts would be accomplished at this stage. Additionally, personnel from several central offices were made available for more extensive field efforts in locating students not accounted for in the schools' initial attempts.

### Preparation and Training.

Special meetings were held for principals to explain the purpose of the data collection and recovery efforts and to stress the importance of the project. Principals were shown examples of the data collection instrument (i.e., the rosters) and provided an explanation of the categories. Also, principals were asked to utilize their own staffs in attempting an initial determination of their target students' current classifications. Finally, principals were told that additional personnel would be contacting them to help in classifying those students that remained unclassified.

Additional training meetings were held for the extra-school personnel recruited from various district-wide departments. The purposes of these meeting included orientation, instruction on filling out the response instrument (roster), procedures to be followed when making house calls, and school assignment.

### Database Searches.

The district's student database was searched several times following the initial search in which the target populations were identified. The primary purpose of these additional searches was to monitor the effectiveness of the recovery efforts. The follow-up database searches also afforded the opportunity to correct some errors in coding that might otherwise have gone undetected. For instance, following the data collection period, several of the students in the target populations remained not classified. However, on subsequent searches of the database many of these students were found in attendance at other district schools. On the basis of these searches these students were assigned to the DSTRCT category, an indication that the students had returned to school. In other instances, students assigned to one of the other categories were later found to be in attendance at some district school. These students were similarly reclassified as belonging to the DSTRCT category. Thus, wherever possible, the responses recorded by the data collectors were corrected on the basis of follow-up searches.

*... on subsequent searches of the database many of these students were found ... at other district schools.*

## Results

The efforts to locate, document, and recover noshows and potential dropouts were mounted on a large scale. In addition to the numerous local school staffs that worked on the projects, approximately 100 extra-school personnel were involved in collecting data out in the community. These additional personnel invested over 5,000 man hours at an estimated cost of over $81,000 in salaries alone.

*.... follow-up searches were effective in locating a large number of the noshows ...*

Of the 7,105 noshows included on the original summer rosters, only 300 of them, or 4.2 percent, remained unclassified. On the other hand, 1,481, or 20.8 percent of the students assigned to categories by the data collectors were later reassigned on the basis of the follow-up database searches. Most of these reassignments (89.1%), however, were for students originally assigned to the categories NotLoc, MovOut, and OTHER. Thus the follow-up searches were effective in locating a large number of the noshows whose whereabouts had gone undetermined by the search teams.[4]

## Recovery Efforts.

The results of the two recovery efforts are summarized in Table 2. On October 4, 1988 the district's expected secondary school enrollment was 58,182 students (grade levels seven through twelve). Of these 7,105 (12.2%) had been listed as noshows (expected, but not enrolled) when the rosters were created in September. By that time, five weeks following their initial identification, the number of noshows, district wide, had declined from 7,195 to 5,276 students.

**Table 2: Summary of the Results of Attempts to Recover Summer Noshows and Dropouts From the Fall Semester**

| | Noshows | Dropouts |
|---|---|---|
| Number of Students Identified | 7,105 | 3,400 |
| Number Returned to District | | |
| First week in October | 1,829 | (25.7%) |
| First week in May | 630 | (18.5%) |

Thus, by October 4, 25.7 percent of the noshows had been recovered. It would appear, then, that the effort expended to locate and recover noshows was at least moderately successful. However, comparable data from the previous year did not support this conclusion. The 5,276 noshows remaining in October of 1988 comprised 9.1 percent of the expected October enrollment. One year earlier, the number of noshows comprised 9.8 percent of the expected enrollment. Thus it is clear that the effort resulted in very little recovery over what would seem to normally occur anyway. By October 4 of the 1988-89 school year only one half of one percent more noshows were identified as having returned to school as compared to the percentage of noshows that had returned by the same time the previous year.

The results of the effort to recover fall dropouts appeared (5) more encouraging. By the first week in May 630 (18.5%) of the potential dropouts identified in the fall project had returned to the district. By comparison, of 4,100 potential first semester dropouts identified a year earlier only 350 (8.5%) had returned to school by the first week in May.

## Classification of noshows and potential dropouts.

Apart from the district's primary interest in recovering dropouts these studies provided valuable information concerning the actual classification of students otherwise officially classified as dropouts. The results of the classifications recorded by the search teams are summarized, for both studies, in the top half of Table 3.

*... data collectors were unable to adequately account for the whereabouts of nearly two thirds of the noshows and about one third of the fall dropouts.*

In spite of their extraordinary effort, the data collectors were unable to adequately account for the whereabouts of nearly two thirds of the noshows and about one third of the fall dropouts. Even so, appreciable numbers of these students were determined to have moved away from the district's jurisdiction (17.3% of the noshows and 18.4% of the potential dropouts were classified MovOut). On the other hand, nearly 28 percent of the noshows and over 30 percent of the fall dropouts were determined to be attending a non-district school. Only 8.6 percent of the noshows, but over 30 percent of the potential dropouts were categorically classified as having dropped out of school (i.e., classified DrpOut).

The fact that the whereabouts of such large numbers of students were not satisfactorily categorized was cause for concern. However, it may be reasonable to assume that students classified into the three undetermined categories (MovOut, NotLoc, and OTHER) were distributed proportionately as those classified into the remaining categories. When this is done the more liberal

Table 3: Classification of Noshows and Potential Dropouts

| | NoShows | | Potential Dropouts | |
|---|---|---|---|---|
| | N | % | N | % |
| Total | 5,276 | | 2,770 | |
| MovOut | 914 | 17.3 | 511 | 18.4 |
| NotLoc | 2,111 | 40.0 | 439 | 15.8 |
| Other | 229 | 4.3 | 18 | 0.6 |
| PrvSch | 255 | 4.8 | 38 | 1.4 |
| AltSch | 118 | 2.2 | 136 | 4.9 |
| PubSch | 1,098 | 20.8 | 674 | 24.3 |
| PshOut | 47 | 0.9 | 94 | 3.4 |
| HthDth | 48 | 0.9 | 15 | 0.5 |
| DrpOut | 456 | 8.6 | 845 | 30.5 |
| | Classification of Students Following Redistribution of Those Whose Whereabouts Remain Undetermined | | | |
| | N | % | N | % |
| PrvSch | 665 | 12.6 | 58 | 2.1 |
| AltSch | 308 | 5.8 | 209 | 7.6 |
| PubSch | 2,865 | 54.3 | 1,036 | 37.4 |
| PshOut | 122 | 2.3 | 144 | 5.2 |
| HthDth | 123 | 2.3 | 23 | 0.8 |
| DrpOut | 1,189 | 22.5 | 1,299 | 46.9 |

estimates displayed in the bottom half of Table 3 are obtained. There the 3,254 noshows and 968 potential fall dropouts originally classified as MovOut, NotLoc, or OTHER were proportionately redistributed over the remaining categories. As can be seen in the table, following this manipulation of the data over 70 percent of the noshows, and over 44 percent of the potential dropouts, were estimated to be attending school somewhere else. As for the students reclassified as dropouts, the rate among summer noshows was estimated at 22.5 percent, and among potential fall dropouts, at 46.9 percent.

### Revised estimates of the district dropout rate.

These results can be used to derive a new estimate of the district's 1988-89 annual dropout rate. On October 4, 1988 the district's expected secondary school enrollment, including the noshows, was 58,182 students. The estimate of the number of actual dropouts, from the top half of Table 3, is 1,301 students. This yields an estimated "true" dropout rate of 2.24 percent. This is a conservative estimate in that it can be assumed that some of the students in the undetermined categories (MovOut, NotLoc, and OTHER) had also dropped out. A more liberal estimate is derived from the bottom half of Table 3. There the total number of actual dropouts is estimated at 2,488 students, yielding an estimated true 1988-89 dropout rate of 4.28 percent.

## DISCUSSION

The results presented above need to be considered from several perspectives. On the one hand, they are in obvious contradiction with the results of many other studies that have appeared over the last several years. At a minimum the results call into question the very high estimates of dropout rates that are often cited. The results suggest, also, that the recovery of noshows is not affected by extraordinary effort. Finally, the results raise questions concerning the utility of including summer noshows in counts of dropouts. These and other important points are addressed in the paragraphs that follow.

*The sheer numbers of noshows at the start of an academic year place a considerable burden on record-keeping mechanisms.*

### Should Noshows be Counted as Dropouts?

In their guidelines for reporting dropout statistics, the Texas Education Agency has stipulated that noshows (i.e., students who fail to enroll during the fall semester as expected, and whose whereabouts cannot otherwise be determined) are to be counted as dropouts. For large school districts with large numbers of noshows, high rates of student mobility, and complicated procedures for tracking students, this stipulation may be unfair. As the studies reported here have clearly shown, many if not most students listed as noshows can reasonably be assumed to be attending school elsewhere. Additionally, another large percentage of those students listed as noshows during the first few weeks of school eventually are found to be in attendance. The sheer numbers of noshows at the start of an academic year places a considerable burden on record-keeping mechanisms. It may be impossible for large school districts, without adopting the extraordinary effort expended here, to adequately account for all its noshows. The penalty is a spuriously high dropout rate.

Beyond the problem of counting matriculating students as dropouts is the problem of jurisdiction. Should districts be held accountable for students who move out of their service areas? Apparently under Texas regulations they are. Thus, in Dallas, under a conservative estimate, as many as 18 percent of the noshows and potential dropouts are to be counted as official dropouts simply because their families choose to move away from the district's jurisdiction over the summer and did not notify their children's schools.

*The penalty is a spuriously high dropout rate.*

In a district report published a year ago, Babu (1989) reported several statistics all of which were components of the official secondary school dropout rate required in state reporting guidelines for 1987-88. The overall dropout rate given there was 22.2 percent of which noshows accounted for a little more than a third (36%). If the liberal estimate for the true dropout rate among noshows (i.e., 2.04%) were applied to the computation in that official report, the dropout rate reported there would have been attenuated to 16 percent. If, in addition, the liberal estimate of the dropout rate among potential dropouts (i.e., 2.23%) were employed, the official rate would have been further reduced to only 8 percent.

### What is the District's True Dropout Rate?

Readers familiar with the high dropout rates reported elsewhere may be troubled by the relatively low estimates obtained here. Those readers may question the practice of allocating only a proportional share of those students originally classified as NotLoc, MovOut, or OTHER to the DrpOut category. They may feel that more students should have been allocated to this category. However, additional data from the studies tended to support, or at least not refute, the assumptions on which this practice was based.

The data-collection instruments contained a space for the data collectors to record comments and observations. In their training meetings, the data collectors were encouraged to make generous use of this area. Accordingly, most of the responses were accompanied by comments. A perusal of the comments recorded for those students classified as NotLoc revealed that in the

two-thirds of the cases where comments were made, the most frequent comment was "moved." Less frequent, but still common, were the comments, "vacant house" and "no answer." Among the variety of other comments few were given that would imply, directly, that the student had dropped out of school. Indeed, the overall impression obtained from the comments accompanying students classified as NotLoc was that most of these students, along with their families, had moved, leaving no readily available forwarding address.

In contrast, nearly all the responses for students classified MovOut were accompanied by comments indicating that these students, again along with their families, had moved out of the district's attendance area. In no case did the comments suggest that a student had dropped out of school. On the other hand, nearly all those assigned to the OTHER category had comments that erroneously placed them in other district schools (the follow-up database searches established that they were not attending district schools).

It must be noted that assignment to these categories was based upon whatever information, direct or indirect, could be gleaned from a variety of sources including fieldwork in the community. In most cases it appeared that the only thing that made a difference as to whether a student was assigned to NotLoc or to MovOut was that in the latter case the data collector was told, or otherwise was able to determine, that the student's family had moved to another city. It seems reasonable to assume, therefore, that the students assigned to these two categories, NotLoc and MovOut, were similar. They were students who had moved away and were probably attending schools (or not attending any school) in proportions equivalent to those whose residence remained within the district's boundaries.

There may be a less solid basis for treating as similar those students assigned to the OTHER category. The majority of these students were (erroneously) placed in other district schools by the data collectors. Yet they were not found in subsequent database searches. Thus, in effect, they remained noshows and potential dropouts who could not be located. These students were included in the pool that was redistributed because: one, it could not be verified that they belonged in any other category, and two, it seemed reasonable to assume that they would be distributed, at least approximately, like those in the NotLoc and MovOut categories.

## SUMMARY

In recent years the nation's media have reported alarmingly high dropout rates on the order of 40 to 50 percent. Such headlines have been fueled by a few serious studies which have reported high longitudinal rates along with lower annual rates on the order of 20 to 25 percent. But even rates of this latter magnitude may be too high, as the studies reported here suggest.

I have shown, for instance, that a relatively simple change in accounting procedures, keeping a record of requests for student transcripts, can yield a remarkable decrease in a school district's annual dropout rate. Additionally, if a district is willing to expend the time and energy required to obtain more detailed information on the whereabouts of students who withdraw or fail to return to school following summer vacation they are apt to find that many of those presumed to have dropped out are attending school elsewhere. At the very least, they will find that many of the presumed dropouts have moved away from the district's service area.

*... a relatively simple change in accounting procedures ... can yield a remarkable decrease in a school district's annual dropout rate.*

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## NOTES

1. Horst & Donahue (1989) realized this: "the...higher [dropout statistic] is the one that will be remembered and reported most widely in the media." [page 4].

2. In both efforts the district sought to recover students who dropped out from all grade levels, K through 12. Only those results pertinent to secondary schools, grades 7 through 12, are reported here.

3. There were some minor differences in the wording of the different categories of classification between the rosters for the two studies. Since the differences were not critical, only the descriptions for the summer study are given here.

4. Similar detail is not available for the fall recovery project.

5. Even here the results by be more apparent than real. Additional, albeit preliminary, analyses seem to indicate that the rate of return of dropouts was not appreciably higher by the end of 1988-89 than it was by the end of 1987-88.

# Can We Predict Which Students Will Graduate or Drop Out?

*Linda Frazer, Austin ISD*

The question to be addressed is: "Can We Predict Which Students will Graduate or Drop Out?" This paper discusses both perspectives, but the emphasis will be on dropouts. In the Austin Independent School District (AISD) last year we conducted several studies - three of which are presented in this paper.

The first study was a cross-sectional one using the state and Texas Education Agency (TEA), criteria. Let's turn to a discussion of the TEA criteria.

## HB 1010

House Bill 1010, which was passed in 1986 and took effect September 1, 1987, relates to reducing the number of dropouts in public schools. One section addresses those students in grades 7-12. By state law we as a public school district are required to identify as at risk any student in grades 7-12 who meets one of the following four criteria.

The first is that the student has not been promoted one or more times in grades 1-6 and has not been promoted one or more times since then — cumulatively, was not advanced from one grade level to the next for a total of two or more years. We have operationalized this in the District and used two years overage as in indication that the student has been retained. So any student who is two years or older, for the grade level that he is in, is considered at risk.

The second criterion is that the student who has mathematics or reading skills two or more years below grade level is considered at risk. The third is that the student has had an F in two or more semesters and continues to be unable to master the content of the curriculum and is not expected to graduate within four years of the time he began ninth grade. The fourth one is that the student did not perform satisfactorily on any one of the TEAMS tests is at risk. In summary the four criteria concern Retention (overage), Achievement, TEAMS, and F's.

## RESULTS OF IMPLEMENTATION OF CRITERIA IN AISD

### Cross-sectional

One might ask how many students are identified by those criteria as being at risk? How many students are potentially at risk for dropping out? Using the state criteria in 1987-88, 44.3% of the students in grades 7-12 in the Austin Independent School District were considered at risk. In 1988-89, the number considered at risk was 46.1%.

The next question one might ask is - how many of those at risk actually dropped out? In 1987-88, of those at risk by TEA's definition (almost half of the district), 12.1% dropped out - a very small proportion. In 1988-89, of the almost half who were identified as at risk, 11.5% dropped out. So we can see that the TEA criteria, when looked at over a one year period, overidentify students as being at risk of dropping out.

*... the four state criteria overidentify students as at risk and fail to identify all those who drop out in that year.*

Now the next logical question is - do the criteria fail to identify some students? And the answer is yes. In 1987-88, 31.7% of the dropouts were not identified as being at risk. In 1988-89, 38.4% of the dropouts were not identified as at risk by the state criteria. So, put together, we can see that the four state criteria overidentify students as at risk and fail to identify all those who drop out in that year.

In the Austin Independent School District, we decided to look a little further at the criteria to see what we could do. We created 22 categories based on those four criteria. We used overage and only overage as one category. The second was if they had failed the math achievement or were two years below in math, but did not meet the other criteria. The third was if the only reason for being at risk was that they were two or more years below in reading. The fourth category was two or more F's. Then a separate category for each of the TEAMS

tests. And then there were various combinations of those variables.

We determined that there were differential dropout rates from the various categories. We were able to derive what would be considered five high risk groups. The first one is age and TEAMS. Of those students in grades 7-12 who were identified as at risk because they were two or more years overage and had failed any part of TEAMS, 48.54% dropped out. In other words, in one year almost half of those identified for that reason dropped out.

*(Of) students in grades 7-12 who were identified as at risk because they were ... overage and had failed ... TEAMS, 48.54% dropped out.*

The second high-risk group with the largest percent of dropouts was students overage for the grade. If a student was overage, by two years, but did not have any of the other criteria (i.e. he was achieving, wasn't making F's, and was passing TEAMS), that student had a 38.27% chance of dropping out. The average dropout rate for at-risk students was 12.10%. There were some categories that had a very low rate, such as those who had failed the TEAMS writing composition. Those students dropped out a rate of 3.30. This is less than the rate of students dropping out who were not even identified as at risk.

So, we have some categories of students considered at risk who have a lower likelihood of dropping out than some students not even identified. It is interesting that by using the TEAMS criteria you can identify these high risk groups that have a strong likelihood of dropping out. These statistics that have been presented are from 1987-88. The 1988-89 statistics are almost identical. They varied, by about .08 of a percentage point to three or four percentage points.

## Longitudinal

In the second study we applied the state criteria in a longitudinal study looking at the ninth graders of 1986-87 with a dropout rate over a longer period of time. We were able to discriminate between the dropouts and those who were staying in school fairly well. The state criteria correctly classified 94% of those students who were staying in school but only 40% of the dropouts.

## AISD STUDY - LONGITUDINAL

In the third study we turned from the application of the state criteria to another longitudinal study in an attempt to try to improve upon our predictive accuracy. Could we do better at predicting dropouts if we added other criteria? In AISD there is a longitudinal database, started in 1983-84, that has maintained a history on every student in grades 7-12 in the district. This file has dropout status for each year as well as other information.

From this longitudinal file, we selected a cohort of first-time ninth graders from 1983-84 and followed them from that period of time up through the end of the school year 1987-88. Using SAS we performed a discriminant function analysis. Our criteria for selecting variables for the analysis was based on reading literature and looking at predictors that have been used many times. We used some of the variables that are based on literature and could not use some of the ones recommended as we did not have the information available. Information such as parents' occupation and, parents' educational level is not available to us. So we used the information that we do have, including:

- Age,
- Sex,
- Ethnicity (American Indian, Asian, Black, Hispanic, White),
- Low-income status (whether the child was receiving a free lunch, a reduced price lunch or had a sibling receiving free lunch, or was not low-income),
- Discipline incidents from 1982-83 (the student's eighth grade year prior to entering the ninth grade),
- The 1983-84 TABS subtests of Math, Reading, and Writing,
- Whether the student was new to the district in 1983-84 (y/n),

- The 1982-83 ITBS scores of Reading, Math, Language Total, Work-study Skills and the total battery,
- The special education status of the student,
- The special education contact hours per day,
- The LEP (limited English proficient) status,
- The number of years in the Chapter One program,
- The number of years in the Chapter One Migrant program,
- The number of years in compensatory education,
- The number of years that they were identified as LEP, and
- The number of years in special education.

We also created some interaction variables from the variables listed above based upon statistical analyses. What did we find? We found that we were able to correctly classify 75% of the dropouts and 92.7% of those who graduated or stayed in school — much better than the TEA criteria on dropouts.

The best predictor that we were able to derive based on these analyses was the interaction variable which was a combination of the TABS Reading raw score and Work Study Skills (the Work Study Skills subtotal from the ITBS.) In several other analyses that we ran we did not use the interaction variables and work study skills alone was the number one predictor.

*... we were able to correctly classify 75% of the dropouts and 92.7% of those who graduated or stayed in school — much better than the TEA criteria ...*

The second best predictor was the number of years that student was identified as limited English proficient. Third was age. The fourth was the combination of years identified as limited English proficient with being Hispanic. The fifth was number of discipline incidents in grade eight. The sixth was being new to the district in grade nine. The seventh was the combination of years identified as being limited English proficient with being Black. The eighth was special education. In this case if you were identified as special education you were more likely to stay in school (an inverse relationship). The ninth, the combination of age and number of years identified as limited English proficient, and the last one, which contributed a very small amount, was having a sibling who is low income (an indication that the student is from a low-income family).

It is possible to also take these predictive equations and look at the students by ethnic group. And when we did that the equation changed slightly, depending upon the ethnic group. We obtained very similar results, and the ability to predict dropouts or graduates improved.

We were able to predict:

- 100% of the American Indian dropouts and 100% of the graduates,
- 89.5% of the Asian dropouts and 100% of the graduates,
- 71% of the Black dropouts and almost 88% of the graduates,
- 79% of the Hispanic dropouts and 85% of the graduates, and
- 67% of the White dropouts and 95% of the graduates.

So, there was a small variation in the rate of predicting dropouts or graduates, depending on the ethnic group, but we are able to predict within each ethnic group fairly accurately.

## DISCUSSION

Some comments need to be made at this point. First, TEA has critiqued that we used different samples in our analyses. They are quite correct. We did. One of the reasons for that is that in 1983-84 we did not have TEAMS. So we could not apply the TEA criteria to the 1983-84 cohort. We will this coming year be looking at two additional cohorts and applying the TEA criteria and the other predictive equations that we've derived and we will be comparing those.

A second comment is that we do not have grade point averages in the equation. Other people have claimed that this is a good predictor and it is possible that if

we had included GPA in this equation we might have improved our predictability. It is also possible that, because of multicollinearity, adding GPA might not have added anything. It might have just kicked out another predictor. But it is something to look at in our future work.

*We need ... to have alternatives to retention in the elementary grades.*

As we get better at identifying high-risk students, and the schools are notified as to which students are high-risk and develop intervention treatments and programs to deal with these students, our prediction equations are going to lose some of their value. That is because the interventions may be effective, and that in itself will be an indicator that we have some success, and we will have to change our formulas.

When we have findings such as the ones that have been described, we have to be careful about who is using them. Our own numbers have some shortcomings; for instance, in the 1983-84 group we had 378 students that our equation predicted would be graduates or would be staying in school that we were listing as dropouts.

Some counselors came in over the summer and worked to track down these students and to see what we could find out. We were able to confirm that 15.9% of those that we had listed as dropouts were indeed dropouts. We were also able to confirm that 39.4% had graduated from some high school or had obtained a GED or were enrolled in college and pursuing higher education. So that is about 55-60% that we were able to confirm as either dropouts or pursuing further education. Forty percent we were unable to locate or find any more documentation about them. We can document the graduates of our system pretty easily. Most of our error is on the side of overestimating dropouts. In summary, the dropout status was not always correct. There was some error. This will impact the equations derived.

Based on some of the things that we found in our prediction equations—in going back just quickly, remember we talked about reading raw score in combination with work study skills, limited English proficient, age, discipline incidents, being new to the district, etc. You will notice that most of those are school-related variables. They are not related to the demographics of the child. This is somewhat encouraging in that these are issues that we can deal with, that we can work with.

*We need to ensure that the student has remediation for TEAMS.*

An ideal dropout prevention program or set of programs needs to work to ensure academic success. We need to work to have alternatives to retention in the elementary grades. Remember, being overage is one of the top predictors of dropping out. We need to ensure that the student has remediation for TEAMS. We need to have quick intervention when a student is at risk. We need to prevent the failing courses and the loss of course credit. And we need to have procedures for the students to make up lost time and credit so that the student can stay on pace towards graduation. Along with this, we need to ensure that our students have a reason for being in school and that the students have the ability to be in school—whether that takes food or a new pair of shoes. We need to work to ensure our students' success.

*An ideal dropout prevention program ... needs to work to ensure academic success.*

Questions?

*What years, number of LEP, what does that reflect, is that since they entered the district, or is that a certain timeframe?*

Okay, the number of years LEP reflects the number of years that we could identify them as that based on their being in the district. Now it is possible that students might have come in later who had been identified thus in other districts and we wouldn't have that information. This is just based on the information that we have in our files—that we know. And the more years a student was identified as limited English proficient, the more likely he was to drop out.

*It had nothing to do with whether they were LEP at that point?*

No, it had nothing to do with whether they were labelled thus at that point.

## CAN WE LEGISLATE STUDENTS TO STAY IN SCHOOL?

*Sylvia Garcia, TEA*

When we started the state at-risk criteria, we did not have these data. We had to search other states' information, and that's the best data we had at the time. As we get information from cities throughout the state, I do predict that TEA will use that data to refine our criteria so that they are more predictive.

Our state and our nation have a history of legislating behavior. In this case, we have taken the new social policies in a number of areas related to the school to convince parents and their children that they need to have their children graduate. It is important in our society to have an educated citizenry. The assumption here is that by changing the social policies, there will be incremental changes in the dropout rate of the state. Let me give you an example of some of those.

*I do predict that TEA will use that data to refine our criteria so that they are more predictive.*

The first one you have is the mandating of state at-risk criteria and the fact that all school districts must now identify at-risk children in grades 1-12. It is 1-12; we count only grades 7-12 because that's what the U. S. Department of Education and the statisticians were recommending as the national formula. But at-risk children are identified at grades 1-12. On September 1, 1989, that criterion was changed again to add prekindergarten students. Many of you are not aware of that because we have not drafted rules. We are in the process of drafting rules commensurate with the state-mandated new criteria. You will see many more elementary criteria. Some of those are: the identification of children that are limited English proficient, the identification of elementary children that are being abused in some way, and a number of other criteria. By September, 1990, they should be in effect in school districts.

*... retention is not a choice strategy in dropout intervention.*

Another social policy that we have attempted to work with, as you know, is student attendance. Legislation was passed this last time that repealed the five days of unexcused absences where Students do not get credit. Now a student must be in attendance 80 days. Districts have the flexibility for a review committee to determine whether it was an excused absence, an extenuating circumstance, or an unexcused absence. If it was an unexcused absence or there was some other reason, the review committee can allot or prescribe alternative ways for the student to make up work to receive credit. We have had many calls about this one particular social policy.

The other one that Glynn mentioned is retention. In talking with Austin ISD personnel, we both concur that retention is not a choice strategy in dropout intervention. In a recent published report, Shepard & Smith found the probability of lowering achievement scores and the probability of dropouts increasing are higher if you retain kids. Some of you will begin to see some steps taken by TEA to look at some of the strategies that are in fact ways to retain kids are counterproductive to our efforts to reduce the dropout rate for the state.

In 1984, a massive discipline management program began. Previous to this, thousands of students were being given out-of-school suspension (OSS). The idea behind the change was that if kids were not there, they were constantly being given OSS, they got behind academically and therefore would drop out. So now you have instead an in-school suspension program (ISS) in every school in this state and, in addition, alternative education programs by the larger school districts in the state.

*I think that, in upcoming years, you will see a massive effort to redefine what parental involvement really means.*

Parental involvement is another area in which not only our state government but the federal government has policies encouraging of parental involvement and family re-engagement in the schools. I think that, in upcoming years, you will see a massive effort to redefine what parental involvement really means. It will not mean just PTA groups, but a choice in the governance of the schools, in the choice of principals, in the operations of the schools. I think the federal government is beginning to do some of that when they say that parents should have choices where they send their children.

Now we do have a driver's license law which says to the student, if you are not in school 80 days prior to getting an application for a driver's license, then you can not have a driver's license. Our legislation is different from West Virginia's in that, in Texas, you have to be in school 80 days prior to getting your driver's license. In West Virginia, they take your driver's license away once you drop out. Also, our drivers under 18 renew annually. Every year, from the time you are 16 until the time you are 18 you have to get a verification form by the district in order to renew a driver's license. Once you are past 18, you get a license for four years.

As far as new directions, the Welfare Reform Act requires Aid For Dependent Children (AFDC). Eligible clients are provided training for employment and must have their children in school in order to receive benefits. This is going to have a very lasting impact. That is scheduled to start next year. I think that some of these strategies in fact "blame the victim" for the inadequate systems that we have -- in other words, taking your car away, taking your welfare benefits away. In circumstances where you have multiproblem families, barely coping emotionally, dysfunctional families—in some cases we may be blaming the victim. This can not be done in isolation from other efforts which are the systematic change of our systems.

*In circumstances where you have multiproblem families, barely coping emotionally, dysfunctional families—in some cases we may be blaming the victim.*

Consequently, we also see coming and continuously are hearing about the restructuring of schools. One teacher said, "Not again, we have been at this for a long time." You will see the third wave of reform concerning the restructuring of schools.

The redesign of the schools includes a number of principles, some of which we have right now, some of which we do not.

- *One*, you will see teacher training required, because for years we have been saying that the teacher now has to be a coach, instead of a fountain of knowledge. The student then becomes the responsible learner.
- *Two*, you will see simple but powerful student goals. They will be measurable, observable, and realistic.
- *Three*, you will see a personalization of instruction. One of our messages in the at-risk program has been that the institution of a caring component in our 'impersonalized' schools is very important. Each one of us, whether community members or parents or peers, needs to be responsible for ourselves and for others, and to have that as an operational strategy in our schools. Carnegie Middle Schools' study found that students know whether the system is caring or not—we can tap into that.

*In order to really start identifying successful school districts and successful campuses, we are going to have to get much better at defining other quality indicators.*

Teachers and principals must have the capacity to determine their own pedagogy. Students must demonstrate mastery through meaningful performance. In our schools right now, we have very few quality indicators. We use the TEAMS a lot. In order to really start identifying successful school districts and successful campuses, we are going to have to get much better at defining other quality indicators. Attendance, academic achievement, school climate and morale, and turnover (both students and teachers) are just a few that come to my mind. We need to be looking at a holistic measure of school success instead of just TEAMS. We are going to have to start identifying successful strategies, e.g., at the elementary level—what works at the elementary level with what kinds of kids? We do not have one answer in dropout prevention. You all know that. What is the transferability of a strategy? If it is peer tutoring, will it work in El Paso, as well as in Corpus Christi, as well as in Dallas? Or is it just dependent upon one person to make that program work? We are going to be looking at those variables, at those strategies, and at TEA

*...will it work in El Paso, as well as in Corpus Christi, as well as in Dallas?*

in the area of evaluation. We have been working with accreditation to start moving in that direction, especially since now we will have five levels of accreditation in districts. If you have five levels, you have to make more of a discrimination as to their ability to educate students. Coupled with the quality indicators that I have talked about, you can see the future in this State.

If you want to look at things some of the other states are doing, they started with at-risk criteria but they have gone into programs. What five programs can the state fund? As we identify successful models, we will begin to see some efforts by the State to encourage districts to use models that work and that we know work in other states.

# Does Private Industry Have a Role in Keeping Students in School?

*Jeff Cole, Texas Research League*

My topic is: ***"Does private industry have a role in keeping students in school?"*** Texas business, at least the League's members, clearly think that they have a role in dropout prevention. Our members are deeply concerned about the dropout problem and are devoting considerable resources to this cause, with an almost dizzying number of business-sponsored programs in place in school districts across Texas. But private industry is only now developing a strategic plan for its involvement in the schools. A "Texas Business and Education Coalition" has been formed to press for major school reform. This coalition was formed following two business and education summit meetings held last year.

Early in the 1980s most business involvement in the schools was largely limited to philanthropic endeavors such as donating money and equipment. The need for better educated citizens was viewed as a worthy goal, but not a necessary one. Today, business looks at the dropout problem and sees its very survival threatened. Uneducated, or undereducated workers will not be able to master the more complex skills needed in a rapidly changing technological environment. Stuck in lower paying jobs, these workers will lack the purchasing power to buy consumer goods.

*Today, business looks at the dropout problem and sees its very survival threatened.*

The demand for consumer goods, along with considerable foreign investment, is what has sustained the American economy in the past decade. It is doubtful that foreigners will invest in our nation if our economic future looks bleak. If the dropout problem is not solved, Texas will be unable to capitalize on one of its potential strengths, namely, a growing and relatively young population in a nation which is aging. An excellent educational system in Texas would make our state very competitive in terms of economic development. But an excellent educational system is a prerequisite to this competitiveness.

Because of Texas' demographic characteristics, the school-age population in the future will consist of larger numbers of disadvantaged students. These students are not being well-served by today's schools, and the dropout rate is just one indicator of this. Tests scores also document wide discrepancies in achievement between advantaged and disadvantaged students. Business leaders look at this situation with great alarm. And with good reason.

If academic achievement and graduation rates are not raised, the supply of native-born, highly trained workers will dwindle. As a nation, we can always import highly-skilled individuals to fill technical jobs, as we are already doing. But this will make worse the division of our society into haves and have-nots. And the have-nots will include large numbers of minorities stuck in a permanent underclass. Some of this is already taking place, and the potential for social upheaval is great. If we think crime and drug abuse are grave problems today, imagine what they might look like in a much more polarized society.

So, Texas business does have a vital interest in reducing the dropout rate. Because it is a question of survival, I think that the prospects for change are good. Today, the interests of those who seek to end poverty and injustice are intertwined with the interests of business leaders concerned about their "bottom-line." This is a unique convergence of two very separate agendas. And business possesses the money and political clout which others lack. Politicians listen to those who open their pocketbooks come election time.

*If academic achievement and graduation rates are not raised, the supply of native-born, highly trained workers will dwindle.*

Now let me briefly describe the role which business is fashioning for itself in keeping kids in school. Business is involved in this effort through several strategies and types of involvement. The Committee for Economic Development, a business-supported independent research and educational organization of 200 business executives and educators, has drawn a framework for explaining basic business strategies and types of involvement. The CED identifies business strategies as falling into three groups: system support, incremental change, and structural reform. Three types of business involve-

ment in these areas have been identified: funding, program involvement, and policy involvement.

Let me illustrate this with a few examples. In system support, business funding takes the form of donating equipment, money, and making grants to schools and educational programs. Public relations campaigns are another example of business funding system support. Program involvement in system support includes such things as career days, speaker's programs, Adopt-A-School and management training for school personnel. Finally, policy involvement in system support includes local school board participation.

Several of the items that I just mentioned also fall into the strategy of incremental change. Other examples are magnet schools and school-to-work programs, such as summer employment and JTPA-sponsored employment training programs. Business men and women also serve on education task forces at both the state and local level.

*... the Texas Business and Education Coalition is working on major policy initiatives at the state level, and encouraging local efforts as well.*

The third strategy identified by the CED is structural reform. The activities I mentioned have the potential to contribute to reform, but business leaders are impatient with the pace of reforms to date. For this reason, business is funding a number of major research projects, including restructured schools, such as the Corporate/Community School in Chicago. And as I mentioned earlier, the Texas Business and Education Coalition is working on major policy initiatives at the state level, and encouraging local efforts as well.

While the dropout problem was certainly a key factor in stimulating business involvement in the schools, the business agenda has moved beyond the goal of holding students in school. This is, of course, a necessary condition for academic achievement, but simply keeping students in school does not address the major problems of unequal educational opportunity.

The development of a global marketplace has led to a number of comparisons of educational achievement in other countries, especially Japan and Western Europe. These comparisons are sometimes unfair; the populations in these countries are ethnically, linguistically, and, in comparison to the U.S., economically homogeneous. Everyone is assumed to have the ability to succeed, and failure is blamed on lack of effort. In Japan, there is relatively little variation in test performance among students. The Japanese are setting new standards of educational performance and efficiency, ones that we ignore at our own peril.

*...a recent report indicates that the U.S. under-invests in elementary and secondary education compared to other industrialized nations.*

The American educational system faces challenges unlike those in other industrialized nations. This country, since its founding, has received, educated, and assimilated large numbers of immigrants from around the world. (Blacks and Hispanics are an unfortunate departure from this record). We celebrate individual choice and differences in performance, content with the idea that those who do not succeed in school will find other areas in which to excel. This may not be possible in the future.

Much is made of the tremendous investment we have made in education. However, a recent report indicates that the U.S. under-invests in elementary and secondary education compared to other industrialized nations. According to UNESCO, the U.S. ties for 12th place among 16 industrialized nations. If only public funds are considered, we rank 14th.

While our system of public education may be under-funded, American colleges and universities are generally acknowledged to be among the finest in the world. We have up the investment into that part of our educational system which serves the best and brightest students. This must be turned around. Research suggests that educational investments made early in life can pay big

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dividends in the future. We must design a system which meets the needs of all students, not just the college-bound.

Compared to other nations, we have the least well articulated system of school-to-work transition in the industrialized world. Japanese students go directly into company-based training programs and European students often participate in closely interconnected schooling and apprenticeship training programs. In Austria, Sweden, West Germany, and Switzerland, it is almost impossible to leave school without moving into some form of apprenticeship or other vocational training.

In the U.S., counseling and guidance are geared to meet the needs of the college-bound. According to the High School and Beyond study of high school seniors from the class of 1980, only 5% of graduates were participating in an apprenticeship training program within the first year following graduation from high school and only 1% were reported enrolled three years after high school graduation. In many European countries, between one-third and one-half of all graduates enter apprenticeships after leaving school.

In short, we have failed to make much needed investments in post-secondary education, training, and apprenticeship for all students who leave school, not just the college-bound. As a result, students, employers, and technical training programs find each other on a "catch as catch can" basis. Given the workforce needs of the future, this must change. We need to improve the quality and quantity of education for all Americans.

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In order to accomplish this goal, we are probably going to have to increase the amount of time students spend in school. According to several studies, disadvantaged youth experience a summer learning loss which puts them at a disadvantage compared to other students. In fact, one study found that advantaged students scored higher on achievement tests at the end of the summer than they did when they started, while disadvantaged students fall further behind. In advantaged homes, children are much more likely to read and be read to, and they are more likely to be taken places of educational interest. Disadvantaged students often watch more television and are less likely to use standard English, a major problem for children in non-English speaking households.

What does this mean for keeping students in school? Being overage is one of the best predictors of dropping out of school. Disadvantaged students are therefore more likely to be overage for their grade, given the problem of summer learning loss. Year-round schooling would help alleviate this problem, since both advantaged and disadvantaged students can learn at about the same rate during the school year.

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Finally I would like to briefly describe the role of the Texas Research League in terms of business involvement in the schools. Our members want to know which dropout prevention programs are successful and which ones are not. This is not an easy task. First, there must be a definition of success. Second, there must be a way to measure success, and this, again, is a difficult task. Students may be involved in multiple programs, which makes program evaluation more difficult. An additional problem is the fact that certain types of intervention may have effects long after a student leaves a program. Without a tracking system it is very hard to determine the effect to a given program years later.

An additional complicating factor centers on which students to target for intervention. If a program works with the most difficult students, it may demonstrate a much lower success rate than a program which targets somewhat more successful students. This builds in an incentive to engage in what has been called creaming; that is, taking the not so at-risk students, those who

might succeed anyway, and producing impressive results. So there may be an incentive to not target those most at-risk.

Finally, a big role that the League can play in addressing the dropout problem is in explaining to our members and the public the roots of our problems in the schools. Society has changed enormously, while schools have been slow to adapt to a changing student population. Tremendous changes in family structures and mobility pose fundamental problems for the schools. Yet it is important to understand that the educational system alone cannot deal with all of these problems. The feminization for poverty, the lack of adequate child care and the lack of access to health care are just two problems which contribute to the dropout dilemma. These problems, along with other social problems, must be dealt with in order to improve educational quality. The schools will not solve these problems by themselves, not even with help from private industry.

*...it is important to understand that the educational system alone cannot deal with all ... problems.*

## Audience Questions/ Comments

**Audience 1:** *Would industry look at a program in which students' pay on a job might be tied to their rate of attendance? For example, students might be paid at a higher level if they have high attendance than it they do not? Or some other way to encourage young people to stay in school and work?*

**Jeff Cole:** That is an interesting idea. I had given some thought earlier to ways in which we might work with Chambers of Commerce to get employers together to determine which business policies might impede or help students stay in school. There may be some merit to that. The small businesses may be hardest to convince to get involved—they may not see it as directly important to their business survival.

**Audience 1:** *The business world often talk about the lack of preparedness of students who come into the job market. Is that on the technical skills (mathematics, reading, etc.) or in the propensity not to go to work five days a week and do all the other things required for a job?*

**Jeff Cole:** I think it is both. In the Educational Researcher last year, there was an article that dealt with the kinds of problems industry has with students coming from high schools. From my reading, the biggest bottleneck is in the schools themselves. Businesses would like to get transcripts to help evaluate where to place the kids. They report the schools don't send them; it takes schools months to send such information, so it is just a big problem.

**Glynn Ligon:** Jeff, you made the comment that some programs target students who are less at risk and therefore report better statistics on program success. Linda Frazer in our office has been working on some at-risk factors that provide a way to attach a number to the degree to which students are at risk. We can therefore average these numbers for students in various programs in order to be able to look at how successful programs are based on the at-riskness of the students served. In that way, we can track programs' students over a year or several years and compare the actual number still in school to the predictions for each. We can then balance out the degree of dropout risk for students involved with the outcomes obtained. I think that is very important—good comment Jeff.

**Audience 1:** *You made a reference also to the changing demographics of Texas. It is predicted that Texas will be a majority Hispanic by the year 2000. A question which must come up is how the infrastructure of Texas will have to change given changes in the population. And one area which must change is the educational structure. We obviously cannot continue with the educational base we established in 1949. It will affect business as well since your work force may come from a different language background or whatever. An interesting footnote is that immigration to the US between 1980 and 1989 was greater than between 1900 and 1909. And the areas they came from were very different. And that will cause problems adjusting all over the country—not just in Texas.*

**Jeff Cole:** That poses problems for business involvement as well, especially in communities with high concentrations of disadvantaged students and no large employer (such as the valley). There may not be a business that will step forward to work in partnership with the schools.

Audience 2: *I had a follow-up to Mike's idea of tying wages for a student to their performance in school. Another way in which businesses could help is by not allowing students to work overtime or to close up late at night. A lot of students who are real responsible (and who probably do not show up on at-risk lists) can end up with such duties and their school work may slip behind. Such*

*students can end up dropping out simply because of this lack of communication between businesses and schools.*

**Jeff Cole:** At the parent level too, if there is a company which does not allow their employees to take time off to speak to the teacher, that puts a burden on the parent to try to reach the teacher after dinner or on the weekend. I think there are business policies like that which need adjustment to foster better parent involvement, as well as student involvement, in education.

Audience 3: *On the topic of student wages, one state and at least one corporation did try tying grade point averages to wages (higher wages came with improved grade point averages) with quite a bit of success.*

Audience 4: *I like the idea of businesses looking at transcripts In the registrar offices I have worked with, all it takes is to submit a request and transcripts are sent that same day. I have not seen the problem of slow responses to such requests. If the volume got high it could be a problem, but right now we have zero requests from business. We would like to take on the challenge of providing such information to businesses.*

**Jeff Cole:** I think that could be arranged.

**Audience 5:** *The school district here was criticized for building a high school that had excellent facilities for vocational and trade practices. It seems the property tax payers may not be willing to fund such facilities. Are you aware of businesses making efforts to encourage public support for funding such facilities and programs?*

**Jeff Cole:** As you know, vocational education has gotten quite a bashing in the last ten years or so. The quality is hotly debated. I think there is an important role for business to play in the school to work transition in articulating what skills they want their workers to have, what skills they expect at a minimum for certain jobs. Beyond that, loaning equipment or bringing students to their sites are other ways businesses could assist in the vocational area.

**Glynn Ligon:** Part of that issue is in the realm of what is public education and what is job training, and vocational programs live on the edge of that question. A program our Board of Trustees approved the other night which will provide child care services for teenage mothers so they can stay in school raises questions about what is social welfare versus education and who should fund such efforts. Private industry could help in defining the line and with funding once the line is drawn.

**Jeff Cole:** I may be overly optimistic, but I think there is a willingness for business to put more money into public education. I read a position paper from a CEO of a major Texas corporation lamenting the fact that high school teachers have about 150 students to keep track of when 80 is about the manageable level. That implies a considerable cost. His position paper, unfortunately, did not give the source of that funding.

Audience 6: *Could you address the legal implications of the industry-school relationship? I heard the TI plant in Dallas pulled back on many of their school-based programs simply because of liability issues arising from having students at their corporate sites.*

**Jeff Cole:** That is something I have not looked into at all. That is an interesting point.

Audience 7: *Presently, how do businesses communicate to school systems what they want?*

**Jeff Cole:** Frequently they do not. They complain a lot, but do not always communicate directly to schools. We sent out surveys to businesses in Texas and received a lot of complaints about basic skills and what students are like. In Austin, I think Project A+ provides a way for business to provide input into what areas of the curriculum are weak.

**Audience 1:** *This question is for Sylvia Garcia about the new attendance rules. As assistant principal of a high school, I have been monitoring the impact this first semester. Teachers report they are losing the continuity of instruction because students can be out so many days without reprimand (eight this first semester) and the rest can be attributed to special circumstances as allowed by the law. The curriculum was being redesigned in some courses because the audience kept changing. There was a lot more re-teaching and a slower pace. It could have repercussions for business in that kids may not be used to being in one place five days in a row or one hour at a time. The second semester will be interesting. A lax implementation of the rules could mean students could miss 25-30 days a semester legally and make up the work and still get credit. Such students will not be prepared for business world requirements.*

**Glynn Ligon:** In Austin, with all the policy changes on attendance over the years, we found you should change the attendance rules every year. The first year they are in effect, no one has figured out the rules and they come to class. Once they figure out the game, some quit coming. With new rules this past year at high school, we had our highest achievement. If what you are saying is true, we may see attendance start to go down again as students and parents figure out the rules.

**Sylvia Garcia:** I can predict with some certainty that you will see more changes in the student attendance law based on the calls we have been getting. The attendance rules we had before were something you could not play with. The new law was designed to give districts the carrot and stick with which to maintain attendance without encouraging dropping out. There are some adjustments problems there. Some districts are being very firm while others are not. We will have to look for some middle ground.

**Glynn Ligon:** The session has been great. I would like to thank all of the presenters. To summarize a little, I have always been interested in watching the statistics on rates for rape and child abuse. Discussions and analyses suggest the incidents are reported at higher levels as an area gets more public attention. Thus, an increase in rates does not really indicate an increase in such incidents—just better reporting. I would predict we will see the same thing in the dropout arena in the coming years in the opposite direction. The awareness of dropouts and the reporting requirements are going to motivate us to do a better job of getting transcripts for those who are really not dropouts and the dropout rates will drift downward—perhaps dramatically. We will have to move out of this period of instability to a period of greater consistency in definitions before we can effectively evaluate the success of dropout prevention programs. Once this occurs, it will be easier to utilize dropout rates as a quality indicator for programs.