

ED 324 152

RC 017 742

AUTHOR Mirochnik, Denise; McCaul, Edward J.
TITLE Public School Dropouts: A Contextual Approach.
 Occasional Paper Series: No. 5.
INSTITUTION Maine Univ., Orono. Coll. of Education.; Penquis
 Superintendents' Association Research Cooperative,
 ME.
PUB DATE 90
NOTE 55p.
PUB TYPE Information Analyses (070)

EDRS PRICE MF01/PC03 Plus Postage.
DESCRIPTORS Community Role; Data Collection; *Dropout
 Characteristics; Dropout Prevention; Dropout
 Programs; *Dropout Rate; *Dropout Research;
 Elementary Secondary Education; *Public Schools;
 Recordkeeping; Research Problems; School Role;
 Withdrawal (Education)
IDENTIFIERS *Maine

ABSTRACT

This paper examines existing research regarding the problem of school dropouts. It examines the historical context of the problem and discusses current definitions and methods for identifying dropout characteristics and computing dropout rates. Few incentives exist for accurate record-keeping on dropouts. School finances are often linked to attendance reports, a circumstance that creates a conflict of interest for schools and administrators. Also, the varied methods districts use to determine enrollment alter the reported dropout rates. At the state level, education agencies should consider establishing common dropout definitions, methods for collecting data, and student tracking systems. In Maine, officials have become increasingly active in attempts to lower the dropout rate, which is reported annually as a percentage of fall enrollment. The state's average rate has stabilized at about 4% during the past 5 years. National computations show Maine's 79% graduation rate as being relatively high compared to the 71% national average. Many researchers have attempted to identify national dropout characteristics, looking at such factors as academic achievement, socioeconomic background, family background, individual attitudes, and ethnicity. Responsibility for the problem has been placed alternatively on the schools, society, and students themselves. An analysis of dropout programs and literature reveals a combination of prevention strategies, including non-punitive approaches, alternative school schedules, and modifying or rescinding policies that tend to discourage at-risk students. The traditional dropout prevention method has been segregation and remediation. The document concludes by calling for consensus on a national dropout definition, systematic research, and better understanding of the problem. It includes a bibliography with approximately 100 citations. (TES)

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

ED324152

**COLLEGE OF EDUCATION
UNIVERSITY OF MAINE
OCCASIONAL PAPER SERIES:
NO. 5**

**PUBLIC SCHOOL DROPOUTS:
A CONTEXTUAL APPROACH**

By

**Denise Mirochnik, Ed.M.
Edward J. McCaul, Ed.D.**

**Developed and distributed with the support
of the
PENQUIS SUPERINTENDENTS'
ASSOCIATION RESEARCH COOPERATIVE
Spring 1990**

PERMISSION TO REPRODUCE THIS
MATERIAL HAS BEEN GRANTED BY

Denise Mirochnik

TO THE EDUCATIONAL RESOURCES
INFORMATION CENTER (ERIC)™

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

/ This document has been reproduced as
received from the person or organization
originating it.
• Minor changes have been made to improve
reproduction quality.

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

The Occasional Paper Series is intended to provide educators and policy makers in Maine with information which can assist them as they address the complex problems confronting their communities, education systems, or students. Papers will be distributed periodically as topics vital to educational improvement are addressed by faculty and graduate students at the University of Maine. This paper was developed, produced and distributed in cooperation with the Penquis Superintendents' Association.

**Center for Research and Evaluation
College of Education
University of Maine
Orono, Maine 04469
Walter G. McIntire, Ph.D., Director
(207) 581-2493**

© 1990

Penquis Superintendents' Association Research Cooperative

The Penquis Superintendents' Association Research Cooperative is a collaborative endeavor between the Association and the University of Maine's College of Education. Under the auspices of Walter G. McIntire, Ph.D., Director of the Center for Research of Evaluation, the cooperative prepares papers and synopses regarding timely educational issues which impact the education in individual districts, the Penquis region and/or the state. Current initiatives include examinations of the dropout problem, educational choice, middle level organization, and the physical fitness of Maine youth. The goal of the cooperative is to link the College of Education and the schools in the Penquis region, researchers and practitioners, to meet the needs of Maine students.

**PENQUIS SUPERINTENDENTS' ASSOCIATION
RESEARCH COOPERATIVE 1989-1990**

***Herbert Robinson, Chairman
SAD #30, Union 110**

**Mark Keegan
SAD #46**

***James Doughty
Bangor Public Schools**

**Ray Freve
SAD #48**

**Perry Jordan
Brewer Public Schools**

***Robert Ervin
SAD #63, CSD #8,
Dedham**

**Georgia Carroll
Millinocket Public Schools**

***Leonard Ney
SAD #64**

**John Grady
Old Town Public Schools**

**Charles Casey
SAD #67**

***Raymond Poulin, Jr.
SAD #4**

**Richard Curtis
SAD #68 and
Foxcroft Academy**

**Carlton Dubois
SAD #22**

**Bruce Young
Union #60**

**Paul Whitney
SAD #23, #38**

**Richard Moreau
Union #87**

**William Fowler
SAD #31**

**Richard Unruh, Jr.
Union #90**

**Peter Harvey
SAD #41**

**Ralph Ryder
Union #113**

**Gene McDonald
Union #34**

***Advisory Committee Members**

**Carroll D. Nightingale
SAD #25**

**Public School Dropouts:
A Contextual Approach**

By

**Denise Mirochnik, Ed.M.
Edward J. McCaul, Ed.D.**

Spring 1990

AUTHORS

Denise Mirochnik is Research Associate for the **Penquis Superintendents' Association Research Cooperative**. She received an Ed.M. from Harvard University in 1987, and a B.S. from the University of Nebraska in 1979. She is currently a C.A.S. candidate in Educational Administration at the University of Maine. Ms. Mirochnik has received numerous teaching and research grants from such organizations as the Massachusetts Council on the Arts and Humanities, Cultural Education Collaborative, and Department of Education, State of Massachusetts. She was a Project Associate on a curriculum grant awarded through the National Endowment for the Arts and Humanities. Prior to that, she was Director of Continuing Education at the Boston Architectural Center.

.....

Dr. Edward J. McCaul is Project Associate for the Institute for the Study of At-Risk Students. He received his Ed.D. from the University of Maine in Educational Administration. He received his M.Ed. in Special Education from the University of Maine and his B.A. from Earlham College in English and Psychology. Dr. McCaul has published several articles on a variety of educational topics and has made presentations at annual meetings of organizations such as the American Education Research Association, the Council for Exceptional Children, and the New England Educational Research Organization. He was the Director of Special Education in M.S.A.D. #23 and #38 and was active in the Maine Association of Directors of Exceptional Children and in the development of the summer Special Education Director's Academy. He has had several years of special education teaching experience in a variety of settings and with students with multiple handicapping conditions.

Abstract

The dropout problem is currently recognized as a significant educational and social problem about which practitioners, policymakers, and the general public have expressed increasing concern. The lack of a consensus definition of dropouts and the variability in dropout estimates at the local, state, and national level has led to confusion over the nature and scope of the problem. Current public policy is predicated on the belief that dropping out has negative individual and social consequences, yet researchers have not carefully and systematically investigated the consequences of dropping out. It is time to increase our understanding of the dropout problem through research-based efforts and community-school collaborations.

Introduction

There is a sense in America that a crisis is brewing in our nation's public schools: Many of our youth are dropping out. Earlier explanations for this largely focused on genetic deficiencies, or deficits children brought to school. Modern diagnoses describe economic, social, and personal factors as underlying causes; indicate teaching and learning style variations in potential dropouts; and suggest the need for programmatic changes as the prescription for keeping our youth in school. Two distinct areas of research have evolved: empirical studies which examine correlates of dropout rates such as race, socioeconomic status (SES) and academic ability, and research which focuses on possible intervention strategies that should or could be implemented.

The drop out phenomenon is raising serious questions for researchers, administrators, teachers and parents. Is dropping out a problem of contemporary American society, or is it a problem that is as old as formal education itself and which we are only confronting now? Is American schooling structured in such ways that the system requires the failure of some to assure success for others? Is dropping out sometimes a rational or sensible decision? Should our educational system make changes in school practice to better accommodate the diversity of interests and abilities of our youth? What should parents do? Should the community get involved?

In this paper, we will examine some answers to these questions. First, the historical context of "dropping out" will be examined followed by an overview of current definitions and methods for computing dropouts. Second, we will take

a closer look at Maine's dropout problem and identify the characteristics of early school leavers. A final section will consider current perspectives on "who owns the problem?", dropout prevention efforts, and suggestions for action.

The Evolution of the Public School

Historically, the search for wisdom and the pursuit of knowledge was the prerogative of an elite few. The ancient Greeks believed that education was a necessary preparation for citizenship. Citizenship was available, in those times, only to the sons of the wealthy. Throughout medieval times knowledge and learning were kept alive primarily by monks and scribes. Systems of national education, which developed in Europe, became the roots of our public schools.

Today, education is seen as essential to leading a productive life. In a society rapidly becoming technologically sophisticated, education is vital to obtaining a position in the work place. High school completion appears to be valued more than at any previous time. The ethical issues surrounding school dropouts have become increasingly difficult to ignore in a "society committed to equality of opportunity and to the full participation of all citizens in political, social, and economic affairs" (Natriello, Pallas, & McDill, 1986). No longer can dropouts be absorbed by a labor market offering unskilled jobs in farming, manufacturing and service occupations. Our changing economic system exacerbates the seriousness of today's dropout problem from the perspectives of both unemployable workers and the society which must support them.

The connection between public education and the process of becoming a productive citizen, founded in Greek thought, continues today. Tyack and Hansot (1982) delineated the argument of the early crusaders for the common school: "Education not only results in moral improvement but also in more productive

workers" (p. 55). Gordon (1972) discussed the educational climate of a different era, the 1950s and 60s, when education was "regarded as the basis for all the rights, privileges, and responsibilities of membership in this modern democratic society (p. 423)." As the extent and specialization of education continued to evolve, so did its structure and recordkeeping. Dropping out of school became noticeable.

In 1900, 90 percent of all students "dropped out" of high school, most often to join the ranks of unskilled labor (Mann, 1986); by 1940, the percentage was 76 percent. Secondary education was primarily for the college bound. In the 1950s, the Sputnik era, when national leaders began to place an emphasis on improving science education and began to develop the view that our youth represented a national resource to be developed, the dropout rate was approximately 50% (Fine & Rosenberg, 1983). Dropping out began to become associated with an unacceptable loss of national talent.

The educational climate changed significantly in the 1960s as social reform agendas began to influence the schools. New educational programs were implemented during President Johnson's Great Society movement, coupled with equal rights legislation and litigation. School districts were required to provide an appropriate public education to all their students (McDill, Natriello, & Pallas, 1986). As a result, in the early 1960s, the dropout rate among 16-24 year olds decreased to around 20% (Hahn, Danzberger, & Lefkowitz, 1987). According to the Government Accounting Office, the current dropout rate is approximately 13 to 14% for 16-24 year olds. (Tenth Annual Report to Congress, 1988). It is interesting to note that while the dropout rate is decreasing, public concern over the dropout problem continues to grow and there are still many unanswered questions concerning the dropout problem.

Toward A Definition

The causes of dropping out are complex and the "dropout problem" has many components (Natriello et al., 1986, p. 175). Currently, there has been no consistent way for defining or tracking dropouts. This poses a problem for administrators when considering the implementation of programs. How accurate are national and local dropout figures? How large is the problem? How do we know who the dropouts really are?

Dale Mann (1986) cited the frustration felt by Phi Delta Kappa's Center for Evaluation, Development, and Research when the Center attempted to derive a consensus definition of a dropout.

We simply cannot agree what a dropout is. In some districts death, marriage, taking a job, entering the armed forces, entering college early, being expelled or jailed, going to a deaf school, business school, or vocational school causes one to be considered a dropout. In another district none of these acts would be considered....There are at least as many different definitions of a dropout as there are school districts. Some districts solved their problem of who to count as a dropout by not using any definition at all, whereas other districts had three or four definitions, and neither we nor they seemed to know which one was used (p. 9).

The definition of who can be called a "dropout" often is a result of record keeping at local, state, and national levels. To date, there is no consistent way of tracking dropouts in our public schools, state education agencies, or through the various national organizations compiling statistics. Reports of dropout rates vary from study to study and are a result of the variability in the types of students, homes and schools and the types of research procedures and accounting programs used (MacMillan et al., 1990).

Schools have long been unsure which students to include as dropouts. Local systems are confounded by whether to include students who appear to have left but intend to return, students with prolonged illness, or students who may have, in fact, transferred although the school has not received a formal request for records. Should students who have left for religious or familial reasons be included? What about "stopouts"--students who usually return to school within the same school year? Or students who have been "pushed out", or expelled, as a result of drug dealing or conducting other threatening activities.

Evidence offered by Hahn, Danzberger, and Lefkowitz (1987) illustrates the unreliability of dropout statistics on the local level. Upon checking with local districts, they discovered that many students' departures were not reflected in the enrollment statistics. Part of this confusion resulted from the different "leave codes" used by districts. In one instance, for example, a district had several categories of leave codes: "lost-not coming to school", "needed at home", "married", "cannot adjust", and "dropout" (Hahn et al., 1987, p. 10). Only the latter code was used for computing dropout statistics.

Morrow (1986) noted that dropping out has been a concern for over a hundred years, but the lack of uniformity in collecting data relative to dropouts has prevented the development of an accurate knowledge base. He cited an evolving definition of a dropout which could lead to higher local dropout rates than are generally acknowledged. It is deceptively simple, yet inclusive:

1. Is the student actively enrolled?
2. If not, has the enrollment been formally transferred to another institution?
3. Has the student earned a high school diploma or its equivalent?

A student is considered a dropout if all three questions are answered in the negative. It is worth noting that this definition also includes students who decide to leave school during summer months and students who have passed the compulsory school attendance age. This definition seems to be most widely used for national data collection efforts, yet there is still room for judgment as to who is a dropout. For example, which institutions can confer a high school diploma varies from state to state, and students enrolled in some job training programs would be considered dropouts under the suggested definition.

Barro and Kostad (1987) discuss two other distinct definitions of "dropout" used in the literature: (a) the gross or "dropping out as an event" definition of a dropout; and (b) the net or "dropping out as a condition" definition of a dropout. In the former, any student who has committed the act of dropping out is considered a dropout; that is, a student who has left school without graduating and has stayed away for a given period of time is counted as a dropout. This category obviously includes temporary "stopouts" who may return to school relatively quickly. The net definition of dropping out, however, considers dropping out as a state or condition at a particular point in time. This condition may, of course, change, if the student returns to school or enters a GED program.

An attempt to arrive at a consensus definition is underway, however. Snider (1989) notes that 27 states, 3 territories, and the District of Columbia have agreed to adopt a common definition of a dropout (Maine is not included). (Reported in MacMillan et al., 1990.) This effort underscores the need to adopt a common definition, nationwide, toward the goal of achieving consistency in national and state-by-state dropout statistics. Once this is accomplished, a more precise picture of the true nature and scope of the "dropout problem" will be realized.

Computing Dropout Rates

While a national concern exists relative to decreasing dropout rates, on the local level, few incentives exist for accurate record keeping on dropouts. Staying up-to-date on an individual student's situation is time consuming, and it strains the energy and resources of a district's personnel.

In addition, political pressure and financial incentives also encourage malfeasance in reporting dropouts. No school system wants to be known as the system with the highest dropout rate in its city, state, or region. School finances are often linked to reports of average daily attendance (ADA) or average daily membership (ADM). This encourages districts to carry students on the attendance rolls as long as possible. This is supported by tales of intentional miscoding evident in the dropout literature. Hahn et al. (1987) cite the instance of the independent investigator who used student ID numbers to track students who were listed as transfers from one public school to another. The investigator found that 35% of these students had not, in fact, enrolled in any public school but were still being reported on the public school rolls. Hammack (1986) reported that in the process of trying to obtain true dropout rates for a number of large cities he discovered considerable distortion.

For example, I was told by a school official in one city that considerable pressure had been exerted on principals in the district to keep the dropout rate low. Performance evaluation systems for school managers used in this system were suggested as providing part of this pressure. One of the ways this was accomplished was for building-level personnel to intentionally mis-code students who were "not found," that is, who were most likely true dropouts. A proportion of such students were coded as "transferred to private schools." Because there was no mechanism to share data between

public and private schools, such codes effectively meant that the school's codes could not be checked (had there been any effort to do so), and its dropout rate was recorded as lower than it actually was. Other students who had in fact dropped out were thought to have been coded as having moved out of the district. These suspicions led the district's central research office to be skeptical of the data being forwarded by the individual schools. The magnitude of distortion involved here may be sizable: One school in this system reported an "official dropout rate" of 1.9%, but its actual rate was calculated by the central office as 58.3%. (Hammack, 1986, pp. 24, 25).

Morrow (1986) reviewed the myriad problems when reporting dropout rates and attempted to develop both a standard definition of a dropout and a method for computing dropout rates at the local level. A dropout rate is usually expressed with a numerator that represents the number of students defined as dropouts and a denominator that represents the total pool of students. Several factors may influence the ratio, however. First, this ratio expresses the number of dropouts relative to the total pool of students over a particular time frame. Often, the figure used by districts reflects the ratio for one calendar year, but an alternative which probably expresses a more useful rate is the cohort dropout rate. This rate expresses the attrition of a group (such as a freshman class) over several years. Morrow gives two examples to illustrate the magnitude of the possible difference. School District X determines a rate of 5% based on 50 dropouts for a school year with student membership of 1000. School District Y, in contrast, uses the cohort method to determine the dropout rate for a class as it moves from freshman to senior year. During the freshman year, 8 students dropped out; during the sophomore year 29 students dropped out, during junior year 46 students dropped out, and 17 students dropped out during the senior year. Over the four years of the class's high school experience, 100 students

dropped out; if the pool of students for those four years was 500 then the dropout rate would be 20%. Had this District used School District X's method of calculation, then they may have come up with the 5% figure. (Morrow, 1986, pp. 43, 44).

Another factor which influences the rate is the baseline population used by a district. Two components constitute the baseline population: student grade span and student accounting procedures. The crucial issue when using the grade span approach is whether the district used K-12, 9-12, or some other combination of grades. A school district with 65,272 students and 3,308 dropouts could have a 5.1% dropout rate or a 19.5% rate depending on the grade spans used. For example, if the annual dropout rate is computed as n/d , and 3,308 dropouts are identified, the rate will vary depending on the definition of district enrollment as follows:

$$d = 65,272 \text{ (K-12) rate} = 5.1\%$$

$$d = 27,317 \text{ (7-12) rate} = 12.1\%$$

$$d = 22,119 \text{ (8-12) rate} = 15.0\%$$

$$d = 16,922 \text{ (9-12) rate} = 19.5\%$$

(Morrow, 1986, p. 45).

Using a K-12 figure ensures that dropouts at the early grades will be included but conceals the level of dropping out behavior at the higher grades.

Similarly, the method that a district uses for determining the school enrollment (the denominator of the dropout rate equation) will alter the final dropout rate. If the district uses Average Daily Membership (ADM), for example, then the enrollment will be higher than if the district uses Average Daily Attendance (ADA). ADM includes all students who are assigned to a school;

ADA is the average number of students attending school regularly. The difference between ADA and ADM is referred to as an attendance rate, and nationwide the attendance rate is roughly 92% (Morrow, 1986).

For example, if a school has 50 dropouts and 1000 students (ADM) then, using the ADM figure, the school has a dropout rate of 5%. If the school uses the ADA figure, and its attendance rate corresponds with the 92% national figure, then its ADA will be 920 and its dropout rate will be 5.4% (50/920). It is important to note that if a school's attendance rate is low, then there may be quite a discrepancy between the ADM and the ADA figures. In addition, truant students are not counted in the ADA calculation, while long term truants may still be on school attendance rolls thus inflating the dropout rate when ADM is used.

Morrow (1986) goes on to make several recommendations relative to record keeping on dropouts at the local level. First, schools should establish a basic definition of a dropout that includes the three criteria listed above, and any student with more than fifteen consecutive days of unexcused absence should be considered a dropout. Second, schools should compute two dropout rates. A yearly rate is useful and easy to compute: the number of dropouts for a full calendar year (July 1 to June 30) divided by the average daily attendance (ADA) of students in grades 7-12. Districts should also compute a cohort rate for students, grades 7-12, to monitor student attrition and adjust programs accordingly. Third, schools should be more careful in obtaining basic student data (e.g., school performance, days absent, language spoken at home, etc.), and for dropouts, the date and reason for dropping out as well as a forwarding address. These practices would contribute to the expansion of our ability to create a firm knowledge base regarding the numbers and probable causes of students dropping out. Schools would have to announce the true nature of their

local dropout problem. "The use of a standardized definition of a dropout and procedures for computing a dropout rate provide the hope for progress and may encourage districts to confront the problem" (Morrow, 1986, p.50).

At the state level, education agencies should consider establishing statewide student tracking systems similar to the Migrant Student Record Transfer System, which uses a computer to record data on migrant students as they move from district to district and state to state. By following these recommendations, educators and schools will know the true nature of local dropout problems and can develop programs to confront them.

At the national level, other estimates of the scope of the dropout problem exist and the definitions and assumptions behind the statistics are not always evident. Organizations such as the U.S. General Government Accounting Office's Current Population Survey (CPS), the National Center for Education Statistics, the Department of Commerce's Bureau of the Census, and numerous labor market organizations keep dropout statistics. These organizations have been recording dropout rates through national surveys of the general populace since the beginning of the century (Mann, 1986). It is not uncommon for rates to conflict based upon the variations in computation methods and dropout definitions.

The U.S. Department of Education publishes a "wall chart" which describes annual graduation rates on a state-by-state basis. Graduation rates are reported for public schools only and are calculated by dividing the number of public high school graduates by the public ninth grade enrollment four years earlier. The graduation rates, as reported, are adjusted for interstate population migration and do not include the number of persons receiving GEDs.

The reported graduation rates for 1987/1988 range from a low of 55% to a high of 91% ("State Education Performance, 1987/1988) for individual

states. The U.S. average is reported as 71%. This national figure is somewhat unsettling since a graduation rate of 90% has been set as a national goal by former President Reagan, and was recently re-stated by President Bush.

Maine: Dropouts in Focus

School Attendance

(Section 5001-a, subsection 7)

7. Purpose. Compulsory education is essential to the preservation of the rights and liberties of the people and the continued prosperity of our society and our nation. Maintaining regular student attendance is necessary to achieve the goal of an educated citizenry. Public schools should ensure the rights of access for all school-age persons to an appropriate educational opportunity and, when necessary, should develop alternatives to regular school curricula for those children and youth at risk of becoming dropouts and those who may have left school.

In Maine, school attendance is compulsory for everyone from the ages of 7 - 17. Exceptions to this statute are granted to individuals who meet the following criteria: a person who has reached the age of 15 or completed 9th grade; been approved by the principal for a suitable program of work and study or training; has permission to leave school from the school board or its

designees; and has agreed in writing with that person's parent and the school board, or designees to meet annually until that person's 17th birthday to review educational needs. If permission is denied, the student's parent may appeal to the Commissioner (Compulsory Attendance law, Section 5001-A, subsection 2, paragraph B). These individuals are reported in the annual dropout rates calculated by school district administrators. (Note: Dropout statistics are collected for grades 6 - 12, but only rates for 9 - 12 are reported. This suggests that there may be a dropout problem in grades 6 - 8 as well. The dropout rate for this group remains unexamined and is potentially problematic.)

District administrators identify local dropouts by reporting rates determined by the following criteria: the number of students who left school, for any reason except death, before graduation or completion of an alternate program of studies without transferring to another school (Department of Education and Cultural Services (DECS) Manual). These annual reports are completed by school-year end, with some districts turning in reports to the Office of Truancy, Dropout and Alternative Education, (DECS), at mid-summer. The dropout rate is reported as a percentage of Fall enrollment. With this reporting mechanism, dropout figures for the state can be misleading because students who leave school during the summer are not included. It is also interesting to note that Maine's habitual truancy law (Section 5051) identifies habitual truants as students who have attained the equivalent of 10 full days of non-excused absences or 7 consecutive school days of non-excused absences during the school year. According to Morrow's definition of a dropout (and it appears, according to recent reports, that this definition is being used at the national level as an operative definition), Maine's habitual truant should be classified as a dropout. (See page 6, for Morrow's definition of a dropout.)

Dropout Rates. Maine's state-wide average dropout rate has stabilized at about 4% over the last five years. Ten years ago, the statewide average was in the 6% to 8% range. The 1987-1988 dropout rates in Maine high schools varied from 0% to 9.91% (this percentage reflects the number of students counted in the October 1st child count who were not present at the end for the school year). This variation could indicate that local circumstances (such as economic conditions) as well as personal and school-related circumstances affect dropout rates.

In addition to the school year dropout rates, reported annually, "class dropout rates" would be useful to examine. The "class dropout rate" is often used by school and public officials when seeking the attention of public policy makers. The "class dropout rate" is calculated from the "class graduation rate". For example, in 1988 the state of Maine class graduation rate (according to statistics provided by DECS) was 77%, not adjusted for deaths and net migration, transfers to private school, or retention. Using this figure, it can be estimated that the class dropout rate for that year was between 20 - 23%.

Another way of looking at the dropout rate would be to calculate the "calendar year dropout rate", October 1 - October 1, to include students who drop out during the summer months. If all three rates were used, districts would begin to get a more accurate dropout profile. The process currently used by DECS and the United States Department of Education calculates graduation rates by using October enrollment figures for each 9th grade class compared with the number of graduates reported four years later. These calculations do not include GED recipients or adult diploma graduates. Beginning with the class of 1988, future DECS counts will include all persons over the age of 21 who complete high school diploma requirements at public expense.

Adjusted statistics provided by the U.S. Department of Education ("State Education Performance", 1987/1988), however, list the graduation rate as 79% for the same period based on the formula described above. The U.S. Department of Education's State Education Performance Chart, or "Wall Chart" as it is commonly known, compares graduation rates for all 50 states. In the year 1987-1988, Maine had the 13th highest rate of graduation in the nation when compared with the other 50 states. Maine's rate of 79% is relatively high when compared to the overall average of 71% for the 50 states.

The state has become increasingly active in attempts to lower the dropout rate. In 1989, state legislators passed a law requiring school systems to form dropout prevention committees in an attempt to rejuvenate the "positive action" committees first formed in the 1970's. Committee members, composed of school personnel and community representatives, will study the problem of dropouts and identify at-risk children in grades K-12 needing alternative programming in the schools. Members will develop a set of recommendations for addressing the problem and submit a plan of action to the school board. This effort appears unique to dropout prevention efforts in the country. There are 130 dropout prevention committees already formed in the state. Dropout prevention plans are tightly linked to the five-year school approval process. Many districts have already stated that even one dropout is too many and are ambitiously exploring alternatives in an effort to decrease dropout rates.

Dropout Profiles: Who Drops Out and Why?

One of the crucial questions, and one frequently addressed by authors on the topic, is what are the characteristics of those students who choose to drop out of school? A basic assumption underlying the question is that an understanding of the population will lead to appropriate interventions and solutions. Morrow (1986) notes that the literature on dropouts is hardly new--the issue was presented to the National Education Association in 1872 and in 1956 one author reviewed over 800 reports on dropouts. As noted by Beck and Muia (1980), however, the dropout problem received considerable attention through the 1960s, but research activity waned during much of the 1970s. In the 1980s, there has been a renewed interest in dropouts as calls for school effectiveness and school reform have swept the nation.

During the optimism of the societal reforms in the 1960s and early 1970s, a number of studies (for example, see Schreiber's The School Dropout, 1964; Schreiber et al., Dropout Studies: Design and Conduct, 1965; the Defense fund report, Children out of School in America, 1974; and Blum and Smith, Nothing Left to Lose: Studies of Street People, 1972) focused on the sociology of dropouts.

A.C. Cervantes was one of the early pioneers in dropout research, and his book, The Dropout: Causes and Cures (1965) typifies early approaches to the topic. In it, Cervantes investigated the family life and personalities of school dropouts. He used the Thematic Apperception Test, interviews, and questionnaires to examine differences in outlook between dropouts and stay-in youth.

Cervantes reached the following conclusions:

1. Dropouts' families have less solidarity and less beneficial paternal influence.
2. A dropout's family has fewer friends.
3. The dropout's peer group is not approved of by his or her parents, and the peer group is more "trouble prone."
4. The dropout is more frequently in trouble in school and is less involved in school-related activities.
5. The fantasy life of the dropout reveals an unrestrained id [in the Freudian sense of the word] and a personality more prone to revolution, protest, and aggression.

Cervantes also concluded that the typical dropout had an IQ between 75 and 90 (25% of those students with IQs less than 110 will drop out of school according to Cervantes) and that dropout rates are highest among sophomores.

Almost all research of this type has documented that students from lower socioeconomic status, with weaker home educational support systems, and from minority groups are more likely to drop out of school (Ekstrom et al., 1986). Students with poor grades, who are frequently in trouble with school authorities, and who have stayed back a grade are also more likely to drop out (Catterall, 1987). Various authors have also argued that dropouts differ psychologically from their peers, possessing lower self-esteem, negative attitudes toward school, and depressed educational aspirations (Bachman, Green, & Wirtanen, 1972; Cervantes, 1965).

Pallas (1986) examined three perspectives on dropout behavior: academic performance, social disability, and accelerated role transitions. The academic performance viewpoint emphasized the significant impact of low

academic achievement in dropping out, and this factor has been well established as affecting dropping out behavior. The second viewpoint attributed poor social and personal adjustment to those who drop out. In essence, this view saw dropouts as "misfits", lacking in normal social skills. The third perspective, a more ecological one, viewed dropping out behavior as related to family and environmental pressures. Some young adults are forced to adopt adult roles before they have finished school. For example, the circumstances of some students force them to work after school or to get married and bear children. In addition, sometimes they are treated as an adult; sometimes they are treated as a child. These events create stress and result in the young person dropping out of school (Pallas, 1986).

MacMillan et al. (1990) cited several risk indicators which affect a dropout's decision to leave school. Students differ in terms of aptitude, achievement (Gallington, 1966), gender (e.g., Rumberger, 1986), ethnic group membership (e.g., Fine, 1986; Peng & Takai, 1983), language usage (e.g., Steinberg, Blinde, & Chan, 1984), and age. Higher dropout rates are frequently found among students from single-parent or large families (Ekstrom, Goertz, Pollack & Rock, 1986), homes with low income (Peng & Takai, 1983; Rumberger, 1986), and families where educational attainments by parents and aspirations for their children are low (Rumberger, 1987). Dropout rates can also vary as a function of school characteristics. The concentration of minority children in a school (Hess & Lauber, 1985) and reassignment of minority students to other high schools to achieve racial balance (Doss, 1984) appear related to higher dropouts rates as do policies regarding retention in grade (Mann, 1986; MacMillan et al., 1990).

Beck and Muia (1980) further developed the profile of a dropout by describing the sequence of steps that typically lead to a student dropping out of school. First, the student loses interest in schoolwork with the consequence of lowered grades. Then, the student becomes frustrated, starts skipping class, and gets in trouble with school authorities. This cycle evolves into more disruptive behavior, intensified conflict with school and parents, and increasing negativism. Finally, the child feels his or her self-worth increasingly attacked and decides to end the problem by leaving school. Beck and Muia (1980) also reiterated the probability that the archetypical dropout has serious problems at home, noting that "parents of dropouts are nine times more prone to nag and pressure their children about school performance than are parents of graduates" (p. 67). They also noted that there are higher levels of parental punitiveness in a dropout's home than there are in the homes of graduates.

This view is supported by Finn's (1989) "participation-identification" model and "frustration-self esteem" model--two developmental models which characterize the process of dropping out. Finn's participation-identification model emphasizes the importance of a child bonding with the school experience early in life. While identification is defined in terms of a student feeling a sense of "belonging" to the school and "valuing" the experience, participation is identified in terms of student behavior--attending to the teacher, studying, reading, memorizing, etc. The basic premise of this model is that involvement in school equals positive outcomes. Conversely, a lack of involvement in school puts the child at-risk to experience emotional and eventual physical withdrawal from school. Finn calls this a "process of disengagement". The frustration-self esteem model focuses on the relationship between self-esteem and school failure. As a result of lowered self-esteem, students exhibit problem behavior that

"constitutes a way of coping with social stigma and loss of self-esteem associated with failure" (Elliot & Voss, 1974, p. 204.) Often this results in students moving between peer groups and choosing alternative modes of social approval such as dropping out to combat feelings of frustration associated with school failure.

Several authors discuss gender, race, and culture as factors in dropping-out behavior (Cavatta & Gomez, 1984; Diekhoff, Diekhoff & Bemby, 1984; Mirano-Nakanishi, 1984; McLaughlin, 1984; Steinberg, 1982). In a striking contrast with the traditional view of Cervantes, Fine and Rosenberg (1983) argued that race, social class, and gender biases operate in school and in society at large and that traditional portrayals of dropouts divert attention from these social problems. They asserted that the common stereotype depicts the dropout as helpless, academically deficient, and a trouble-maker but, in reality, dropouts play the unwelcome role of social critics. As a result, they become scapegoats for the prejudices of schools and society.

To carry this theme even further, Fine conducted an ethnographic study in 1986. She visited classrooms at a New York inner city school, interviewed recent and earlier dropouts, and surveyed 350 of the school's ninth graders. During her observations, she noted that "schools do little to disrupt and much to reproduce existing social arrangement" (p. 91). Fine discovered through her interviews that many students left school because they saw no relationship between schooling and future income, because of negative experiences with school, and because--in many cases--they were thrown out of school. Many of the students interviewed reported that family obligations and racial remarks made by teachers forced them to leave. For females, pregnancy was often the reason cited for leaving school. Fine reported (based on statistics on teen

pregnancy from the Children's Defense Fund) that 50% of teen mothers do not graduate from high school and that 40% of those males that identify themselves as teen fathers do not graduate from high school. Based on her interviews of dropouts, Fine concluded that the stereotypes of dropouts are pernicious--"to suggest that these adolescents are unmotivated, as many have, is to ignore the energy with which they pursue what they perceive to be their life choices" (p. 102). She recommended that future research cease to focus on dropout "profiles" and personal deficits and to begin to investigate the structural and social explanations for dropping out behavior.

Coladarci (1983) interviewed Native American dropouts and also found that several school factors influenced the decision to drop out. Results of structured interviews indicated that the dropouts perceived that teachers did not care about them, that they had disagreements with teachers, that school was not relevant to what they wanted to do in life, and that teacher encouragement would have been a factor in helping them stay in school (p. 18). Other suggestions included the school's curriculum be modified to include issues relevant to Native Americans and the creation of more opportunities for positive and caring interactions between teachers and students and between school administrators and students.

Other authors have explored the relationship between race and/or economic disadvantage and students' decisions to drop out of school. For example, Self (1985) suggested that dropouts come from low economic status and broken homes with poorly educated parents. He added that they are more likely to have poor academic and reading ability, a dislike of school, a poor self-concept, and high absenteeism. While this list may seem exhaustive, other authors have added the following: vocational immaturity (Dykeman, 1983), involvement in serious

discipline issues (Curtis, 1983), and inadequate academic preparation for high school (Jordan-Davis, 1983).

Wagner (1984) discussed the effects of poverty on students' school experiences. He noted several reasons why economically deprived students leave school: First, students often need to take jobs in order to meet family income needs. Second, students lack the material possessions necessary for schoolwork or for effective peer relations. Third, the lack of parental aspirations can lead students to devalue the school experience. Finally, the school curriculum is often irrelevant or ill-suited to the needs of low-income students.

In summary, these attempts to develop a dropout profile and the risk indicators which describe the differences between those students staying in school and those who leave have increased educators' awareness of which students are at greatest risk of dropping out. Many of the identified characteristics such as SES, ability and ethnicity are out of educators' control. Longitudinal data bases, such as High School and Beyond (HS&B) developed as part of the National Center for Education Statistics' Study of Excellence in High School Education, have allowed researchers to more closely examine the predictors of dropping out and the school-related factors which are involved. Nevertheless, since researchers have had difficulty obtaining accurate information on students who have dropped out, basic questions remain relative to their adaptation to society.

Who Owns the Problem? Who Has the Solution?

The "dropout problem" is both serious and complex. It is considered a problem for individuals, for schools, and for society. It carries with it myriad consequences: personal in terms of loss of income and future options; societal in

terms of costs of social services, crime prevention, and lost income (Levin, 1985); and the consequences for schools (Catterall, 1987). Each of these perspectives will be examined in this section.

Individual

Current concerns and policies on the dropout problem are predicated on the belief that dropping out leads to negative consequences for both the individual and society. While this belief may be warranted, there has been a lack of rigorous research on the personal and social consequences of dropping out. Most research assesses the consequences of dropping out for the individual in the context of society.

The results of surveys done by the U.S. Census Bureau have indicated that dropping out has a negative effect on lifetime income. Levin (1972) used the 1968 Census Bureau income projections to compute the loss of income due to dropping out of school for males ages 25 to 34. He estimated the total loss of lifetime earnings from this group to be \$237.6 billion. According to Levin, the average 1968 high school graduate could expect to earn \$74,000 more over his lifetime than the average dropout. Catterall (1985) revised these figures to reflect labor market conditions of 1980 and concluded that the average male and female graduate would earn \$266,000 and \$199,000 more, respectively, than their counterparts who had dropped out. Catterall suggested that for each high school class (e.g. the high school class of 1980) the loss of income is \$228 billion.

Other reports have identified a similar impact on employment opportunities and income. A Vermont study of special education students reported higher earnings for graduates than dropouts: 28% of the graduates earned more

than five dollars per hour as opposed to 11% of the dropouts. According to the U.S. General Accounting Office Report for 1986, 14% of male dropouts and 50% of female dropouts were neither employed nor looking for work as opposed to 6% of male graduates not attending college and 20% of female graduates (cited in Tenth Annual Report, 1988). In 1979, the U.S. Department of Commerce cited \$250,000 in lifetime earnings as the difference between male dropouts and graduates. Bruininks et al. (1986) estimated a 1.47 ratio of earnings of graduates to dropouts.

Future employment projections, included in the report "America's Shame, America's Hope: Twelve Million Youth at Risk", (MDC Report, Inc., 1988), further the growing concern over an unprepared workforce. By the year 2000, the authors of this report claim, new jobs will require a median level of education of 13.5 years. This means that most of our youth will need some college training, or the equivalent, just to acquire a job.

But, what does that mean for the individual? Most current research points to the negative consequences of dropping out. Yet, many dropouts are certainly quite content with how their lives have progressed (see, for example, McDougall & McCaul, 1987). While dropping out of school is more often seen as having dire personal consequences, two of the early studies of dropouts using longitudinal data bases (Bachman et al., 1972; Coombs & Cooley, 1968) indicated that the gains which accrue from staying in school are relatively marginal. Coombs and Cooley (1968), for example, used a longitudinal data base to compare approximately 2,000 dropouts with an equal number of high school graduates with no postsecondary school on measures of ability, interests, high school activities, and post-high-school activities. While graduates scored significantly higher on ability measures, many of the differences on other

measures were not significant. Interestingly, male dropouts were earning slightly more than male graduates during the follow-up survey. Bachman et al. (1972) also argued that the benefits of staying in school were vastly overrated. They found that dropouts reported higher levels of delinquency, but "there were no indications that dropping out made things worse" (p. 3). They also found that nearly three-quarters of dropouts, as opposed to two-thirds of graduates, were satisfied with their work.

In another evaluation of the personal consequences of dropping out, Wehlage and Rutter (1986) found that dropouts have shown gains equal to or greater than graduates in self-esteem and sense of control over their own lives. These authors raised the questions of whether the lack of self-esteem in dropouts was related to school experiences rather than to a psychological condition.

Another concern relative to dropping out is the impact of dropping out on cognitive performance. Alexander, Natriello, and Pallas (1985) assessed the achievement test score gains of a sophomore cohort from 1980 to 1982. Dropouts scored lower on the achievement test battery in 1980, and their growth as measured by 1982 test scores was not as great as those who stayed in school. Dropouts lost the most ground to stayers in such curriculum-driven subjects as civics and writing, but their loss due to dropping out (with background factors controlled) was consistently about one-tenth of a standard deviation across all subjects. Ekstrom et al. (1986) noted a similar cognitive loss and found that the losses were greatest for women and minorities.

Many researchers and public policymakers would see dropping out as an unwise choice of the individual. Some ethnographic researchers, however, such as Fine (1986) and Rosenberg (1983), have placed the responsibility for dropping out behavior on school and societal inequities. We are left with these

questions: Is it dropping out per se, rather than other preexisting conditions, that has a negative impact on individual's personal, social, and economic well being? Or, are such factors as socioeconomic status, gender, and academic ability the actual factors which lead to differences in postschool adjustment?

Society

Levin (1985) noted "High dropout rates, low test scores, and poor academic performance of a group that will become a larger and larger portion of the school population mean that a larger and larger portion of the future labor force will be undereducated for available jobs" (p. 9). He argued that the inevitable result will be a "two-tiered society" consisting of a lower class of poorly educated and economically deprived minorities and a wealthy, highly educated largely white upper class. The tension between these groups, he asserted, will inexorably lead to political unrest and social disruption (p. 12).

Rumberger (1987) found that dropouts are more likely to be unemployed, to require public assistance, and to engage in crime, and have less political participation. Governor Baliles of Virginia supported this view. He stated "two-thirds of the prisoners in our system--and I suspect that the figures are pretty much the same nationally--do not have high school diplomas" (We Revere, 1977).

Dropping out, then, it could be concluded, can have a negative impact on society in terms of economics and an uneducated citizenry. It becomes a problem of serious national concern and solutions should be reflected in aggressive public policy and prevention efforts. Politicians at all levels, as noted at President Bush's recent Education Summit, have identified dropping out as one of the nation's largest educational concerns. They have turned their attention toward

setting national goals, enforceable at the state level, in efforts to raise graduation rates.

School

There have been various suggestions in dropout literature for school-based efforts to address the problem. One of the most commonly cited solutions is early intervention. Schreiber (cited in Beck & Muia, 1980) observed that "over the long haul, programs in the nursery and kindergarten will probably be most beneficial in preventing dropouts" (p. 71). Early efforts, such as Headstart, attacked the problem of concomitant socioeconomic and educational disadvantage primarily with the preschool population. Then, of course, prevention in the early grades should address the recognition of possible problems and on the social and educational remedial efforts necessary to attack the individual problem (Beck & Muia, 1980; Hahn, Danzberger, & Lefkowitz, 1987). Also, grade retention is a strong predictor of dropping out; Hahn et al. (1987) argued that retentions may be, in actuality, a form of punishment for students who began schooling at a disadvantage. Remedial efforts, as well as a developmental approach for the early grades, may be more effective than retention (p. 27, 28).

Wehlage (1983) described several successful alternative programs and discussed the indicators of their effectiveness. His research indicated that several common traits characterize effective programs. First, programs must be of manageable size and small enough to promote face-to-face contact between teachers and administrators as well as between teachers and students. Second, programs must have autonomy; effective programs are run by a small cadre of teachers who feel empowered and able to be creative in approaching difficult-to-teach students. A positive teacher culture develops in effective programs with

the teachers adopting a positive attitude relative to students' potential and relative to their own abilities as teachers. In fact, teachers must view themselves as "quasi-counselors" and deal effectively with the whole student, not just promoting academics to the detriment of social growth, or what Wehlage refers to as "social bonding"--the establishment of positive adult relationships. Third, teachers in effective programs also have high expectations of the students and firm, consistent guidelines for student behavior. They also exhibit a collegiality which, in turn, develops a family style atmosphere in the school. This fosters a cooperative atmosphere among the students and a supportive peer culture. Finally, in terms of curriculum, the emphasis in effective programs should be one, according to Wehlage, that emphasizes an individualized approach with real-life problem solving, out-of-school experiences, and community involvement. In short, experiences should be designed to develop a sense of responsibility, a sense of self-efficacy and competence, and a positive self-image (pp. 32-40).

Tharp and Gallimore (1989) offer another view. They argue that instruction in schools needs to be culturally congruent with the student's familial and communal background. Therefore, the community needs to be the context for instruction and involve all community members.

Successful use of a child's foundations for learning has occurred when the child has not been looked at in isolation, but when education has been looked at as a social process that affects an entire community. More long-lasting progress has been achieved with children whose learning has been explored, modified, and shaped in collaboration with their parents and communities (John-Steiner and Smith, 1978, p. 26; cited in Tharp and Gallimore, 1989, p. 61).

What Should We Do?

"The dropout crisis has placed our nation at risk" reads a letter from Esther Ferguson, Founder and Co-Chairperson of the National Dropout Prevention Fund (1987). She cited some startling facts:

- One million young people drop out of school each year.
- By the year 2020, the total U.S. population will be 265 million, of which approximately 50 million will be dropouts.
- High school dropouts cost the nation 77 billion dollars every year in lost tax revenues, crime prevention, welfare and unemployment.
- It costs \$30,000 to educate a young person from kindergarten through high school. How does the state get paid back if a young person doesn't get a high school diploma? It doesn't.

Proposed solutions currently range from the global to specific. The National Dropout Prevention Fund projects a 40% dropout rate by the year 2000 and this organization believes that raising the nation's awareness of the problem is essential. They urge citizens to increase awareness in their local communities in efforts to get community leaders involved in proactive solutions.

Many authors treat the problem as one of national scope. Levin (1985) stated that "approaches to change must be viewed in the context of an overall strategy for placing the challenge of the disadvantaged on the national policy agenda and addressing the challenge effectively" (p. 18). He went on to argue that addressing the problem of educationally disadvantaged students is a sound national investment, and the federal government should spearhead this effort. From there

the responsibility should spread to the states to identify the specific populations at risk and to establish programs to meet their needs; to the communities and school boards to establish dropout prevention as a priority; and to business and industry to encourage schools to provide a high-quality labor force and to help schools in their efforts to address the needs of the educationally disadvantaged.

Dropout Prevention. An analysis of dropout prevention programs and literature revealed a combination of eight strategies used by educators at the national, state and local level (Fennimore, 1988; Hamby, 1989). These included:

- Using non-punitive approaches to attendance monitoring, out-reach, and improvement;
- Providing alternative school schedules (e.g. evening high schools, summer programs);
- Modifying or rescinding policies that "push out" students (e.g. grade retention, out-of-school suspension, inadequate social support services);
- Improving the school climate by incorporating elements of school effectiveness and by building partnerships within the community;
- Designing curriculum to link the academic, psychosocial, and vocational domains of adolescent experience;
- Expanding the teacher's role from dispenser of knowledge to mentor, collaborator, and coach;
- Using instructional strategies that actively engage students in learning, such as cooperative or experiential learning or applied problem solving;
- Assessing the integrity of the school environment by measuring how frequent and how participatory interactions are that are occurring within the school.

Dropout prevention programs have traditionally been pull out programs aimed at remediation. Alternative schools, though often successful, group dropouts in one place and may alienate them from the mainstream of their peers. School restructuring, improved vocational education, acceleration, and early childhood intervention have been offered as viable solutions to the dropout crisis. But what really is needed is a collaborative effort from outside the school as well as from within. Research shows that children achieve more and have an overall advantage when parents are involved in school and homework. It is the task of the teacher and administrator to let parents know how they can become involved and to develop programs and developmental goals. Community members and parents in partnership with the schools will help to win the dropout battle.

For the administrator, these youngsters present numerous problems. First, as educators dedicated to providing opportunities to youth, we are distressed at the waste of potential when a student becomes truant or drops out. Second, usually many hours of an administrator's time are spent on discipline problems, meetings with parents, and often, contacts with outside agencies that often accompany dealing with such children. Third, solutions are few; the alternatives for such children are often lacking and making arrangements for alternative placements is frustrating, time-consuming, and often unsuccessful. The dream of education for all dies hard; dealing with these students can be a deeply painful experience for administrators.

Clearly, the "dropout problem" will not go away. It is time for schools, together with community members and national policy makers, to work together toward a common solution.

Where do we begin?

As a first step, a consensus definition of a "dropout" must be developed. This definition should be adopted nationwide in an effort to arrive at a true picture of the dropout problem. This effort needs to be followed by an agreement concerning the way in which dropout rates are computed. This will provide policymakers and school administrators with a true accounting of the scope of the problem.

Researchers should also begin to carefully and systematically investigate the personal, social, and economic consequences of dropping out. The research that has been done suffers from a number of limitations. First, since many studies have been limited to a particular group (with homogeneous background characteristics) their generalizability has been suspect. Second, many studies have focused on self-reported reasons for dropping out in their determination of the "causes" of dropout behavior. Self-reports are, however, often biased by subjects' rationalization and oversimplification. Third, dropout research has been impeded by measurement problems (e.g., suitable measures of academic ability) and difficulties in obtaining an adequate sample of dropouts (Catterall, 1987). Finally, dropout studies have wrestled with the difficult problem of separating causes of dropout behavior from its consequences. For example, did an anticipated marriage cause a young person to drop out of school or did the need to leave the school's environment lead to the marriage? Did another underlying factor cause both the marriage and the dropout behavior?

Pallas (1986) has argued that all of these limitations have significantly obstructed the efforts of research on understanding dropout behavior. In addition, as Mann (1986) has noted, the dropout problem is "in fact a nest of

problems" (p. 7). We must begin to develop a sound research agenda if we are to implement programs and policies that address the dropout problem effectively.

***C*onclusion**

As Ransom (1986) aptly stated:

The problem affects everyone, and how the nation responds will help determine whether we create a permanent underclass or social cohesion, whether we will enjoy the fruits of our retirement or be destitute in our old age, and whether we will once again utilize our cities as places to live and work" (p. 2).

In summary, it should be noted that while there is no clearcut way to systematically deal with the dropout problem in America today, it is time to begin working together -- researchers, school administrators, teachers, policymakers, community members, parents, and the public -- toward the goal of understanding and preparing our youth for the challenges that await them.

Bibliography

- Alexander, K. L., Natriello, G., & Pallas, A.M. (1985). For whom the school bell tolls: The impact of dropping out on cognitive performance. American Sociological Review, 50, 409-420.
- Alexander, K. M., & Pallas, A.M. (1984). Curriculum reform and school performance: An evaluation of the "New Basics". American Journal of Education, 92, 391-420.
- Bachman, J., Green, S., & Wirtanen, I. (1972). Dropping out is a symptom. Education Digest, 37, 1-5.
- Banas, C. (November, 1982). Dropout fighter looking for an apostle in Chicago. Chicago Tribune, p. 2.
- Barro, S. M. & Kolstad, A. (1987). Who drops out of high school? Findings from High School and Beyond (Contractor Report. Washington, DC: Center for Education Statistics.
- Beck, L., & Muia, J. A. (1980). A portrait of a tragedy: Research findings on the dropout. The High School Journal, 64, 2, 65-72.
- Biddle, B. J., Bank, B. J., Anderson, D. S., Keats, J. A., & Keats, D. M. (1981). The structure of idleness: In-school and dropout adolescent activities in the United States and Australia. Sociology of Education, 54, 106-119.
- Block, L. T. (1978). Mini-school eases dropout rates. National Association Secondary School Principals, 62, 422.
- Blum, J. D., & Smith, J. E. (1972). Nothing left to lose. Cambridge, MA: Beacon Press.

- Catterall, J. S. (1985). On the social costs of dropping out of school. (Report No. 86-SEPI-3). Stanford, CA: Stanford University, Center for Education Research.
- Catterall, J. S. (1987). An intensive group counseling dropout prevention: intervention: Some cautions on isolating at-risk adolescents within high schools. American Educational Research Journal, 4, 521-540.
- Catterall, J., & Cota-Robles, E. (1988). The educationally at-risk: What the numbers mean. Accelerating the education of at-risk students (conference papers). Stanford, CA: Stanford University.
- Cavatta, J. C., & Gomez, A. S. (1984). New Mexico dropout study: 1983-1984 school year. (Report for New Mexico State Department of Education) Sante Fe, NM. (From computer search abstracts, April, 1986).
- Cervantes, C. F. (1965). The dropout: Causes and cures. Ann Arbor, MI: University of Michigan Press.
- Chicago Panel on Public School Finances. (1985). Dropouts from Chicago public schools. Chicago, IL: Author.
- Children's Defense Fund. (1974). Children out of school in America. (Report to Washington Research Project, Inc.) Washington, DC: Author.
- Coladarci, T. (October 1983). High school dropouts among Native Americans. Journal of American Indian Education, 15-22.
- Coladarci, T., & McIntire, W. G. (1988). Gender, urbanicity, and ability. Research in Rural Education, 5 (1) 13-15.
- Coombs, J., & Cooley, W. W. (1968). Dropouts: In high school and after high school. American Educational Research Journal, 5, 343-363.

- Curtis, J. (1983). Dropout prediction. (Report for Office of Research and Evaluation, Austin Independent School District) Austin, TX. (From computer search abstracts, April, 1986).
- Diekhoff, G. M., & Diekhoff, K. B. (1984). The adult literacy program attrition problem: Identification and intake. Adult Literacy and Basic Education, 8, 34-47. (From computer search abstracts, April, 1986).
- Dropouts reasons get spelled out. (March, 1987). Chicago Tribune, p. 9.
- Dropping out gentrified as young and able leave school. (February, 1987). Bangor Daily News, pp. 1,3.
- Dykeman, B. F. (1983). Correlation of vocational maturity and components of vocational maturity with rated work effectiveness. Education, 104, 1, 80-84. (From computer search abstracts, April, 1986).
- Ekstrom, R. B., Goertz, M. E., Pullack, J. M., & Rock, D. A. (1986). Who drops out of high school and why? Findings from a national study. In G. Natriello (Ed.) School dropouts: Patterns and policies (pp.89-105). New York: W. W. Norton.
- Ferguson, E. (undated). Dear friends. (form letter from National Dropout Prevention Center) Clemson, SC: Clemson University.)
- Fetters, W. B., Stowe, P. S., & Owings, J. A. (1984). Quality of responses of high school students to questionnaire items. Washington, DC: National Center for Education Statistics.
- Fine, M. (1986). Why urban adolescents drop into and out of public high school. In G. Natriello (Ed.) School dropouts: Patterns and policies (pp. 53-69). New York: Teacher's College Press.

- Fine, M. & Rosenberg, P. (1983). Dropping out of high school: The ideology of school and work. Journal of Education, 165, 3, 257-272.
- Forky, B. (December, 1985). State truancy office proposed. Morning Sentinel. p. 9.
- Gilmore, P. & Smith, D. (1989). Mario, Jesse and Joe: Contextualizing Dropping Out. In H. T. Trueba, G. Spindler and L. Spindler (Eds.), What do anthropologists have to say about dropouts? (pp. 79-92). New York: Falmer Press.
- Gordon, E. W. (1972) Toward defining equality of educational opportunity. In F. Moesteller & D. P. Moynihan (Eds.) On equality of educational opportunity (pp. 423-427). New York: Random House.
- Groups to match dropouts with particular aid. (December, 1986). Chicago Tribune. p. 40.
- Hafner, A. L. (1988, April). Sex differences in students' self-esteem ratings and changes over time. Paper presented at the annual meeting of the American Educational Research Association, New Orleans, LA.
- Hahn, A., Danzberger, J., & Lefkowitz, B. (1987). Dropouts in America: Enough is known for action. Washington, D.C.: Institute for Educational Leadership.
- Hammack, F. M. (1986). Large school systems' dropout reports: An analysis of definitions, procedures, and findings. In G. Natriello (Ed.) School dropouts: Patterns and policies (pp. 52-69). New York: Teacher's College Press.
- Hamilton, S. F. (1986) Raising standards and reducing dropout rates. In G. Natriello (Ed.) School dropouts: Patterns and policies (pp. 148-167). New York: Teacher's College Press.

Hayner, D. (May, 1987). Austin fights dropout image. Chicago Sun-Times. p. 34.

Hirano-Nakanishi, M. (1984). Hispanic school dropouts: The extent and relevance of pre-high school attrition and delayed education. (Report from National Center for Bilingual Research) Washington, D.C.: National Institute for Education.

Inquiry: Education; bad jokes, bad policies hurt education. (October, 1987). USA Today. p. 13A.

Jones, C. C., Sebring, P. A., Campbell, S., & MacArthur, D. (1986). Two years after high school: A capsule description of the 1980 sophomores. (Contractor Report). Washington, DC: Center for Education Statistics.

Jordan-Davis, W. E. (1984). The cry for help unheard: Dropout interviews. (Report to Austin Independent School District) Austin, TX: Office of Research and Evaluation.

Kanouse, P., Haggstrom, G. W., Blaschke, T. J., Kahan, J. P., Liwoski, W., & Morrison, P. A. (1980). Effects of postsecondary experiences on aspirations, attitudes and self-conceptions. (Report R-2616-HEW). Santa Monica, CA: Rand Corporation.

Lawler, J. (November, 1987). Researchers work to save troubled kids. USA Today. pp. 1,2.

Leary, M. (July, 1987). State, federal job training funds being spent for remedial education. Bangor Daily News. pp. 1,2.

Levin, H. M. (1985). The educationally disadvantaged: A national crisis. (The State Youth Initiatives Project, Working Paper #6) Philadelphia, PA: Public/Private Ventures.

- Lewis-Beck, M. S. (1980). Applied regression: An introduction. Series number 07-022. Beverly Hills, CA: Sage Publications.
- MDC, Inc. (1988) America's shame. America's hope: Twelve million youth At risk. Chapel Hill, NC: Author.
- MacMillan, D. L., Balow, I. H., Widaman, K. F., Borthwick-Duffy, S., & Hendrick, I. G. (1990). Methodological problems in estimating dropout rates and the implications for studying dropouts from special education. Exceptionality, 1, 19-39.
- Maine Department of Educational & Cultural Services. Dropout prevention planning guide. Augusta, ME: Author.
- Maine wages war against dropouts with alternative education programs. (February, 1990). Bangor Daily News. p. 14.
- Maine's grads on increase. (February, 1987). Bangor Daily News. p. 15.
- Mann, D. (1986). Can we help dropouts? Thinking about the undoable. In G. Natriello (Ed.) School dropouts: Patterns and policies (pp. 3-19). New York: Teacher's College Press.
- McCaul, R. L. (1987). The black struggle for public schooling in nineteenth-century Illinois. Carbondale, IL: Southern Illinois University Press.
- McDill, E. L., Natriello, G., & Pallas, A. M. (1986). A population at risk: Potential consequences of tougher school standards for student dropouts. In G. Natriello (Ed.) School dropouts: Patterns and policies (pp. 106-147). New York: Teacher's College Press.
- Mcdougall, W., & McCaul, E. (1987). Perceptions of dropouts: An ethnographic exercise. Unpublished manuscript.

- McLaughlin, D. C. (1984). Some relationships between Appalachian language and culture and high school drop-out rates found in two West Virginia counties. (Eric Document #ED263743, from computer search abstracts, April, 1986).
- Mitang, L. (August, 1987). Schools are not bribing pupils into studying hard. Morning Sentinel. p. 40.
- Morrow, G. (1986). Standardizing practice in the analysis of school dropouts. In G. Natriello (Ed.) School dropouts: Patterns and policies (pp. 38-51). New York: Teachers College Press.
- National Dropout Prevention Center (undated). Dropout prevention: Addressing a national crisis. Clemson, SC: Author.
- National Dropout Prevention Fund (undated). You're no fool...Stay in school. New York: Author.
- Natriello, G., Pallas, A. M., & McDill, E. L. (1986). Taking stock: Renewing our research agenda on the causes and consequences of dropping out. In G. Natriello (Ed.) School dropouts: Patterns and policies (pp. 168-178). New York: Teacher's College Press.
- O'Quinn, K. (December, 1985). New state department proposed to deal with high school dropouts. Morning Sentinel, p. 3.
- Ordovensky, P. (June, 1986). Dropouts discover new hope. USA Today, pp. 1,2.
- Pallas, A. M. (1986). The determinants of high school dropouts. (Report No. 364.) Baltimore: John Hopkins University, Center for Social Organization of Schools.

- Pattison, E. M. & Kaufman, E. (1982). The Alcoholism Syndrome. In E. M. Pattison & E. Kaufman (Eds.) Encyclopedic Handbook of Alcoholism, (pp. 3-30). New York, Gardner Press.
- Pedhauzer, E. (1982). Multiple regression in behavioral research. New York: Holt, Rinehart, & Winston.
- Peng, S. S. (1983). High school dropouts: Descriptive information from High School and Beyond. Washington, DC: National Center for Education Statistics.
- Piers, E. V. (1986) Piers-Harris children's self-concept scale: Revised manual. Los Angeles: Western Psychological Services.
- Promising ideas to cut school dropouts. (December, 1986) Chicago Tribune, p. 22.
- Ransom, S. (1986). School dropouts: Everybody's problem. Washington, DC: Institute for Educational Leadership.
- Ravitch, D. (1988). Education and the public good. The College Board, 148, 11-26.
- Reynolds, P. (1988, June 4). High School dropouts go into the world at a disadvantage. Bangor Daily News. p. 9.
- Robinson, T. (June, 1987). Dropouts get new chances at school, success. Chicago Sun-Times. p. 3.
- Rosenberg, M. (1965). Society and the adolescent self-image. Princeton, NY: Princeton University Press.

- Rumberger, R. W. (1983). Dropping out of high school: The influence of race, sex, and family background. American Educational Research Journal, 20, 2, 199-220.
- Rumberger, R. W. (1984). High technology and job loss. (Project Report #84-112). Stanford, CA: Stanford Educational Policy Institute.
- Rumberger, R. W. (1987). High school dropouts: A review of issues and evidence. Review of Educational Research, 57, 101-121.
- Schrieber, S. (1964). The school dropout. Washington, DC: National Education Association.
- Schrieber, S., Kaplan, B. A., & Strom, R. D. (1965). Dropout studies: Design and conduct. Washington, DC: National Education Association.
- Sebring, P., Campbell, B., Glusberg, M., Spencer, B., & Singleton, M. (1987). High School and Beyond 1980 Sophomore Cohort Third Follow-Up (1986) Data File User's Manual. Washington, DC: Center for Education Statistics.
- Self, T. C. (1985). Dropouts: A review of the literature. Monroe, LA: Northeast Louisiana University. (From computer search abstracts, April, 1986).
- Steinberg, L. (1982). Dropping out among language minority youth: A review of the literature. Washington, DC: National Education Association. (From computer search abstracts, April, 1986).
- Stern, D. & Paik, I. W. (1989). Comparing the labor market experience of Hispanic, White and Black teenagers with and without high school diplomas. Paper presented at the annual meeting of the American Educational Research Association, San Francisco, CA.

Tharp, Roland G. (1989). Culturally compatible education: A formula for designing effective classrooms. In H. T. Trueba, G. Spindler & L. Spindler (Eds.), What do anthropologists have to say about dropouts? (pp.51-66). New York: Falmer Press.

Trueba, H. T., Spindler, G. & Spindler, L. (Eds.) (1989) What do anthropologists have to say about dropouts? New York: Falmer Press.

Tyack, D., & Hansot, E. (1982) Managers of Virtue. New York, Basic Books.

U. S. Department of Education (1988). Tenth annual report to congress on the implementation of the Education of the Handicapped Act. Washington, DC: Author.

U. S. Department of Education (1989). State Education Performance Chart Supplement: Student Performance and Resource Inputs, 1987, and 1988. Washington, DC: Author.

U. S. Department of Education (1989). Digest of Education Statistics. Washington, DC: Author.

U. S. Department of Education (1989). Dropout Rates in the United States: 1988. (25th ed.) Washington, DC: Author.

Wagenaar, T. C. (1986). The high school diploma as a terminal degree. (Contractor Report). Washington, DC: Center for Education Statistics.

Wagner, H. (1984). Why poor kids quite attending school. Education, 105, 2, 185-188.

We revere history, but we also want to make it. (August, 1987)
USA Today.

Wehlage, G. G. (1983). Effective programs for the marginal high school student. Bloomington, IN: Phi Delta Kappa Educational Foundation.

Wehlage, G. G., & Rutter, R. A. (1986). Dropping out: How much do schools contribute to the problem? In G. Natirello (Ed.) School dropouts: Patterns and policies (pp. 70-88). New York: Teacher's College Press.

Wylie, F. C. (1979). The self-concept volume 2: Theory and research on selected topics. Lincoln, NE: University of Nebraska Press.

Ysseldyke, J. E. & Aigozzine, B. (1982). Critical issues in remedial and special education. Boston, MA: Houghton, Mifflin.

Equal Opportunity Policy Statement

The University of Maine shall not discriminate and shall comply with applicable laws prohibiting discrimination on the grounds of race, color, religion, sex, sexual orientation, national origin or citizenship status, age, handicap, or veteran status in employment, education, and all other areas of the University. Any questions about discrimination should be directed to the Director of Equal Opportunity, University of Maine, Alumni Hall, Orono, ME 04469.

The views expressed herein
are not necessarily those of
the college of Education,
University of Maine or the
Penquis Superintendents
Asociation.

College of Education
Center for Research and Evaluation
Shibles Hall
University of Maine
Orono, Maine 04469-0121



The LAND GRANT UNIVERSITY and SEA GRANT COLLEGE OF MAINE