$E 02 \cdot 51 / 1971-72$

## COLORADO STATE PUBLICATIONS LIBRARY



31799001069921

Raturn to
Siate Publieations Librayy
201 Easi Collan
201 Easi Cellaz ARvenue, Room 314
Denvil: Co sozo3

# COLORADO PUBLIC SCHOOL DROPOUT REPORT 

## 1971-72

Donald D. Woodington, Commissioner

Denver, 1973
COLORADO STATE BOARD OF EDUCATION
Lewis E. Stieghorst, Chairman Littleton
(Second Congressional District)
Mrs. Robin Johnston, Vice-Chairman ..... Denver (First Congressional District)
Maurice G. Baker Colorado Springs
(Fifth Congressional District)
William Graham ..... Beulah
(Third Congressional District)
Allen B. Lamb ..... Windsor
(Fourth Congressional District)
Pupil Services ..... 20
45 p., July 1973

# COLORADO PUBLIC SCHOOL DROPOUT REPORT 

 1971-72NINTH ANNUAL REPORT

Prepared by

Donald M. Whitney

Submitted by

Pupil Services Unit David C. Miles, Director

## Denver

March, 1973
Lewis E. Stieghorst, Chairman ..... Littleton
(Second Congressional District)
Mrs. Robin Johnston, Vice-Chairman Denver (First Congressional District)
Maurice G. Baker Colorado Springs
(Fifth Congressional District)
William Graham ..... Beulah
(Third Congressional District)
Allen B. Lamb Windsor
(Fourth Congressional District)
Pupil Services ..... 20
45 p., 500 c., ..... \#277
July 1973

## TABLE OF CONTENTS

Page
ABSTRACT ..... ii
INTRODUCTION ..... 1
CHARACTERISTICS OF THE DROPOUT ..... 5
Characteristics of the Dropout Child at Grade 8 ..... 6
Causes for Dropouts ..... 7
Statistical Data Related to Dropouts ..... 8
Summary ..... 8
EFFECTS OF THE DROPOUT PROBLEM ..... 12
PUPIL RETENTION ALTERNATIVES ..... 14
Early Diagnosis of the Potential Dropout ..... 15
The Potential Dropout and Special Education Related Handicaps ..... 16
MANAGERIAL ROLE OF THE TEACHER ..... 18
CAREER EDUCATION PROGRAMS ..... 19
Additional Changes Required ..... 20
DROPOUT RATES FOR ETHNIC GROUPS ..... 22
ADDENDUM A - STATISTICAL DATA ..... 25
ADDENDUM B - THE STUDENT ANALYSIS SYSTEM (SAS) ..... 31
Data Interpretation ..... 32
Data Utilization ..... 33
Procedures ..... 34
Forms ..... 34
Checklists ..... 34

## ABSTRACT

Included in this report were statistical and narrative data related to the problem of the school dropout. Elements of the report were:

1. Characteristics of the dropout
2. Effects of the dropout problem
3. Parental considerations
4. Pupil retention alternatives
5. Managerial role of the teacher
6. Career education programs

Failure was reported to be central to the problems associated with the school dropout. Prescriptive teaching was described as a preferred solution alternative to the failure syndrome.

Generic characteristics of and more specific subsets for early diagnosis and treatment served as unifying threads in the report. Solution alternatives focused upon a career education program approach with incorporation of its related concepts into the curriculum commencing at the primary grades leve1. Awareness, exploration and "hands on" experiences at the elementary, intermediate and high school levels were treated.

## INTRODUCTION

Educators, research personne1, other professionals and paraprofessionals who work with allienated youth are aware of an exodus of youth from school soon after they reach the age of 16 . The exodus phenomena usually occurs at the 10th or 11 th grade levels. The decision to leave school prior to graduation is not a decision reached in haste. Varied and complex factors and events underlying the decision probably have smoldered for a number of years. Complexity of these variables have been identified by a variety of researchers. The variables combine to form individual patterns which result in an increasing preponderance of "failure" oriented experiences. These experiences are located in the home and in the school for the potential dropout. Failure experiences may result in a lowered sense of self-esteem, lowered occupational aspirations, and negative attitudes toward the school.

Due to failure experiences, the potential dropout no longer can tolerate the confines of school. Conversely, school personnel may reduce efforts to reach the student they perceive no longer is motivated nor interested in school. Attributing blame or responsibility for the exodus phenomena either to the student or to the school clouds the issue.

A prime consideration is whether unique variables and events which channel the potential dropout away from school can be changed or modified. The following four questions can be asked:

1. Can modifications be made which will make it possible for the potential dropout to have success oriented experiences at school and at home?
2. To what extent can the environment of the school be changed or modified to accommodate a greater variety of learning styles and student needs?
3. To what extent should the school attempt to change conditions in the home and how successful would such an approach be?
4. Should all students be expected to complete what essentially is one "type" of program in a thirteen-year time span?

Failure is one of the more pervading factors relating to students dropping out of school. A failing youngster may perform at a level below his peers because of deficits which are the result of early experiences. A background for successful school experience may not have been provided. Characteristics of the failure-oriented child include:

1. He does not exhibit a facility with the English language.
2. He has not had experiences with paper, pencil and/or crayon materials.
3. He speaks the language of the ghetto, the barrio, or the lower classes.
4. He has not had experiences with books and magazines.
5. He has not had the opportunity to develop expressive forms of language.
6. He may be poorly clothed and/or inadequately groomed.

Based upon the hypothesis that the failing child represents a potential dropout, pupil retention at the elementary level must be based on preventive and prescriptive techniques. When a child progresses to the middle school or junior high school level and continues to exhibit many of the behaviors of the potential dropout, various strategies can be developed to meet his particular needs. Currently, it is estimated that a minimum of 50 percent of students who drop out of high school have at least
average ability and are capable of completing a regular high school academic program. They are constrained by a deficiency in academic skills development, not intellectual functioning. Twenty-five percent of the students who drop out have the ability to complete a college or university program. Ten percent have the capacity to complete a college or university graduate program of studies.

If characteristics of the potential dropout appear to be relatively uniform and stable, then a primary question to be asked of educators is: Can we identify the potential dropout early enough to provide remedial assistance to ameliorate some of the major factors which contribute to his eventual dropping out?

Programs have been developed to reduce dropouts or to aid in pupil retention. These programs can be found in large cities, urban and rural areas. A finding in these programs is that the potential dropout--the child who traditionally experiences failure--can learn to read and manipulate the language. Data in Table I comparing dropout rates for a nine-year time span indicate the seriousness of the problem.

## TABLE I

## YEAR BY YEAR COMPARISON OF POTENTIAL DROPOUT RATE AND TOTAL NUMBER OF DROPOUTS

|  | Potential Dropout Rate | Total Number of Students |
| :---: | :---: | :---: |
| 1963-64 | 23.0\% | 7,696 |
| 1964-65 | 22.7\% | 8,053 |
| 1965-66 | 22.8\% | 8,203 |
| 1966-67 | 22.6\% | 8,390 |
| 1967-68 | 22.8\% | 8,840 |
| 1968-69 | 24.4\% | 9,366 |
| 1969-70 | 21.5\% | 8,993 |
| 1970-71 | 20.9\% | 8,887 |
| 1971-72 | 23.9\% | 10,747 |
| * Poten the year. It an be dr | e projected dropout dropouts which o the results of lon hat proportion of nt holding power | ndicates in one studies. s would ?" |

A dropout is defined as: "A pupil who leaves school, for any reason except death, before graduation or completion of a program of studies without transferring to another school." ${ }^{1}$ Characteristics of the dropout have been recognized to be quite stable. They include:

1. The dropout tends to be more mobile than other students.
2. A majority of dropout students are from lower socioeconomic backgrounds. Many are minority students, but the majority are Anglo.
3. Their parents usually have been dropouts.
4. One or more older brothers or sisters may have dropped out of school.
5. They exhibit discipline problems in the home and the school.
6. There is poor communication between the home and the school.
7. They exhibit a high rate of absenteeism and/or truancy.
8. Academically, they are low achievers.
9. They fail more grades than their peers.
10. They have frequent health problems.
11. They tend to have more personal problems. Usually this is reflected in behavioral problems or rebellious behavior.
12. Generally, they are "loners" and not accepted by their peers.
13. Their closest friends are not in school.
14. They do not participate in extracurricular activities.
15. Their parents tend to be more punitive than parents of the student who graduates from high school.

1 Harold L. Hoyt, "Who is Missing? One in Every Five Students Drop Out of School Before Graduating." Colorado Department of Education, Denver, 1971, p. 54.

When the potential dropout reaches the eighth grade, he may have experienced failure in two or more grades. In addition, he may exhibit one or more of the following characteristics:

1. He may be reading two or more years behind his peers.
2. Academic achievement in other areas may be one or more years behind his peers who are functioning at an "average" level.
3. Negative attitudes, rebellious and delinquent behavior patterns may have begun to develop.
4. The child may be defiant of adult authority.
5. He may gain his recognition by acting out against the school system, its personne1, other students and/or society.
6. The extremely rebellious may be expelled or suspended from school before completion of the eighth grade.
7. He may have been involved in altercations with the police.
8. He may be or have been incarcerated in an institution of correction.
9. He may have developed a history of high absenteeism and truancy.
10. He may have had confrontations with teachers and administrators.

Efforts of the school staff and the student directed toward improvement probably will meet failure. These efforts probably will be oriented to attempts to change his behavior, improve his basic skills, increase his achievement and/or change many of his negative attitudes toward school and adults. Both he and his teachers may become increasingly frustrated.

A number of reasons may be used to explain the increase in dropout rates and total number of students leaving school prior to completion of a regular program of studies. Any one or a combination of the following factors could lead to an increase of students dropping out of school:

1. The irrelevancy of education.
2. The influence of a stronger counter culture which does not put as much emphasis on education.
3. Today's students may be exhibiting greater independence or rebellion.
4. Conflict between student informal dress codes and school codes.
5. Greater awareness on the part of all students that school is not meeting their needs.
6. Female students are exhibiting less conforming behavior and more rebelling type of behavior.
7. More young females are leaving school because of pregnancy (200,000 annually).

While the list presented above is not exhaustive, it may serve as a source of conjecture and provide a basis for additional investigation.

The descriptive characteristics mentioned above are general. As such, the list omits some unique characteristics of the dropout. For example, a potential dropout may exhibit the following characteristics:

1. He may be passive and apathetic.
2. He may not challenge the school system or the home.
3. He may be ignored by other students and school personnel.

Data in Table II and Table III indicate statistical trends related to kinds and numbers of dropout students. In Table II, the dramatic gain at grade 10, for both males and females is noted. Gains in grade 9 also are dramatic. Data in Table III indicate a slight reduction of dropouts in grades 7 and 8 for 1971-72 when compared with 1970-71. In 1971-72 there was a slight increase in grade 9 and a dramatic increase of dropouts at grades 10 and 11. Although there was an increase in dropout rates both of males and females, the rate for females was greater than the males for grade 10. The increase at grade 11 was the reverse. The largest increase was evidenced in males. The increase for grade 12 was not quite as dramatic as grades 10 and 11 nor were the differences between males and females quite so substantial. Dropout data related to special education students indicated an increase in dropout rates. In 1971-72, there were 276 reported dropouts with a larger number being male students. This was a 48 percent increase of male students over the previous year. Additional statistical data in tabular form were included as Addendum A.

## Summary

The potential dropout has been characterized as constantly experiencing failure in his school experiences. In addition, he has been characterized as lacking personal-social relationships which could provide him with a sense of belonging and identification with the school environment. Student problems may have been compounded by socioeconomic level and parental
inability to provide early experiences which would prepare him for successful school achievement. In general, problems of the potential dropout may result from conflicts between the social values of the lower socioeconomic group and those imposed by the middle class school. This is not a recent finding. Sociologists and psychologists have recognized this conflict for years.

## NUMBER OF DROPOUTS BY GRADE AND SEX ON STATEWIDE BASIS 1971-72

|  | 7 | 8 | 9 | ades 10 | 11 | 12 | Special <br> Education | Total |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Dropouts |  |  |  |  |  |  |  |  |
| Ma 1e | 30 | 107 | 448 | 1,715 | 2,038 | 1,521 | 154 | 6,029 |
| Female | 27 | 81 | 365 | 1,396 | 1,507 | 1,211 | 122 | 4,718 |
| Total | 57 | 188 | 813 | 3,111 | 3,545 | 2,732 | 276 | 10,747 |
| Unknowns* |  |  |  |  |  |  |  |  |
| Male | 164 | 115 | 91 | ** | ** | ** | 32 | 402 |
| Female | 120 | 130 | 133 | ** | ** | ** | 13 | 397 |
| Total | 284 | 245 | 224 | ** | ** | ** | 45 | 799 |

* Unknown is a withdrawal for which transfer or dropout status in unknown.
** Data is not available for these grades.

TABLE III

SUMMARY OF STATE DROPOUT RATES BY GRADE
1963-1964 TO 1971-1972
$\left.\begin{array}{lccccccccc}\hline \hline & & & & & & & & & \begin{array}{c}\text { Spec. } \\ \text { Ed. }\end{array} \\ \text { Year } & \text { Ungrad. }\end{array} \begin{array}{c}\text { Projected* } \\ \text { Dropout } \\ \text { Rate } \%\end{array}\right]$

* All figures in this table are minimums, unknowns are not included in these data.
** The Annual Dropout Rate is the percentage of the total student membership which dropped out in one year in grades 7 through 12. It is important to note that it does not reflect the cumulative effect of the dropout.
*** Data for the ungraded category is not available for the year 1964-1965 and 1965-1966.

During the past decade there has been an increased emphasis on college education. It has been estimated at the national level that of 30 percent of high school graduates who enroll in colleges and universities, only one-third of them will complete a baccalaureate degree within four years. An undue amount of importance and effort may have been placed on guiding students into colleges and universities. Personal and occupationaloriented needs apparently have not been met.

Problems related to pupil retention, whether at the high school or college level, appear to be of significant magnitude to require fundamental changes in our educational institutions.

Since 1961, national figures have expressed concern regarding the high school dropout (Ribicoff, 1961; Kennedy, 1963; Johnson, 1965). At those times the primary emphasis was on remaining in high school and completing college. Today it is realized that this is not realistic for the following reasons:

1. Not all students can be successful in college.
2. There currently are not enough employment opportunities for many college graduates.
3. It appears that alternative post high school training programs would better meet the needs of many high school students and meet the employment needs of our technological society.

Today, there are job openings in scientific and technological fields which lack qualified, trained personnel. It has been estimated that by 1980 the majority of occupational job openings will be in the professional, social service and technological fields. All of these fields require
some form of post high school training but not necessarily a college degree. The demand for the unskilled person will be reduced drastically. He will fall further behind the mainstream of the economy. The unskilled will be a misfit in a highly technological society. A challenge to educators is to educate and to train these potentially unskilled "dropouts" to be productive contributing members of society.

## PUPIL RETENTION ALTERNATIVES

To reduce dropouts, greater emphasis on individualizing instruction may be required. Modification of materials and instructional procedures to meet the needs and learning style of the individual may be required. Achievement then can be a function of progressive successes throughout the school experience. Recognition of effort can be used to facilitate acceptance of responsibility and meaningful learning in terms of the consequences of one's behavior. Failure provides feedback information to the child, teacher and parent. Additional experiences then can be provided before he moves on to more complex material. Emphasis can be given to what the child is able to accomplish or master. If the child constantly exhibits difficulty in achieving success with the material, then the material and the approach being used in the instructional program should be evaluated. Increased emphasis should be given to personal progress as opposed to peer competition.

Educational technology has been used to demonstrate that failure is not inevitable for the potential dropout. Programs have been developed and operated which have demonstrated the feasibility of educating the child who exhibits educational or learning deficits. However, conditions must be facilitative. Emphasis should be given to assisting students to identify and to develop their aptitudes and career interests. It may be helpful to provide the child with tutoring. Tutoring can be done by junior high school or high school age students under the supervision of a teacher or teacher aide.

A tutoring approach requires a prescriptive teaching program for the specific needs of each child. If the child cannot read, the total educational program can be oriented to correcting that particular deficit. If he cannot manipulate numbers, the educational prescription can be designed to emphasize skill development in number operations. The emphasis can be focused on teaching to the educational deficit. This type of educational program can be supplemented by using reinforcers as part of a motivation process.

To compensate for problems within the home, parents can be encouraged or required to attend parent counseling groups. It is there that family counseling in and training for effective child management can be provided.

## Early Diagnosis of the Potential Dropout

The Student Analysis System²--a computerized program--provides a prediction coefficient for each child screened and the significant characteristics which reflect his potential dropout status. The computer also stores a graduate file and dropout history file for each school district. This service facilitates comparisons of characteristics of the fourth grader against those students who have graduated or who have dropped out. The SAS is based on the concept that if characteristics of know graduates and dropouts from a specific community or location are subjected to analysis, then the data can be used to identify the potential dropout(s).

[^0]
## The Potential Dropout and Special Education Related Handicaps

Severe learning problems may be accompanied by concommitant behaviors which interfere with the total learning environment and detract from other children's opportunities to learn. A typical school curriculum may not meet the needs of the potential dropout nor provide him with the necessary experiences which will enhance his self-esteem or occupational aspirations. The longer he remains in school the more progressive the deterioration in self-esteem and the lower his occupational aspirations may become. One researcher (Bachman, et. a1.; 1971) has found that self-concepts of potential dropouts become more positive after they in fact drop out of school.

Many learning problems can be overcome if adequate assistance is available to the teacher and if appropriate strategies are developed to compensate for the child's learning deficits. Support services provided by personnel such as counselors, school psychologists and social workers (pupil services workers) can provide direct assistance to the child and to the teacher. In addition, consideration can be given to the use of paraprofessionals and student tutors. This strategy requires increased organization and coordination by the teacher but the benefits which accrue to the child outweigh the effort. Supportive services also can be used to provide a more effective communication link between home and school.

It may be necessary to remove a child with severe behavior problems from the regular classroom. This especially is true for the child who
is hyperactive and/or who exhibits extreme hostile behavior. In many situations the child may be assisted in the classroom with only limited interference to other children's learning. Much depends upon the child, the behaviors he exhibits and the nature of the learning problem.

Remedial programs should be supplemented by experiences outside the controlled environment of the school. One method to accomplish the supplementation is through a comprehensive program of career education. Careers and occupations, can be fused into the curriculum. The school can begin to prepare the student for the world of work. This approach can be pragmatic. The student can be provided with situations and experiences which will prepare him to function in an effective and productive way once he has left school.

The child who is failing or perceives himself as failing may function to create more problems for himself, other children and the teacher. The teacher with access to resource people has an advantage of additional professional assistance and can concentrate more specifically on problems of the child. The additional professional staff can work with the teacher to identify problem causes and to develop strategies for alleviating the problem or deficit. At a minimum, more effective methods of functioning with respect to deficits or disabilities can be developed.

The teacher who does not have supporting services may experience added frustration in her attempt to teach the child. She is limited in terms of the skills she may need to assess his educational progress and/or to develop new strategies to alleviate his educational deficits. The amount of time expended reduces the amount of attention she can give to her other students.

If the achievement of a more efficient level of individualized instruction requires the use of additional paraprofessionals, volunteers and student tutors, then the teacher may be required to spend more time and effort performing the management functions of organizing and coordinating resources at her disposal. The rationale for the extra effort should be oriented to meeting the individual needs of the children within her classroom.

## CAREER EDUCATION PROGRAMS

There appears to be an increased emphasis on occupational/vocational training and skill training in the schools and/or in the communities with the cooperation of the public schools. In some situations, students are enrolling in on-the-job training and receiving high school credits to complete their diploma requirements. It is not uncommon to find that the students are receiving stipends from the company for which they are working to increase their interest and motivation.

The success of such programs is noteworthy when one considers that many of these students exhibited behavioral problems in the regular school program. Conversely, they may have demonstrated apathetic behavior. Many have a history of truancy, failure and negative attitudes toward the general educational program. When involved in experiences that relate to meaningful employment, many students become interested and motivated to do well in the program.

Employers also are evaluating and modifying some of their attitudes about the "high risk" student who has had a problem(s) in school. This does not negate the fact that some of these young people fail at this new approach to education, nor is it to negate the fact that some have difficulty assuming responsibilities as trainees in a skill training program. From the apparent success, however, education is achieving a level of relevancy for them. It may provide the basis for them to achieve a meaningful role as contributing members of society.

Generally it is agreed that to reduce crises, a career education program should include characteristics appropriate to the age level of
the student. This includes awareness level activities at the elementary level, exploration activities at the middle or junior high school level and hands-on-experiences and/or actual work experiences at the secondary school level.

Awareness activities help the student to become more conscious of 1) career alternatives, 2) himself and his interests, aptitudes and values and 3) the value of meaningful work activities as well as leisure time activities. The exploratory phase includes expansion of earlier activities. Greater emphasis is placed on identifying several career families for in-depth exploration. The "hands-on" phase includes actual on-the-job experiences in a work situation. For example, if a student were interested in the field of law, he would be provided opportunities to have a variety of work experiences in a variety of legal settings. Similarly, experiences would be provided for the student interested in a skilled trade such as pipefitting.

Today, there is a variety of career education programs in operation throughout the United States. The United States Office of Education (USOE) has funded four career education models. The Comprehensive Career Education Model (CCEM) which currently is being developed in six school districts throughout the nation is one such program.

## Additional Changes Required

In a career education program, the curriculum can be modified to include experiences which coincide with career interests and aptitudes of the students. Subject areas can relate course work to real situations.

These situations aid by reflecting different careers representing that subject area. A central theme of the curriculum from preschool to adulthood can emphasize careers, career planning and decision making for careers. Career education should include all occupations, not just the professional or the skilled trades.

Career education programs include structured guidance activities to facilitate career decision making. These activities however should not be to the exclusion of related significant aspects of the educational program.

Career education programs can provide opportunities for a student to develop skills for employment. Included as clients of the career education programs are students who desire to leave school prior to graduation. The program also can include a school placement service to assist students in finding meaningful employment. If the concept of recycling is vital to the ever changing needs of our technological society, then the career education program can provide for a more open and flexible school system which emphasizes continuous learning, even after leaving school.

## DROPOUT RATES FOR ETHNIC GROUPS

Data related to dropout rates for ethnic groups were presented in Table IV and $V$. The data indicated that male students were the most prone to dropout. Female minority students however, dropout at a rate almost equal to that of their male counterpart.

According to available data, the Black had the lowest dropout rate for minority groups at a projected dropout rate of 26.3 percent for males and 23.6 percent for females. These data cannot be accepted at face value however as several large districts failed to provide an ethnic breakdown on data they reported.

Projected rates for the Indian and Spanish surnamed were high compared to the total dropout figures for all students. According to these data, 56.4 percent of Indian males entering the seventh grade will not complete high school. Almost one-half ( 42.9 percent) of the females will not complete their high school programs. Over one-third of the male ( 35.6 percent) and female ( 34.1 percent) Spanish surnamed students will not complete a high school program.

TABLE IV

PROJECTED DROPOUT RATES, EDUCATIONAL POTENTIAL DROPOUT RATES FOR ETHNIC GROUPS

1971-1972

|  | Minimum <br> Projected <br> Dropout Rates | Educational <br> Potential <br> Rates |
| :--- | :---: | :---: |
| Indian |  |  |
| Male | 56.4 |  |
| Female | 42.9 | 75.8 |
| Total | 49.5 | 82.8 |
| Spanish Surnamed |  | 79.4 |
| Male | 35.6 |  |
| Female | 34.1 |  |
| Total | 34.9 | 85.2 |
| *Black |  | 85.4 |
| Male | 26.3 | 90.3 |
| Female | 23.6 | 91.2 |
| Total | 25.1 | 90.8 |
| Other |  |  |
| Male | 21.4 |  |
| Female | 17.8 | 92.0 |
| Total | 19.4 | 93.5 |
|  |  | 92.8 |
| Black data are incomplete. |  |  |

TABLE V

> NUMBER OF DROPOUTS, GRADE, SEX, ETHNIC GROUPS $1971-1972$

|  | 7 | 8 | 9 | 10 | 11 | 12 | Spe. Ed. | Ungrade | Total |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Indian |  |  |  |  |  |  |  |  |  |
| MaTe | 74 | 81 | 59 | 47 | 43 | 38 | 2 | * | 344 |
| Female | 64 | 85 | 73 | 54 | 64 | 33 | 5 | * | 378 |
| Total | 138 | 166 | 132 | 101 | 107 | 71 | 7 | * | 722 |
| Spanish Surnamed |  |  |  |  |  |  |  |  |  |
| Male | 7 | 28 | 92 | 259 | 250 | 164 | 37 | 9 | 849 |
| Female | 9 | 19 | 101 | 249 | 207 | 144 | 20 | 4 | 753 |
| Total | 16 | 47 | 193 | 508 | 457 | 311 | 57 | 13 | 1602 |
| *Black |  |  |  |  |  |  |  |  |  |
|  |  | 0 |  |  |  |  | 3 | * | 45 |
| Female Total | 0 0 | 1 | 0 | 15 29 | 10 25 | 10 21 | 1 | * | 37 82 |
| Other |  |  |  |  |  |  |  |  |  |
| Male | 9 | 27 | 211 | 882 | 1033 | 703 | 50 | 7 | 2915 |
| Female | 11 | 20 | 133 | 706 | 778 | 574 | 31 | 5 | 2248 |
| Total | 20 | 47 | 344 | 1588 | 1811 | 1277 | 81 | 12 | 5163 |

ADDENDUM A
STATISTICAL DATA

## TABLE VI

## PROJECTED DROPOUT RATES, EDUCATIONAL POTENTIAL AND ANNUAL DROPOUT RATE BY SEX 1971-72

|  | Minimum Projected Dropout Rates | $\begin{gathered} \text { Educational* } \\ \text { Potential } \\ \text { Rate } \\ \hline \end{gathered}$ | Annual** Dropout Rate |
| :---: | :---: | :---: | :---: |
| Male | 26.1 | 90.2 | 4.6 |
| Female | 21.6 | 91.9 | 3.8 |
| Tota 1 | 23.9 | 91.1 | 4.2 |
| * The Educational Potential Rate is the percentage of total potential years of education that would be accomplished by pupils from the end of grade seven until the end of grade twelve, under the holding power conditions that exist during one school year. |  |  |  |
|  | opout Rate is rship which dro twelve. It i ect the cumula | rcentage of $t$ out in one ye rtant to note ffect of the | al grades it t. |

NUMBER OF DROPOUTS, HOLDING POWER BY GRADE AND SEX 1971-72

|  | 7 | 8 | 9 | Grade 10 | 11 | 12 | Special <br> Education | Total |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Male | 30 | 107 | 448 | 1,715 | 2,038 | 1,521 | 154 | 6,029 |
| Fema 1e | 27 | 81 | 365 | 1,396 | 1,507 | 1,211 | 122 | 4,718 |
| Total | 57 | 188 | 813 | 3,111 | 3,545 | 2,732 | 276 | 10,747 |
| Ma le | . 999 | . 995 | . 980 | . 923 | . 900 | . 914 |  |  |
| Female | . 999 | . 996 | . 983 | . 935 | . 923 | . 929 |  |  |
| Total | . 999 | . 996 | . 982 | . 928 | . 911 | . 921 |  |  |
| * Grade Holding Power - the grade holding power is the proportion of pupils held in school at one grade level. It can be used to identify the grade level of highest and lowest proportion of dropout. |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |

TABLE VIII

## A COMPARISON OF TITLE I AND NONTITLE I DROPOUT RATES, SEX, AND ETHNIC GROUPS 1971-1972



TABLE IX

STATE SUMMARY: DROPOUT DATA BY SEX
AND GRADE FOR NON-TITLE I SCHOOL DISTRICTS

| Males | 1 | 1 | 14 | 350 | 458 | 415 | 10 | -- | 1,249 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Females | 1 | 3 | 10 | 258 | 333 | 274 | 6 | -- | 885 |
| Total | 2 | 4 | 24 | 608 | 791 | 689 | 16 | -- | 2,134 |

TABLE X

STATE SUMMARY: DROPOUT DATA BY SEX
AND GRADE FOR TITLE I SCHOOL DISTRICTS

| Males | - | - | 37 | 627 | 682 | 555 | 56 | 10 | 1,967 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Females | - | - | 20 | 480 | 508 | 428 | 50 | 5 | 1,491 |
| Total | - | - | 57 | 1,107 | 1,190 | 983 | 106 | 15 | 3,458 |

ADDENDUM B
THE STUDENT ANALYSIS SYSTEM (SAS)

## THE STUDENT ANALYSIS SYSTEM (SAS)

How early can the dropout be identified? The Colorado Department of Education has developed the Student Analysis System (SAS) which can be utilized to identify the potential dropout as early as the fourth grade. The program is available to all districts in Colorado. The mechanics required for operation are provided to the districts by the Colorado Department of Education.

In general, The SAS is a procedure for identifying the potential dropout. The following constraints apply, however:

1. It cannot be used below the fourth grade level.
2. Incomplete forms are useless as the results then are based on incomplete data and are not dependable.
3. It requires effort on the part of the teacher or counselor to complete all the forms for each class.
4. The returns may be delayed because of limited computer time.

Two of the output documents are concerned directly with the child's potential for becoming a dropout. The dropout prediction printout lists all students in a school by grade level and provides a numerical coefficient from 0.000 to 1.000 following each name.

## Data Interpretation

The higher the numerical value of the coefficient the greater the potential for dropping out of school. For example, a child who receives a prediction coefficient of 1.000 is considered to be almost certainly a potential dropout. The child who receives a coefficient of 0.000 would be considered a strong candidate for high school graduation.

Students who exhibit more of the characteristics of the dropout than the characteristics of the graduate might receive a prediction coefficient of 0.500 . For each of these students a separate printout is prepared listing the responses made on the original form which was completed by the school staff. Characteristics which appear to be significant for dropouts are identified for the document user. The output documents provide space for developing educational strategies for the child and assessing and reporting the results of the strategies.

## Data Utilization

The SAS also enables each school to be provided a frequency analysis. This analysis summarizes all responses reported on the student report form. This frequency report is prepared on a student summary printout for all students at each grade. The analysis summary is broken down by sex, total responses for each question, and indicates the "no response" for each item on the student form. The frequency report summary is valuable in providing an overview of the group characteristics for a particular grade level or school.

Personnel in a school district or individual school using the SAS at the fourth grade level would have time to work with the potential dropout, his parents and other educators. Hopefully, the child would remain in school and complete an appropriate program of studies. Studies may be of an academic or of a vocational-technical nature.

## Procedures

Specific procedures involved in implementing the system are simple and inexpensive. Data used in the system are collected on machine processable sheets. At the elementary level these forms can be completed by the teaching staff or the elementary counselor. These data then are subjected to computerized analysis which is reported in output documents.

## Forms

The system functions efficiently if the student forms are completed in detail. If any of the student data are incomplete, the results are suspect. Incomplete forms or forms which have missing information are rejected by the computer and the results are worthless. Because the data are quite specific and involve some family information, the forms for the elementary child must be completed by an adult. Usually a teacher or an elementary counselor provides the data. Some of the data will require parent cooperation. Most of the information, however, can be collected fram cumulative records. Extra efforts then must be expended by the instructional staff. One school district which has used the system estimates that approximately twenty hours will be required to complete the data forms for a fourth grade class of thirty students.

## Checklist

As many teachers, counselors and administrators are aware, some potential dropouts readily are identifiable by simple observation of classroom behavior. One school district has taken the SAS forms and
modified them for use as a simple checklist. (Wahlfeldt, 197l)
This approach has the following four advantages:

1. The checklist (Figure 1) has been developed so that it can be used for primary age children.
2. Only those children who are experiencing difficulty and/or are exhibiting some of the characteristics of the potential dropout are evaluated.
3. A child can be screened at any time by either the teacher or the elementary counselor, or both. A child that enrolls in the district after the SAS is completed and forwarded to the computer for analysis would not be screened until the following year.
4. The checklist procedure also may be completed in a shorter period of time. School personnel then have more time to develop strategies for providing direct assistance to the child.

FIGURE 1
Criteria and Checklist for Early Identification Procedures Potential Dropouts

Student's Name
Grade $\qquad$ School $\qquad$ Date $\qquad$
Teacher
What seems to be this pupil's difficulty or difficulties?
$\qquad$ a. Attitude is poor $\qquad$ f. Acceptance by others is poor
$\qquad$ b. Motivation is poor $\qquad$ g. Discipline problems
$\qquad$ c. Achievement is poor $\qquad$ h. Home/school relations are poor
$\qquad$ d. Reading is poor $\qquad$ i. Medical problems
$\qquad$ e. Attendance is poor $\qquad$ j. Other $\qquad$

Why is the pupil having these difficulties? (if known)

What assets and potentialities does this pupil have?

What can be done or has been done to help the pupil cope with or solve these difficulties?
$\qquad$ a. Psychological referral $\qquad$ f. Behavior modification
$\qquad$ b. Medical referral $\qquad$ g. Tutoring
$\qquad$ c. Counseling $\qquad$ h. Different teacher
$\qquad$ d. Special program $\qquad$ i. Special teacher attention
$\qquad$ e. Parent conferences

How may his potentialities be enhanced?

Follow-through notes - Actions taken and dates.

Follow-up on actions taken: Were actions successful?

What is the prognosis for success with this pupil for his being able to cope with his problems?
$\qquad$ a. Prognosis is excellent
$\qquad$ b. Prognosis is good
$\qquad$ c. Prognosis is fair
$\qquad$ d. Prognosis is poor

Recommendations for next year

In many situations the simple checklist approach is more feasible for the teacher and counselor who are limited with respect to time. The checklist approach is required when the system is applied in the primary grades.

## BIBLIOGRAPHY

Bachman, J. G., Green, S., and Wirtanen, I.D., Youth in Transition, Volume III. Dropping Out - Problem or Symptom? Institute for Social Research, University of Michigan, Ann Arbor, Michigan, 1971

Hoyt, Harold L., Who is Missing? One in Every Five Students Drop Out of School Before Graduating. Colorado Department of Education, Denver, 1971, 4.

Johnson, L., A Message From The President For A11 Who Work With Youth. American Education, 1965, 1, 27.

Kennedy, J., The President's message on education to the congress of the United States, January 29, 1963. School Life, 1963, 45, 22-26.

Ribicoff, A., Plain words from Mr. Ribicoff on dropouts. School Life, 1961, 44, (3), 14-15.

Wahlfeldt, S., Criteria and Check List for Early Identification Procedures. Potential Dropouts. Ft. Collins, Colorado, 1972.









Bachman, J. G., Green, S., and Wirtanen, I.D., Youth in Transition, Volume III. Dropping Out - Problem or Symptom? Institute for Social Research, University of Michigan, Ann Arbor, Michigan, 1971

Hoyt, Harold L., Who is Missing? One in Every Five Students Drop Out of School Before Graduating. Colorado Department of Education, Denver, 1971, 4.

Johnson, L., A Message From The President For All Who Work With Youth. American Education, 1965, 1, 27.

Kennedy, J., The President's message on education to the congress of the United States, January 29, 1963. School Life, 1963, 45, 22-26.

Ribicoff, A., Plain words from Mr. Ribicoff on dropouts. School Life, 1961, 44, (3), 14-15.

Wahlfeldt, S., Criteria and Check List for Early Identification Procedures. Potential Dropouts. Ft. Collins, Colorado, 1972.



[^0]:    ${ }^{2}$ The SAS was described in Addendum B.

