# This dissertation has been <br> microfilmed exactly as received 69-2492 

ANDERSON, Edmond Cardell, 1910A DESCRIPTIVE STUDY OF DROPmOUTS AND GRADUATES WITH IMPLICATIONS FOR DROP-OUT PREVENTION.

The University of Oklahoma, Ed.D., 1968
Education, administration

University Microfilms, Inc., Ann Arbor, Michigan

## THE UNIVERSITY OF OKLAHOMA <br> GRADUATE COLLEGE

A DESCRIPTIVE STUDY OF DROP-OUTS AND GRADUATES WITH IMPLICATIONS FOR DROP-OUT PREVENTION

A DISSERTATION<br>SUBMITTED TO THE GRADUATE FACULTY<br>in partial fulfillment of the requirement for the degree of DOCTOR OF EDUCATION BY

EDMOND CARDELL ANDERSON
Norman, Oklahoma
1968

A DESCRIPTIVE STUDY OF DROP-OUTS AND GRADUATES WITH IMPLICATIONS FOR DROP-OUT PREVENTION


DISSERTATION COMMITTEE

DEDICATION
This study is dedicated to my wife, Doris Marie, for her patience, understanding, encouragement, and assistance throughout this study.

## ACKNOWLEDGMENTS

Sincere appreciation and deep gratitude are expressed
by the writer to those whose generous assistance and coopera-
tion made this study possible.
It is the writer's pleasure to acknowledge the great
assistance afforded throughout the study by Dr. Oliver D.
Johns, his committee chairman.
The writer expresses thanks and appreciation for the
assistance so freely given by Dr. Mary Claire Petty, Dr. Robert
Bibens, Dr. Gene Shepherd, and Dr. Claude Kelley of the faculty
of the College of Education.
Further thanks and appreciation are extended to Dr.
W. T. White, Superintendent of Schools, Dallas, Texas, members
of the Census office, principals and counselors of the high
schools visited, Mmes. Celestine Anderson, Ann Edwards, and
Dorothy Holmes for their help in gathering and compiling the
materials of this study.

## TABLE OF CONTENTS

Page
LIST OF TABLES ..... vii
Chapter
I. INTRODUCTION ..... 1
Background, Need and Purpose for Study ..... 1
The Problem. ..... 4
The Data ..... 6
The Method of Research. ..... 6
Organization of the Study ..... 9
II. REVIEW OF RELATED LITERATURE ..... 10
Why The Concern with the Drop-Out Problem. ..... 10
Causes for Dropping Out of School. ..... 14
Possible Remedies for the Drop-Out Problem. ..... 24
III. PRESENTATION OF DATA ..... 40
Extent of Drop-outs ..... 41
Period of Withdrawal ..... 41
Reason for Withdrawal ..... 44
Characteristics of Drop-outs and A
Comparison of Certain of These Characteristics with Those Who Graduated. ..... 47
Academic Achievement of Pupils While in Elementary School ..... 77
Comparisons with Other Studies ..... 82
IV. FINDINGS, CONCLUSIONS, AND RECOMMENDATIONS ..... 93
Procedures ..... 93
Findings and Conclusions ..... 94
Recommendations ..... 101Page
BIBLIOGRAPHY ..... 104
APPENDICES
I. INDIVIDUAL STUDENT SCHEDULE FOR STUDY OF DROP-OUTS ..... 121
II. COMPUTATION OF THE CONFIDEN A INTERVAL BY THE USE OF THE STANDARD SRROR OF A PERCENTAGE ..... 128

## LIST OF TABLES

Table Page

1. Numbers and Percentages of Boys and Girls from Seventh Grade Class, Arranged According to Whether They Graduated, Withdrew after Entering, or Failed to Enter High School ..... 41
2. Numbers and Percentages of Boys and Girls from Seventh Grade Class Who Failed to Graduate from High School Distributed According to Period of Withdrawal ..... 43
3. Numbers and Percentages of Pupils from the Seventh Grade Class with Time of Withdrawal with Respect to Compulsory Attendance Period ..... 44
4. Number and Percentages of Boys and Girls from the Seventh Grade Class Distributed According to Reason for Withdrawing ..... 45
5. Age at the Time the Boys from the Seventh Grade Class Entered or Would Have Entered High School ..... 48
6. Age at the Time the Girls from the Seventh Grade Class Entered or Would Have
Entered High School ..... 49
7. Number of Boys in Seventh Grade Class Who
Graduated, Failed to Enter, or Withdrew from High School, Arranged According to the Number of Children in Family. ..... 51
8. Number of Girls in Seventh Grade Class Who
Graduated, Failed to Enter, or Withdrew from High School, Arranged According to the Number of Children in Family ..... 53
Table Page
9. Numbers and Percentages of Boys of the Seventh Grade Class Distributed According to Persons with Whom They Lived ..... 55
10. Number and Percentages of Girls of the
Seventh Grade Class Distributed According to Persons with Whom They Lived ..... 55
11. Numbers and Percentages of Boys Who Graduated of the Seventh Grade Class, Distributed According to the Major Wage Earner of the Family, and Job Classification to Which He/She Belonged. ..... 57
12. Numbers and Percentages of Boys Who
Withdrew of the Seventh Grade Class, Distributed According to the Major Wage Earner of the Family, and Job Classification to Which $\mathrm{He} /$ She Belonged ..... 58
13. Numbers and Percentages of Girls Who Graduated of the Seventh Grade Class, Distributed According to the Major Wage Earner of the Family, and Job Classification to Which He/She Belonged ..... 60
14. Numbers and Percentages of Girls Who Withdrew of the Seventh Grade Class, Distributed According to the Major Wage Earner of the Family, and Job Classification to Which $\mathrm{He} /$ She Belonged ..... 61
15. Numbers and Percentages of the Boys of the Seventh Grade Class, Distributed According to the Educational Level of Their Fathers ..... 63
16. Numbers and Percentages of Girls of the Seventh Grade Class, Distributed According to the Educational Level of Their Fathers ..... 65
17. Numbers and Percentages of Boys of the Seventh Grade Class Distributed According to the Educational Level of Their Mothers ..... 66
Table Page
18. Numbers and Percentages of Girls of the Seventh Grade Class Distributed According to the Educational Level of Their Mothers ..... 68
19. Numbers and Percentages of the Boys of the Seventh Grade Class, Both Graduates and Drop-outs, Distributed According to Their Intelligence Quotient ..... 70
20. Numbers and Percentages of the Girls of the Seventh Grade Class, Both Graduates and Drop-outs, Distributed According to Their Intelligence Quotient ..... 71
21. Numbers and Percentages of the Boys of the Seventh Grade Class, Both Graduates and Drop-outs, Distributed According to Days Absent during Their First Semester in High School ..... 72
22. Numbers and Percentages of the Girls of the Seventh Grade Class, Both Graduates and Drop-outs, Distributed According to Days Absent during Their First Semester in High School ..... 73
23. Numbers and Percentages of Drop-outs of the Seventh Grade Class, Distributed According to the Number of Subjects Failed during First Semester in High School ..... 75
24. Numbers and Percentages of Drop-outs of the Seventh Grade Class, Distributed According to the Subjects Failed during First Semester in High School ..... 76
25. Numbers and Percentages of Boys of the Seventh Grade Class Who Graduated, Distributed According to Their Average Achievement Grade in Their Elementary School Subjects. ..... 78
26. Numbers and Percentages of Girls in the Seventh Grade Class Who Graduated, Distributed According to Their Average Achievement Grade in Their Elementary School Subjects. ..... 79
27. Numbers and Percentages of Boys in the
Seventh Grade Class Who Withdrew,
Distributed According to Their Average
Achievement Grade in Their Elementary
School Subjects.
80
28. Numbers and Percentages of Girls in the Seventh Grade Class Who Withdrew, Distributed According to Their Average Achievement Grade in Their Elementary School Subjects ..... 81
29. Comparison of Reasons for Withdrawal of This Study with Four Other Similar Studies. ..... 84
30. Compasison of Reasons for Withdrawal of This Study with Four Other Similar Studies with Similar Causes Combined. ..... 89

## CHAPTER I

## INTRODUCTI ON

## Background, Need and Purpose of the Study

## Background

In the western part of the city of Dallas, across the Trinity River, is a community of approximately fifty thousand people. This area is commonly known as West Dallas. Until l952, it was not in the corporate limits of the city, and consequently had no building $c o d e$, no enforcement of sanitary and health regulations, nor were there good streets, storm sewers or fire stations. This was one of the worst slum areas that could be found adjacent to any large city. The population of this area is about fifty per-cent Negroes, thirty per-cent white, and twenty per-cent Latin-Americans.

After annexation to the city of Dallas, there began immediately a program to change this blighted area into a community with at least minimally acceptable living standards. At present, the city council holds very heated sessions over how best to improve this area.

One of the immediate improvements was the clearing of a portion of the land of its improvised huts and the
erection of a 3000 unit federal housing project. There are 1500 units for Negroes, 1000 units for whites, and 500 units for Latin-Americans.

In the Edgar Ward Housing Development, the name given to the 1500 units for Negroes, is a large elementary school for Negroes only. It has an average enrollment of 2000 pupils in grades one through six. Eighty-five per-cent of its pupils come from within this housing area. The other fifteen per-cent come from west of the housing area.

The children originally left this elementary school at the completion of the eighth grade, and later the seventh grade, to travel by city bus seven or eight miles across town to high school. Recently a junior high school has been built nearby, thus saving the families of this community three years of public transportation per child.

Need
The advent of automation and mechanization of our industries creates a need for persons with specific skills. Many of the youths who dropped out of school some years ago were able to get un-skilled jobs. Although their living conditions were meager they were self-supporting.

This new era of mechanization has brought with it many changes. One of the changes is that there are no jobs for the hordes of boys and girls who leave school before graduation. These young people are un-skilled and un-learned,
and consequently find themselves un-employed and a problem for the society and community in which they live.

The drop-out rate is gradually getting larger in this community, as in other communities throughout the nation, creating a serious need to examine the nature and causes of withdrawal from school before graduation.

The larger number of pupils who don't complete their public school education has long been a disturbing problem to educators and interested laymen. It does not submit to any one formula for its solution. In the same city the needs of the pupils in different sections will vary according to the cultural and socio-economic level of the community; therefore, the improvement of the holding power of any school is essentially a local problem to be met by the wisdom and resourcefulness of the administrators, teachers, and parents. Most studies concentrate on the high school with little effort to see if the causative factors extend downward into the elementary school.

## Purpose - --

This study was undertaken to ascertain certain characteristics of a particular class in elementary and high school, which might have a bearing on the drop-out problem in the high school. Although there have been numerous studies made on drop-outs generally, it was felt that each situation is unique in many aspects and that a careful study of the drop-out problem in a particular class in a school system
would be of value to that system as it seeks to provide an educational program to meet the needs of its students.

The United States Office of Education stated in 1957 that only seven of ten pupils enter high school, and only four remain to graduate. ${ }^{1}$ There are other studies concerned with the drop-out problem. Each of these is concerned with a particular place and its special conditions. Therefore if the conditions in this community are to be improved, its problems must be studied separately and a program of improvement be initiated based upon the findings.

With the above statements in mind the writer has undertaken the task of finding some facts from which some generalizations and conclusions may be drawn, which will aid in keeping the pupils of this community in school until they graduate. This study is not a panacea for the problems surrounding the withdrawal of pupils from school. The problem will require constant study and re-evaluation from time to time with inovations and new approaches toward its solution.

The Problem

Statement of the Problem
The problem of this study was to determine if there were significant differences in selected characteristics of those who dropped out of school as compared with those who

[^0]completed high school after having attended the same elementary school. The problem was composed of six sub-problems:

1. To determine the extent of withdrawal
2. To determine the period of withdrawal
3. To determine the reasons for withdrawal
4. To identify characteristics of drop-outs and compare certain characteristics of those who dropped out with those who graduated
5. To compare the academic achievement in elementary school of those who graduated with those who dropped out of school
6. To compare this study with four similar studies to determine whether the reasons for droppingout revealed in this study were significantly different from those reported in the four similar studies.

## Delimitation

This study was limited to the $1956-57$ seventh grade class of the George W. Carver School of Dallas, Texas. It was further limited to the information available from the records of the George W. Carven Elementary School; and the Lincoln, Booker T. Washington, Franklin D. Roosevelt, and Madison high schools of Dallas, Texas.

## Definition of Terms

Drop-outs. - A drop-out is any pupil who has left school before graduation from the twe.lfth grade.

Graduate. - Any pupil who fulfills the requirements to receive a high school diploma.

## The Data

The primary data in this study consist of items of information taken from the Elementary School Cumulative Records, the High School Permanent Records, and the High School Counseling Records. Secondary data were secured from the literature and selected unpublished materials.

## The Method of Research

## Type of Ressearch

The type of research used in this study is known as "The Descriptive Survey." ${ }^{1}$ This type of research is used in studies to secure evidence concerning the existing situation or current condition. It is also used to identify standards or norms with which to compare present conditions, in order to plan remedial action. It permits the use of the descriptive survey technique, and a schedule to gather accurate information from which plans can be made for the improvement of a situation under study. The choice of this type of research is based on the needs and requirements of the study.

The problem was approached in three steps: (1) the construction of a schedule to be used in gathering the information from the school records, (2) the collection,

[^1]organization, and analysis of data, and (3) summarizing, drawing conclusions, and making recommendations.

## Procedure

The construction of a schedule was done by listing a number of items or types of information necessary to satisfy the statement of the problem. The items were checked with the several counselors of the high schools to ascertain if they appeared in the records of the pupils. When it was decided which items could be used and which could not, the schedule was constructed in its final form as shown in Appendix I.

The writer and three assistants, whom he had trained for this task, went to the various high schools in search of the records of the pupils. Some of the records had to be secured from the census office where they were stored. The schedules were filled as completely and as accurately as possible from these records.

## Treatment of Data

The primary data were obtained from the records of the elementary school, four high schools, and the census office. The data were placed in individual schecules for each pupil and subsequently organized into tables in a manner to satisfy the statement of the problem.

The secondary data obtained from the literature and unpublished materials were carefully reviewed and analyzed.

The findings from this review and analysis were used in writing the following parts of the study: (1) background of the study, (2) need and purpose of the study, and (3) review of the literature.

The reasons for dropping out as revealed in this study were compared with those reported in four similar studies: Harold J. Dillon, ${ }^{1}$ Charles James Johnson, Jr., ${ }^{2}$ Harvey Clayton Johnson, ${ }^{3}$ and William David Igoe. ${ }^{4}$ In order to see if there were significant differences in the number of pupils who dropped out for the various reasons in this study and in the four similar studies the standard error of a percentage at the five per cent level was used. The use of the standard error of a percentage for this purpose is described by J. P. Guilford in his book, Fundamental Statistics in Psychology and Education. ${ }^{5}$ After computing the standard error of a
$1_{\text {Harold J. Dillon, Early School Leavers (New York: }}$ National Child Labor Committee, 1949); Work Experience in Secondary Education, Publication No. 394 (New York: National Child Labor Committee, June, 1946).
${ }^{2}$ Charles James Johnson, Jr., "A Critical and Intensive Study of Drop-outs of Negro Students in Secondary Schools in Columbia, S.C.: (unpublished Doctor's Dissertation, Pennsylvania State College, 1952).
$3_{\text {Harvey Clayton }}$ Johnson, "Pupil Dropouts in the High Schools of Beaumont, Texas, and Curriculum Implications" (unpublished Doctor's Dissertation, University of Southern California, 1960).
${ }^{4}$ William David Igoe, "Causal Factors of Drop-outs From Upper Six Grades in Selected Fourth Class School Districts in McKean County, Pennsylvania" (umpublished Doctor's Dissertation, The Pennsylvania State University, 1959).

5J. P. Guilford, Fundamental Statistics in Psychology and Education (New York: McGraw-Hill Bock Company, Inc., 1956), p. 177.
percentage the confidence interval was found by use of the $z$ score at the five per cent level. Those reasons that did not fall within the confidence interval were considered to be affected by factors other than chance.

## Organization of the Study

This study will be organized into four chapters. Chapter $I$ will consist of the background, need, and purpose of the study, the statement of the problem and its delimitation, definition of terms, and the method of research. Chapter II will be a review of related literature. It will be divided into three parts: (1) why the concern with the dropout problem, (2) causes for dropping out of school, and (3) possible remedies for the drop-out problem. Chapter II will be a presentation of the data. It will have the following subdivisions: (1) period of withdrawal, (2) reasons for withdrawal, (3) characteristics of drop-outs and a comparison of certain of these characteristics with those who graduated, (4) a comparison of the academic achievement of the drop-outs with the graduates in elementary school, and (5) a comparison of this study with four similar studies. Chapter IV will consist of the conclusions and recommendations.

## CHAPTER II

## REVIEW OF RELATED LITERATURE

The review of the literature is presented in three parts: (1) why the concern with the drop-out problem, (2) causes for dropping out of school, and (3) programs in use and possible remedies for the drop-out problem.

## Why The Concern With The Drop-Out Problem

The drop-out problem has been of concern for sometime, but it has not been the problem it is at the present time. Why this concern now? Why have nagazines, television, radio, and newspapers given time and space to tell young people to stay in school through graduation? Sterling M. McMurrin, U.S. Commissioner of Education, had this to say:

Two and one-half million of the $10,000,000$ students to be enrolled in grades nine through twelve of the nation's public and non-public schools this fall will drop-out before graduation.

Recent surveys indicate that sizable percentages of school-leavers have average intelligence. Significant numbers have demonstrated ability levels suited to the intellectual disciplines of college.

I urge the cooperation of all citizens in a nationwide effort to encourage young people to complete their schooling.

Too many of us fail to see education as the foundation upon which our values rest. Too often we regard school for the prestige it gives us than
as a source of intellectual and spiritual strength. In the enjoyment of affluence which an educated society has given us, we tend to forget that the affluence derived from intelligent achievement is not self-generating.l

There is great concern as to the number of drop-outs and their ability to find employment. The Research Bulletin of the National Education Association states:

Only slightly more than half of all the fifth grade pupils finish high school; less than twothirds of those in the ninth grade remain through grade twelve.

Persons lacking a high school diploma are the first to feel the results of the diminishing demands for unskilled labor and are at greatest disadvantage in periods of high unemployment.

Juvenile deliquency is ten times more frequent among drop-outs than among high school graduates. 2

Joan M. First quotes from former Secretary of Labor,
James Mitchell, on concern for the drop-out problem. He
states:

During the decade, ahead, twenty-six million young people will enter the labor force. Seven and one-half million of them will leave school without a high school diploma; two and one-half million without having completed the eighth grade. The labor market waiting these youngsters is one geared to a business and industrial machine growing yearly in complexity and skill requirement. Employment opportunities for the untrained, unskilled and uneducated are in an era of accelerated decline. 3

A very important reason for all persons and
${ }^{1}$ Sterling M. McMurrin, "Drop-out Problem," Wisconsin Journal of Education, XCIV, No. 2 (October, 1961), p. 17.
${ }^{2}$ National Education Association, "High School Dropouts," National Education Research Bulletin, XXXVIII (February, 1960), pp. 11-14.
$3^{3}$ Joan M. First, "Drop-out," Michigan Education Journal, XXXVIII (November, 1960), pp. 250-53.
organizations to be concerned with the drop-out is given by
Ritchie when he summarized what happens to the drop-out:
In one short significant statement, he becomes a potential social problem. The high school dropout is making a significant contribution to our national rising crime rate; he adds to the unemployment pool of his community, and he produces a negative effect on the student currently enrolled who is looking for an excuse to drop out of school. Regardless of the geographic location of the drop-out, these are his contributions to society. ${ }^{1}$

Seymour Wolfbein stresses again the effect the drop-
outs have on the unemployment problem of this country when he states:

The unemployment rate has hovered around five and one-half percent; but professional and technical labor has been around one and one-half percent; managerial personnel about four percent; the skilled crafts less than the average.

The semi-skilled and unskilled which run above two and one-half times the national average are the ones that make up the bulk of the five and one-half percent in the national average.

Similar disproportionate concentrations are found among the unskilled Negroes. The story here can be starkly told. Negroes account for about ten percent of the American labor force, twenty percent of the unemployed, twenty-five percent of the long term unemployed.

The package really ties together when we move to the high school drop-out. The most recent data show that for 1961, the unemployment rate among the high school drop-outs was twenty-seven percent, more than five times the national average. Of the employed drop-outs one in ten was in the higher paying clerical jobs as compared to four out of ten high school graduates. ${ }^{2}$
${ }^{1}$ Robert R. Ritchie, "The High School Drop-out: An Educational Dilemma," National Association of Secondary School Principals Bulletin, XIVI, No. 277 (November, 1962), pp. 45-47.
${ }^{2}$ Seymour Wolfbein, "Expertness in Preparing Youth for Employment: The Need," Journal of Secondary Education, XXXVII, No. 2 (February, 1963), pp. 106-109.

Paul C. Tullier writes a very timely article about
the drop-out problem in a special report entitled, "The Three
U's--Unschooled, Unskilled, Unemployed." He says:

- . . Today, $1,000,000$ young Americans between the ages of sixteen and twenty-five are looking for jobs. . . . These young people make up the biggest single age group of unemployed workers in the United States. . . . The problem the unemployed drop-out faces, then, becomes painfully clear. He is caught in a squeeze play. Unable to qualify for the skilled jobs that are open, the supply of unskilled jobs he might be able to fill is drying up.

There is another irony. "Because of . . . automation and . . . technical devices," says one authority, "professional and technical jobs are going to grow by 3,000,000 or about forty percent during this decade. Jobs in clerical and sales fields will grow about 3,700,000. Skilled occupations are expected to provide $2,000,000$ additional jobs by 1970. Implicit is the fact that these $8,700,000$ new jobs would more than absorb the 7,500,000 youngsters, who, because they lack skill and schooling will now want in the midst of plenty. 1

Helen B. Shaffer reiterates concern for the drop-out
with a simple but strong statement when she says:
Teenagers who have not finished school are not likely to find jobs. Because they are idle and many times emotionally disturbed they are likely to get into trouble. ${ }^{2}$

From the statements cited it is obvious that the nation should be concerned with the drop-out problem for these reasons: (1) To fulfill the aims of education to see that each student is given an opportunity to develop to his
${ }^{1}$ Paul C. Tullier, "The Three U's--Unschooled, Unskilled, Unemployed," Special Report, The World Book, Yearbook (Chicago: Fields Enterprises Educational Corporation, 1963). pp. 126-128.
${ }^{2}$ Helen B. Shaffer, "School Drop-outs," Editorial Research Reports, I (May 16, 1963), p. 367.
fullest potential; thus-achieving the goals of self realization, human relations, economic efficiency, and civic responsibility. (-2) To avoid having a large segment of society that is socially and economically deprived and the inevitable hot beds of political and social unrest that are an anathema to a democratic way of life. (3) The Nation cannot afford to take an indifferent attitude toward the fullest development of its most precious resources, the minds and talents of its youth, if it wants to maintain a place of leadership among the nations of the world.

Causes For Dropping Out Of School
Since it is apparent that there should be concern for the students who leave school before graduation, some of the causes that lead to the student becoming a drop-out should be considered.

The drop-out is likely to be most of ten sixteen years of age. In many cases he has been marking time until he could legally quit school. He is most likely to quit between the ninth and tenth or tenth and eleventh grades. ${ }^{1}$ He is especially likely not to return after a summer vacation. Lichter describes the drop-out from more of a psychological point of view. He views him as having emotional problems which are the cause of his difficulties and which lead to his withdrawal from school. He says school to the students takes
$1^{1}$ National Education Association, op. cit., p. 12.
on a special psychodynamic meaning of a conflictual nature. ${ }^{1}$
Some authorities divide the causes for withdrawal
from school into two categories, though the line is not rigidly drawn. They are listed as those that come more or less under the responsibility of the home, and those that come under the responsibility of the school.

Some of the causes that would be the responsibility of the home are: economic conditions, weak or broken homes, parents' attitude toward education, and status of family socially. Those that are considered more related to the school are: low ability level, low achievement, attendance, school program, lack of participation in co-curricular activities, teachers' attitudes, and lack of a sense of belongingness. ${ }^{2}$

The economic condition of the home has a definite determining influence on a student's schooling. Eckart and Marshall state:

On the average, the poorer the student is, the sooner he will leave school. Those who most desperately need what the school might offer because of their circumscribed home background and their limited ability to learn directly from experience are the least likely at the present time to receive it. 3
${ }^{1}$ Solomon 0. Lichter, et al., "Prevention of School Drop-outs," School and Society, $v$ (April 7, 1962), pp. 15968.
${ }^{2}$ National Education Association Research Division and Department of Classroom Teachers, Discussion Pamphlet No. 3, High School Drop-outs (Washington, D.C.: The Association, September, 1959), p. 10.
$3_{\text {Ruth E. Eckart and Thomas O. Marshall, When Youth }}$ Leave School (New York: McGraw-Hill Book Company, Inc., 1939), p. 78.

The economic factor extends to the occupation of the father in determining a student's grade attainment in school. It is generally concluded by some authorities that a boy's grade upon leaving school is closely related to the class of work his father does. ${ }^{l}$ The students who live in wealthy or prosperous suburban districts stay in school longer than those in the low-income areas where the unskilled laborers and domestic workers live. ${ }^{2}$ Johnson and Legg state that onefifth of the students in a study of drop-outs gave financial reasons for withdrawal from school. ${ }^{3}$ Tesseneer and Tesseneer cite studies in areas around Chicago and Austin, Texas which show that students who withdrew from school, to a large extent, came from low-income families who lived in the section of town where homes are substandard. ${ }^{4}$ Along with the financial factors are those of a weak or broken home and low esteem for education by the parents of the drop-outs. ${ }^{5}$ Often the
${ }^{1}$ Howard M. Bell, Youth Tell Their Story (Washington, D.C.: American Council on Education, 1938), p. 58.
$2_{\text {Harl R. Douglas and Calvin Grider, American Public }}$ Education: An Introduction (New York: The Ronald Press Company, 1948), p. 263.
$3^{3}$ Elizabeth Johnson and Caroline E. Legg, "Why Young People Leave School," National Association of Secondary School Principals Bulletin, XXXII (November, 1948), pp. 1424.
${ }^{4}$ R. A. Tesseneer and L. M. Tesseneer, "Review of the Literature on School Drop-outs, "National Association of Secondary School Principals Bulletin, XIII (May, 1958), pp. 141-153.
$5_{\text {Edward A. Krug, The Secondary School Curriculum }}$
(New York: Harper and Brothers, Publishers, 1960), pp. 6975.
education of the parents is below eighth grade, and they have a negative attitude toward graduation. ${ }^{l}$ Eargle observes that some educators support the idea or theory that the social class of a child can be used to predict rather accurately his success or lack of success in school. He contends that this is true because the attitude of the teacher toward her pupils is in most instances affected by the social class to which the children belong. Teachers as a group come from the middle class. Therefore, they cling to and expect of all their students middle class standards and values. Children who do not come from the middle class find adjustment most difficult and for many it is much easier to drop out. ${ }^{2}$

Hollingshead made a study of the impact of social class upon adolescents, and one phase of the study concerned the number of drop outs and the factors that contributed to their leaving school. All the youth of the upper classes were in school. The largest proportion of drop-outs, eight out of nine, came from the lowest social class. ${ }^{3}$ The social and economic status of the family is probably a significant factor in the high rate of drop-outs among Negro boys and girls. Stetler
${ }^{1}$ Russell N. Cassell and Jack C. Coleman, "A Critical Examination of the School Drop-out, Reluctant Learner, and Able Non-College Student Problem," National Association of Secondary School Principals Bulletin, XIVI, No. 277, pp. 6065.
${ }^{2}$ Z. E. Eargle, "Social Class and Student Success," High School Journal, XLVI (February, 1963), pp. 162-69.
${ }^{3}$ August B. Hollingshead, Elmtown Youth (New York: John Wiley and Sons, 1949), Ch. 13.
reported that Negro pupils dropped out of school at a rate about sixty percent greater than that of white pupils. ${ }^{l}$

Cook's study of the ninety-five drop-outs of a large city high school found that "going to work" represented the number one reason for dropping out of school. ${ }^{2}$ Cook listed 39.6 per cent of the drop-outs in his study as giving "work" as their reason for leaving school. Only 12.99 per cent of the drop-outs in this study listed "work" as a reason for withdrawing from school.

Plett found in his study of junior high school dropouts that a "lack of interest in school" was the principal reason for withdrawing from the junior high schools in Tulsa, Oklahoma. ${ }^{3}$ In a California study of drop-outs and graduates it was reported that 57 per cent gave "dissatisfaction with school" as the reason for withdrawing. ${ }^{4}$ Fenelon in his study of the secondary school drop-out problem of Port Washington, Wisconsin high school also found that "dislike for school"
$1_{\text {Henry }}$ G. Stetler, Comparative Study of Negro and White Drop-outs in Selected Connecticut High Schools (Hardford: Connecticut Commission on Civil Rights, 1959).
${ }^{2}$ Edward S. Cook, Jr., "An Analysis of Factors'Related to Withdrawing from High School Prior to Graduation, " Journal of Educational Research, L (November, 1954), pp. 191-196.
${ }^{3}$ Joseph F. Plett, "A Study of Drop-outs of the Junior High Schools of Tulsa, Oklahoma, 1949-50" (unpublished Doctoral Dissertation, College of Education, Oklahoma A \& M College, Stillwater, Oklahoma, 1951).
${ }^{4}$ William H. McCreary and Donald E. Kitch, Now Hear Youth (Sacramento: A Report on the Cooperative Study of School Drop-outs and Graduates, California Department of Education, 1953).
was the principal reason for leaving school. ${ }^{1}$ The Saint Paul Public School study shows better than three out of four pupils graduated. The rate of drop-outs was 23.3 per cent. ${ }^{2}$ Boys generally drop out in larger numbers than girls.

The curriculum, and the student's achievement, intelligence, motivation, and participation in co-curricular activities have been shown to be related to the drop-out problem. Cantrell in a study of drop-outs gave among others low achievement as a cause for dropping out of school. ${ }^{3}$ Holbeck in a study of drop-outs in Passiac, New Jersey found much of the problem in the curriculum. He states:

The heart of the trouble is in the curriculum. Passiac High School, like many of the high schools of the country, is designed primarily for college preparation. While it has done an excellent job, it has not done enough to prepare students to meet the problem of modern life or to earn a livelihood here in this city. The lack of equipment for new and practical courses has been a severe handicap to the high school, but a change in curriculums, based on student interest and ability, will persuade many more young people to remain at their studies in school. 4
${ }^{1}$ William John Fenelon, "A Study of the Secondary School Drop-out Problem at Port Washington, Wisconsin High School" (unpublished Doctoral Dissertation, Northwestern University, 1960).
${ }^{2}$ Saint Paul Public Schools, Second Drop-out Study: Based on Pupils Who Entered the Ninth Grade in the Saint Paul Public Schools in September, 1955 (Saint Paul: Office of Secondary and Vocational Education, Saint Paul Public Schools, Publication Number 259, 1961).
$3^{3}$ William Paige Cantrell, "Implications for Secondary School Curriculum Development in the Bay County Schools Derived From a Study of Drop-outs" (unpubished Ed.D. dissertation, Alabama Polytechnic Institute, 1958).
${ }^{4}$ Elmer S. Holbeck, "Seven Ways to Help Prevent Dropouts," The Nation Schools, XLV (May, 1950), pp. 35-36.

In a study of causal factors of drop-outs Igoe found indications of a need for careful revision of the curriculum and a critical evaluation of courses in English and Social Studies. ${ }^{1}$

In a study of drop-outs Cook observed that the greatest difference between non-withdrawals and the drop-outs was measured intelligence. On an average the total mental factors IQ of the non-leavers was 93.85 as compared to 85.19 for the drop-outs. ${ }^{2}$ Although there is a difference between the average non-leaver and the drop-out in favor of the non-leaver, many drop-outs have an IQ range sufficiently high to do high school work. This is indicated in a study by Brown with a group of drop-outs in Camden City, New Jersey. ${ }^{3}$ Most studies find the drop-out to be low in scholastic aptitude, but there is considerable variance in the extent of the difference found to exist between drop-outs and graduates. McGee found that almost all drop-outs were failing at the time of leaving school, with IQs ranging from 65 to $95 .{ }^{4}$ Whereas Cantoni found that there was little difference between the IQ of the drop-out (92.3) and the IQ of the graduate (101.6), as

[^2]${ }^{2}$ Edward S. Cook, Jr., "How IQ Figures in the Dropout Problem," The School Executive, LXXIV, No. 1 (September, 1954), pp. 56-57.
${ }^{3}$ N. W. Brown, "Why They Leave School," The Education Digest, XVI (February, 1950), p. 41.
${ }^{4}$ George A. McGee, "We Increased Our Holding Power," National Education Association Journal, XLII (November, 1953), p. 482 .
measured on the Kuhlman-Anderson Intelligence Test. ${ }^{l}$ Penty found that most drop-outs had a chronic reading problem. ${ }^{2}$ Shea also states that the drop-out usually has trouble in the language arts, including written and oral expression, reading and spelling. ${ }^{3}$ Vogel in writing about the causes of withdrawal from school was concerned with motivation.

She observes:
While the average IQ of drop-outs is lower than the average for graduates, motivation rather than IQ is the more significant lack. The majority of drop-outs have an IQ of 90 or over, indicating their capability of coping with high school school work; about ten percent test at IQ 110 or over. 4

The achievement of the drop-out is less on the average than that of the graduate. The drop-out is usually retarded from one to three years, particularly in reading and arithmetic skills. ${ }^{5}$ The U.S. Department of Labor found that eighty-four percent were retarded at least one year, and fifty-three percent were retarded two or more years. ${ }^{6}$ Murk
${ }^{1}$ Louis J. Cantoni, "Stay-Ins Get Better Jobs," Personnel and Guidance Journal, XXXIII (May, 1955), pp. 351-53.
${ }^{2}$ R. C. Penty, "Reading Ability and High School Dropouts,:" National Association of Women Deans and Counselors Journal, XXIII (October, 1959), pp. 11-15.

3Dorothea P. Shea, "Drop-out," Grade Teacher, LXXVI (December, 1959), p. 26.
${ }^{4}$ Anita Vogel, "How to Check Drop-Outs," School Management, (November, 1961), p. 73.
${ }^{5}$ Ibid.
${ }^{6}$ U.S. Department of Labor, Bureau of Labor Statistics, School and Early Eqployment of Youth, A Report on Seven Communities, 1952-1957, Bulletin No. 1277 (Washington, D.C.: Superintendent of Documents, Government Printing Office, August, 1960), p. 4.
in his study of drop-outs found that failing grades ranked two among the reasons given by the boys and three among the girls, yet sixty-three percent had IQs of ninety or above indicating they had ability to do the work. ${ }^{1}$

Studies generally show that drop-outs do not partic-
ipate in extracurricular activities. Thomas in a study of drop-outs in a high school in the vicinity of, but not in, the city of Chicago found that of some ten factors studied the participation in extracurricular activities was the most significant factor. He states:

The first indication that extracurricular activities might be at all important in regard to dropping out was the fact that not one person who dropped out before completing the third year had engaged in even one activity, and eighty-nine percent of those who finished had.

In every method of comparison or grouping used, activities were found to be the factor most related to whether or not the student finished high school and by far the most striking difference between those who finish and those who drop out. 2

Tesseneer and Tesseneer also found that drop-outs had a feeling of "not belonging" which is a primary cause of being a non-participant. ${ }^{3}$ Cassell and Coleman also listed Iittle or no participation in extracurricular school activities among

[^3]the causes of dissatisfaction with school. ${ }^{l}$ It is apparent where the class structure of society and cliques enter into activities the lower class pupils, who make up the majority of the drop-outs, will be excluded. ${ }^{2}$

Marriage and pregnancy are listed as causes for leaving school. In a drop-out survey by the Oklahoma Association of Secondary School Principals marriage tied for first place with low ability and achievement in frequency of mention for causes of withdrawing from school. In one study they were the leading causes. ${ }^{3}$ Marriage does not rank so high in most cases and is more prevalent among girls than boys.

One writer said there are no reliable statistics on drop-outs, because many who stay in school until graduation have dropped out in all but the physical sense. Kelley states these are the children who stay in school because it would be embarrassing to their parents to quit. He suggests trying something that may not be what "we" think they ought to want. In other words, we should try some of the things in which they have an interest. ${ }^{4}$ Bryne says the greater emphasis should be on a better program to meet their needs
${ }^{1}$ Cassell and Coleman, loc. cit.
${ }^{2}$ Hollingshead, loc. cit.
${ }^{3}$ Joseph Ernest Wilson, $:$ Withdrawals From Three Selected High Schools for Colored Youths on Ouachita Parish School System, Louisiana," (unpublished Ed.D. dissertation, Colorado State College, 1962).
${ }^{4}$ Earl D. Kelley, "Drop-Outs Our Greatest Challenge," Educational Leadership, XX (February, 1963), pp. 294-96.
and interests rather than just keeping them in school per se. ${ }^{l}$ Johnson urges early detection and a program of constant diagnosis in order to get to the student in trouble before his case becomes chronic. ${ }^{2}$

Possible Remedies For the Drop-Out Problem
It has been noted that all pupils do not want the same things from school. The National Education Association states:

A continuing goal of the school must be to provide each child with the type of training and education best suited to him as an individual and to his expected needs as an adult. Furthermore as the schools succeed in demonstrating the concrete value of what is being taught and its relationship to real life, students will more readily consider the time and effort spent worth their while. 3

It recommends a critical evaluation of the curriculum and the guidance program as a basic step.

In stressing the importance of the sensitivity of teachers to pupils' needs and a curriculum that is not static Wolfbein states, "Both teachers and curriculum must be as adaptable, manuverable, and responsive to the changing needs of our society as the trainees themselves need to be." ${ }^{4}$
$I_{\text {R. }} H_{0}$ Byrne, "Beware the Stay-In School Bandwagon!" Personnel and Guidance Journal, XXXVI (March, 1958), pp. 49396.
${ }^{2}$ Eleanor M. Johnson, "Diagnosis Points the Way to Learning Progress, " My Weekly Reader, Bulletin, Education Center, (Columbus, Ohio: October, I962), p. 2.
$3^{\text {National Education Association, loc. cit. }}$
${ }^{4}$ Wolfbein, loc. cit.

Myers believes that an increased friendliness on the part of the teacher will increase attendance, and as a concomitant value will also increase achievement. ${ }^{l}$ Fornwalt states, "School life is what a teacher makes it; for the individual teacher has it within his power to mold a child's attitude." ${ }^{2}$ Hull and Cummings in their discussion of the culturally deprived pupil stated it was not enough to keep him in custody; though that may help the community temporarily, it will do little for the pupil. He needs a program geared to his needs and ability. Most of all he needs teachers who are devoid of ethnic and class prejudices, and understand the child beyond the classroom. ${ }^{3}$ Topetzes and Ivanoff stress better guidance and counseling services and the importance of teachers and guidance workers knowing the students as individuals, obtaining their confidence, and providing an educational program in which they can achieve. ${ }^{4}$ Cantrell also expresses the need for teachers knowing and understanding the outside lives of the students. All members of the faculty should be considered to be guidance workers. ${ }^{5}$

[^4]Schreiber sees the need for a new type of counseling and an imaginative curriculum expert to devise it. He cites a study in Greensboro, North Carolina in which drop-outs interviewed a year after leaving school stated they would have been helped if they had had guidance. He advocates increased guidance and counseling services not only in high school, but in elementary school also. ${ }^{1}$ Tompkins and Gaumnitz recommend capitalizing on the assets of the pupil rather than discouraging him by complaining about what he could not do only. They also recommend a personalized approach to the pupil's problems. ${ }^{2}$ Alexander and Saylor in their analysis of a number of studies also found that an early recognition of the drop-out problem facilitated the remedy. ${ }^{3}$ Keller sums up our consideration of the personal aspect of the educational process for the dropout with a philosophical consideration for the curriculum. He states:

The inescapable fact about people is their diversity. The depressing truth about curricula is their uniformity.

Schoolmen believe in the individual, they exalt him, but - he must run the course. If he takes too long or quits the race, he is a poor student or a "drop-out."
${ }^{1}$ Daniel Schreiber, "The School Drop-Out--Fugitive From Failure," National Association of Secondary School Principals Bulletin, XLVI, No. 274 (May, l962), pp. 233-41.
${ }^{2}$ Ellsworth Tompkins and Walter H. Gaumnitz, "Reducing Drop-Outs," National Association of Secondary School Principals Builetin, XXXIV, No. 174 (December, 1950), pp. 188-95.
${ }^{3}$ William M. Alexander and J. Galen Saylor, Modern Secondary Education-Basic Principles and Practices (New York: Holt, Rinehart and Winston, 1961), pp. 59-65.

Now, recognition of the individual, respect for personality, carries with it the obligation of educating that human being in terms of his own nature as well as the composite nature of two billion other human beings. Therefore, fundamental and precedent to the educational process itself is a determination of what that education should be. This is not a single act, but a series of evaluations or re-evaluations. It is a guidance program. Such a program is not merely a diagnosis of the individual, it is, in the final analysis, an evaluation of education itself.l

Bossing observes that the curriculum offerings should be adjustable to the abilities of all youth. He also states that if pupils drop out because of the lack of money to buy books and supplies, and to participate in student activities that these should be made free of cost to them, or part-time employment furnished. He would make education more attractive and remove the lures from jobs for high school pupils. The compulsory attendance age would $\mathfrak{b}$ e raised to age eighteen; and the gainful employment age, likewise, to age eighteen. ${ }^{2}$ Rioux in a study of the extent and form of educational provisions for drop-outs says, "It is definitely possible to design educational provisions to meet the needs of drop-outs from regular school programs." ${ }^{3}$ One curriculum design for meeting the needs of the drop-outs is the study and work
${ }^{1}$ Franklin Jefferson Keller, The Comprehensive High School (New York: Harper and Brothers, Publishers, 1955), p. 130.
${ }^{2}$ Nelson L. Bossing, Principles of Secondary Education (2nd Edition; Englewood Cliff: Prentice-Hall, Inc., 1955), pp. 284-94.

3Joseph William Rioux, "The Extent, Form, and Future of Educational Provisions for Drop-outs," (unpublished Ed.D. dissertation, Wayne State University, 1961).
experience type of program. Savitsky states:
Work experience is essential to the success of efforts to rehabilitate and redirect potential dropouts. There can be little compromise with this requirement. It provides students with opportunities to face real situations in the world of work with assistance, in the form of guidance and supervision.

If the selection of students is determined by indices of retardation, underachievement, irregular attendance, and growing maladjustment, then the work experience should be continuous, every school day, and under supervision. ${ }^{1}$

Some of the curricula adjustments and special programs designed either to prevent the student from dropping out or to lure him back to school will now be examined.

Mock writes of a plan in the junior high schools of Houston, Texas called the Talent Preservation Project. Participation is voluntary--by the individual school, teachers and students. Parental approval is required. Definite criteria, carefully established, are set for admission to the program and for operation of the class. Teachers are given great freedom to improvise. Eligibility is determined by the following criteria: (l) must be fourteen years of age, (2) have an IQ span from 76 through 89, (3) must be retarded two years or more in reading, language, and arithmetic, (4) must have record of irregular attendance, and (5) must have a cumulative anecdotal record indicative of social and emotional maladjustment. Two periods a day are devoted to
${ }^{1}$ Charles Savitsky, "Work Experience Programs for Potential Drop-Outs," National Association of Secondary School Principals Bulletin, XIVI, No. 277 (November, 1962), pp. 54-55.
the language arts, and a third period to a modified practical mathematics course. Besides physical education they choose two electives in shop, crafts, homemaking, art, music or typing. The pupils have a six period day and the teachers four periods. The teachers spend two periods counseling with pupils and parents, visiting homes, and interpreting the program to other teachers. There is also a highly developed enrichment program. They take tours to the universities, banks, factories, parks, governmental facilities, and museums. The programs now have been extended downward to include thirty elementary schools. Special attention is being given to identifying potential drop-outs from kindergarten through the third grade. The classes are from sixteen to twenty in size. ${ }^{1}$

Roberts and McGeever report on Miami Springs, Florida's attempt to cope with the drop-out problem in its junior high schools. The aim of the program is threefold, (1) to identify prospective drop-outs; (2) to hold the dis-interested pupil in school as long as possible, attempting to develop a more acceptable attitude toward society; and (3) to prepare the student who lacks academic ability for a useful job in case he quits school. He must be at least fourteen years of age, recommended by homeroom or classroom teacher, must have good

[^5]citizenship after admission to the program, and the approval of his parents. ${ }^{1}$

Kansas City, Missouri Public Schools had a pilot project designed to hold youngsters in school by means of specially developed curriculum materials, and the teaching of good work habits and attitudes by means of work experience programs. They took twenty-five boys from the seventh grade from each of four junior high schools for an experimental group. They also took an equal number for a control group. The boys go to school one-half day and work one-half day. Students take English, arithmetic, social studies, and science, but the program is kept sufficiently flexible to meet the individual needs of each boy. The boys obtain this training in special high school classes, except that in one subject they are in class with their classmates. ${ }^{2}$

Louisiana has a state operated trade and vocational technical school program for fourteen year old youths and older, both in-and-out of school youth, and adults. Courses are specifically designed to train for employment, extend trade training, or upgrade the worker. ${ }^{3}$
$\mathrm{I}_{\text {R. O. Roberts and J. F. McGeever, "Junior Occupa- }}$ tional Program," National Association of Secondary School Principals Bulletin, XLI (November, 1957), pp. 43-47.
${ }^{2}$ Daniel Schreiber, "School Drop-Out," National EduCation Association Journal, LI, No. 5 (May, 1962), pp. 53-54. 3 Outs: Newsletter," National Education Association, I, No. 1 (November, 1962), p. 4.

Albuquerque has a general mechanics course, plus training in filling out application forms, vouchers, charge slips, following directions, care of materials, in appropriate dress, and poise in meeting the puilic. The course is designed for 75-90 IQ students, potential drop-outs, and those who finished high school and desire special employment training. ${ }^{1}$

In Mercer County, New Mexico there is a compulsory summer program for unemployed drop-outs of age sixteen and seventeen males of the county. Instruction is provided in radio and television repair, welding, building trades, and plumbing. ${ }^{2}$

In San Francisco there is a Co-op Program sponsored by the Shell Oil Company with the city school system's Distributive Education Program. Students who are recommended by the school receive thirty-two hours of training at Shell's Advanced Retail Training Center. Afterwards, they receive on-the-job training at selected Shell Service Stations until high school graduation. Dealers supervise the boys and pay them the rate of part-time attendants. ${ }^{3}$

Richmond, California has its Neighborhood House. It has many programs including a job upgrading program. In 1961 the Ford Foundation granted the agency $\$ 100,000.4$

Chicago has a Jewish Vocational Service Program designed to motivate the unmotivated youth. The diagnostic
${ }^{1}$ Ibid. $\quad{ }^{2}$ Ibid. $\quad 3^{3}$ Ibid. $\quad{ }^{4}$ Ibid.
testing and training take about ten weeks. They have five counselors for twenty-five students. Each year approximately 130 students receive the total service; of these about half are emotionally disturbed; the balance are mentally retarded, epileptic, or physically handicapped. After training, thirtyeight percent reach a relatively good level of employability; forty-one percent a limited level; and twenty-one percent are considered unemployable in competitive industry. They also have a summer and after-school program for handicapped youths fourteen and fifteen years of age. ${ }^{1}$

The Ford Foundation is financing a number of experimental drop-out-reduction programs, including the Great Cities School Improvement Program in ten cities (Buffalo, Chicago, Cleveland, Detroit, Milwaukee, Philadelphia, Pittsburg, St. Louis, San Francisco, and Washington, D.C.), each of which has undertaken a different type of program for children in slum areas. ${ }^{2}$

In Boston, YEA (Youth Educational Assistance), a voluntary agency backed by the mayor, offers scholarships for drop-outs or poorly trained high school graduates who want another chance to learn a skilled trade. ${ }^{3}$

Canton, Ohio tries to reach the student through a booklet entitled "Teenager Who Lost A Million--This Could Be You...." It reproduces letters from a cross-section of
$I_{\text {Ibid. }}$.
${ }^{2}$ Shaffer, op. cit., p. 373.
${ }^{3}$ Ibid. : p. 363.
the community leaders, including the police, labor leaders, and armed services recruiting stations. Many employers said they had no place in their business for one without a high school diploma. This booklet is used in counseling and in the English letter writing course. ${ }^{1}$

Passaic, N. J. had a cooperative program involving the school, local and state employment services, and community agencies. Cooperating agencies contact employers, pointing out the community's approach to the drop-out problem and stressing the availability of a valuable source of carefully screened labor. This project has been helpful in getting pupils transferred to night school so that they may work during the day. Others have been encouraged to remain in school, while jobs have been found for some. Youngstown, Ohio, Tampa, Florida, and Hartford, Connecticut are other places where the school system and state employment agencies have worked to help the drop-out or the pupil who is a potential drop-out. ${ }^{2}$

Lincoln, Nebraska has developed a work-school program to deal with potential drop-outs, including many with quite low IQ:s. Serving on the school staff is a coordinator of the special employment program, who confers with such students, consults their principal, homeroom teachers, and their parents. ${ }^{3}$
$I_{\text {Vogel }}$ op. cit., p. $75 . \quad{ }^{2}$ Ibid.
$3_{\text {Ibid. }}$.

A number of states have made studies on the drop-out and have devised plans to help local communities and to furnish information to interested persons and organizations. Michigan has its "Michigan Committee on School Holding Power" which was established in 1951. It has put out several pamphlets: Questions and Answers About School Drop-Outs; Quickie-Kit on School Holding Power: Improving Administrative Practices; Improving Curriculum and Instruction; Identifyins Potential School Leavers; Providing Community Cooperation; and Follow-Up. These guides will be combined in a publication called Your Guides to Improving School Holding Power and Services to the Drop-Out. ${ }^{1}$

Mrs. Carla Eugster and others entered the community of Ken-Gar, Maryland and set up a Home Study Program in the fall of 1959 to provide additional encouragement and tutoring for the children in the community. Each Ken-Gar parent agreed to convert some part of his home into a classroom, complete with dictionaries and blackboard, one night a week. Mrs. Eugster secured volunteer tutors. These tutors, most of whom reside in Kenington or neighboring communities, and who are called "parent helpers" are all college graduates and number among them housewives, lawyers, and scientists. They each teach one weekly session of one-and-a-half to two hours duration. After operating as a private organization with contributions from Ken-Gar parents and parent helpers, the

[^6]Home Study Program was incorporated into the Montgomery County Education System. The County Board of Education has added to the staff of the school system two full-time professional social workers who, under the direction of the principals of the individual schools, are concerned particularly with continuing and expanding the Home Study Program. ${ }^{1}$

Lane County, Oregon has two forestry work camps. Each camp has twenty boys. In selecting the boys strong consideration is given to family financial situation. Each high school principal is allotted a number of nominations on the basis of enrollment, but the final choices are made by the county commissioners and county superintendent. The boys are paid $\$ 132$ per month and one-half of it deducted for room and board. ${ }^{2}$

There are several programs designed to improve the drop-out situation in New York City. The New York City schools have enlisted the help of the municipal government in their campaign against drop-outs. They have a program whereby civil service jobs for which there is a lack of qualified applicants are thrown open to high school students. A non-schooi agency, Manpower Utilization Council, assists in helping with the drop-out problem. ${ }^{3}$

Shibler tells how Indianapolis provides opportunity for potential drop-outs to take special training, such as
${ }^{1}$ Ibid.
$2^{\text {Ibid. }}$
${ }^{3}$ Vogel, op. cit., p. 80.
barbering, commercial cooking, and shoe repairing, which will give them salable skills. One high school was set up especially for this purpose. Students receive credits toward graduation for the special courses they take. ${ }^{1}$

There is a growing concern about the elementary school and the part it plays in the drop-out problem. For a long time most, if not all, of the discussion and planning for keeping students from dropping out of school was done at the junior or senior high school level. Livingston states:

Thus far, much attention has been focused on the high school. Various aspects of the high school program have been examined in connection with early withdrawal. But till now, only limited attention has been given to the question of identifying potential drop-outs early enough to permit the development of sound remedial programs. The importance of the elementary school in early identification of potential drop-outs is paramount. ${ }^{2}$

Murk says helping pupils with adjustments can not
begin too early. Efforts should be made to help primary school children alleviate early problems. ${ }^{3}$

Hull and Cummings in discussing the effect of depressed areas have upon children say:

They know, for example, that children from slums and other communities characterized by poverty, social disorganization, and discrimination tend to

[^7]fall off in their school work after the third or the fourth grade; that at that point the street begins to take over, and the child's out-of-school education becomes the product of a poor home and neighborhood. 1

Most elementary school teachers, in culturally deprived areas particularly, are aware of truancy among the elementary pupils. Little has this statement about the elementary child:

Emotional maladjustment $c a n$ be detected in the third grade yet no help is given the child until he gets to high school. It is common psychiatric knowledge that by the time the six year-old child enters the public schools his basic personality patterns are well established. When a child enters school, he brings with him all that he has inherited from his mother and father, the socialization of his environment, and the potentialities which will either help ${ }_{2}$ or hinder him in making his school career pleasant.

Eckerson and Smith state:
Secondary schools counselors have learned through experience that the characteristics that prevent the gifted child from doing superior work and those that are typical of the drop-out and the delinquent were well developed when the children entered high school. ${ }^{3}$

Hightower and others tell of a study made in eight counties of Illinois. They showed that the eight counties lost from 23.5 to 31.0 percent of their enrollment from the first through the eighth grade. These percentages bore out
$1_{\text {Hull }}$ and Cummings, loc. cit.
${ }^{2}$ T. S. Little, "Truancy is a Sign That Something is Wrong," The Texas Outlook, XXXV (April, 1951), pp. 6-8.
${ }^{3}$ Louise 0. Eckerson and Hyrum M. Smith, "Successful Guidance in Elementary Schools," The Education Digest, XXVIII, No. 3 (November, 1962).
the hypothesis that the drop-out pattern in the eight-county area studies was typical of the entire state. ${ }^{1}$

Shaffer tells of a plan by New York City elementary school division in 1959 to identify potential drop-outs. The program starts with kindergarten and goes through the third grade. It provides follow-up services for pupils who need it. Teams of counselors, social workers, psychologists and psychiatric consultants were set up to work with teachers, supervisors, parents and community agencies. ${ }^{2}$

As a summary of factors to identify the drop-out the Michigan Department of Public Instruction has listed twenty factors which help to identify the potential drop-out:

1. Consistent failure to achieve in regular school work
2. Grade level placement two or more years below average for grade
3. Irregular attendance and frequent tardiness
4. Active antagonism to teachers and principals
5. Marked disinterest in school, with feeling of "not belonging"
6. Low scholastic aptitude
7. Low reading ability
8. Frequent changes of schools
9. Non-acceptance by school staff
10. Non-acceptance by schoolmates
${ }^{1}$ Howard Hightower and others, "Mystery of the Elementary Drop-Out," Phi Delta Kappen, XXXVIII (November, 1956), pp. 62-64.
${ }^{2}$ Shaffer, loc. cit.
11. Friends much younger or older
12. Unhappy family situation
13. Marked difference from schoolmates, in regards to size, interests, physique, social class, nationality, dress, or personality development
14. Inability to afford the normal expenditures of classmates
15. Non-participation in extra-curricular activities
16. Inability to compete with brothers and sisters, or ashamed of them
17. Performance consistently below potential
18. Serious physical or emotional handicap
19. Being a discipline case
20. Record of delinquency. ${ }^{1}$

The programs that have been listed are but a few of the many efforts that have been undertaken to provide a solution to the problem of the drop-out.
${ }^{1}$ Michigan Department of Public Instruction, State Curriculum Committee on Holding Power, "Quickie Kit" on School Holding Power, Publication No. 507 (Lansing: the Department, 1960), p. 17.

## PRESENTATION OF DATA

A class of 202 pupils in the seventh grade of the George W. Carver School of Dallas, Texas and who were assigned to the eighth grade was selected for this study. These pupils would be eligible to enter the eighth grade in the three high schools for Negroes in the City. The majority of them would attend one of the high schools in the southern part of the City approximately seven miles from their community in the western part of the City. They should enter during the fall semester 1958 and graduate the spring semester 1963.

An individual student schedule for the study of dropouts was constructed to cover sixteen areas of the pupil's home and school life. This schedule is shown in Appendix I. The information for each schedule was obtained from the Pupil's Enrollment Record, Attendance Records, Students Counseling and Information Sheet, Elementary Pupil's Cumulative Record, and High School Pupil's Permanent Record. A list of the 202 pupils, 109 boys and 93 girls, was obtained from the elementary school that the pupils were leaving.

## Extent of Drop-outs

Table 1 shows the distribution of these pupils.
Forty-eight graduated, seven did not enter, and one hundred forty-seven entered and withdrew. Thus it is seen that 23.76 per cent graduated while 76.24 per cent either did not enter or withdrew

## TABLE 1

NUMBERS AND PERCENTAGES OF BOYS AND GIRLS FROM SEVENTH GRADE CLASS, ARRANGED ACCORDING TO WHETHER THEY GRADUATED, WITHDREW AFTER ENTERING, OR FAILED TO ENTER HIGH SCHOOL

| Groups | Boys |  | Girls |  | Total |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | No. | \% | No. | \% | No. | \% |
| Graduated from High School | 21 | 19.27 | 27 | 29.03 | 48 | 23.76 |
| Withdrew after Entering High School | 85 | 77.97 | 62 | 66.67 | 147 | 72.77 |
| Did Not Enter High School | 3 | 2.75 | 4 | 4.30 | 7 | 3.47 |
| Totals | 109 | 100.00 | 93 | 100.00 | 202 | 100.00 |

## Period of Withdrawal

In observing when the pupils withdrew from school; the semesters at the beginning of a school session, that is, the fall semesters, always showed a larger per cent of drop-outs than the spring semesters. The largest group of 16.88 per cent dropped out during the fifth semester when they reached the end of their compulsory attendance age. The fifth and
sixth semesters, when most of the pupils reached their sixteenth birthdate, accounted for approximately one-fourth of the drop-outs. Of those who dropped out during the summer between the semesters, it was the summer preceding the fifth semester. This was the summer when a number of the pupils reached their sixteenth birthdate. Table 2 shows that approximately 30 per cent of the drop-outs left school during the summer between the fourth and fifth semester, and fifth and sixth semesters when most of them reached their sixteenth birthdate. The first and seventh semesters are tied for the second highest per cent of drop-outs. They each have 11.04 per cent.

Time of Withdrawing With Respect to Compulsory Attendance Period

The largest group of boys, 46 or 52.27 per cent, withdrew before the semester in which the pupil's compulsory attendance period ended. There were 27 girls or 40.91 per cent who withdrew in this same category. Takle 3 gives a compilation of these figures. There were 14 or 15.91 per cent of boys who withdrew during the semester in which the pupil's compulsory attendance period ended. There were eight girls or 12.12 per cent in this same category. There were 28 boys or 31.28 per cent, who withdrew after the beginning of the next semester following the end of the compulsory attendance period. There were 31 girls or 46.97 per cent, who withdrew in this category. It appears that the boys were

## TABLE 2

NUMBERS AND PERCENTAGES OF BOYS AND GIRLS FROM SEVENTH GRADE CLASS WHO FAILED TO GRADUATE FROM HIGH SCHOOL DISTRIBUTED ACCORDING TO PERIOD OF WITHDRAWAL

| Time of Withdrawal | Boys |  | Girls |  | Total |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | No. | \% | No. | \% | No. | \% |
| Failed to Enter | 3 | 3.40 | 4 | 6.06 | 7 | 4.55 |
| First Semester | 10 | 11.36 | 7 | 10.61 | 17 | 11.04 |
| Second Semester | 5 | 5.68 | 6 | 9.09 | 11 | 7.14 |
| Summer Between <br> Second and Third <br> Semester | 2 | 2.28 | 3 | 4.54 | 5 | 3.25 |
| Third Semester | 9 | 10.23 | 6 | 9.09 | 15 | 9.74 |
| Fourth Semester | 5 | 5.68 | 2 | 3.03 | 7 | 4.55 |
| Summer Between Fourth and Fifth Semester | 5 | 5.68 | 4 | 6.09 | 9 | 5.84 |
| Fifth Semester | 15 | 17.05 | 11 | 16.66 | 26 | 16.88 |
| Sixth Semester | 8 | 9.09 | 3 | 4.54 | 11 | 7.14 |
| Summer Between Sixth and Seventh Semester |  |  | 2 | 3.03 | 2 | 1.30 |
| Seventh Semester | 11 | 12.50 | 6 | 9.09 | 17 | 11.04 |
| Eighth Semester | 6 | 6.82 | 5 | 7.58 | 11 | 7.14 |
| Summer Between Eighth and Ninth Semester |  |  | 1 | 1.52 | 1 | . 65 |
| Ninth Semester | 4 | 4.55 | 5 | 7.58 | 9 | 5.84 |
| Tenth Semester | 5 | 5.68 | 1 | 1.52 | 6 | 3.90 |
| Total | 88 | 100.00 | 66 | 100.00 | 154 | 100.00 |

in more of a hurry to withdraw since the largest group was before the semester in which the pupil's compulsory attendance period ended, while among the girls the largest group withdrew after the beginning of the next semester following end of the compulsory attendance period.

TABLE 3
NUMBERS AND PERCENTAGES OF PUPILS FROM THE SEVENTH GRADE CLASS WITH TIME OF WITHDRAWAL WITH RESPECT TO COMPULSORY ATTENDANCE PERIOD

| Time of Withdrawing With Respect to End | Boys |  | Girls |  | Total |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| of Compulsory <br> Attendance Period | No. | \% | No. | \% | No. | \% |
| Before Semester in Which Student's Compulsory Attendance Period Ended |  |  |  |  |  |  |
|  |  |  |  |  |  |  |
|  | 46 | 52.27 | 27 | 40.91 | 73 | 47.40 |
| During Semester in Which Student's Compulsory Attendance Period Ended |  |  |  |  |  |  |
|  | 14 | 15.91 | 8 | 12.12 | 22 | 14.29 |
| After Beginning of Next Semester Following End of Compulsory Attendance Period |  |  |  |  |  |  |
|  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |
|  | 28 | 31.82 | 31 | 46.97 | 59 | 38.31 |
| Total | 88 | 100.00 | 66 | 100.00 | 154 | 100.00 |

Reasons for Withdrawal
Table 4 shows the reason and percent of dropping out for each cause. There were eighty-eight boys and sixty-six girls who withdrew after entering, or did not enter, the

TABLE 4
NUMBER AND PERCENTAGES OF BOYS AND GIRLS FROM THE SEVENTH GRADE CLASS DISTRIBUTED ACCORDING TO REASON FOR WITHDRAWING

| Reason for Withdrawing | Boys |  | Girls |  | Total |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | No. | \% | No. | \% | No. | \% |
| Illness | 3 | 3.41 |  |  | 3 | 1.95 |
| Dismissed or expelled by school authorities | 4 | 4.55 |  |  | 4 | 2.60 |
| Work | 15 | 17.05 | 5 | 7.58 | 20 | 12.99 |
| Indifference or lack of interest | 29 | 32.95 | 11 | 16.67 | 40 | 25.97 |
| Joined Armed Forces | 2 | 2.27 |  |  | 2 | 1.30 |
| Social | 5 | 5.68 | 3 | 4.54 | 8 | 5.19 |
| Married | 6 | 6.82 | 16 | 24.24 | 22 | 14.29 |
| Financial | 4 | 4.55 | 4 | 6.06 | 8 | 5.19 |
| Disliked teachers | 2 | 2.27 |  |  | 2 | 1.30 |
| Pregnant |  |  | 11 | 16.67 | 11 | 7.14 |
| Information can't be found | 18 | 20.45 | 16 | 24.24 | 34 | 22.08 |
| Total | 88 | 100.00 | 66 | 100.00 | 154 | 100.00 |

eighth grade. The largest group of boys gave as their reason for leaving school "indifference or lack of interest." This reason accounted for 32.95 per cent of the boys. "Indifference or lack of interest" was given by 16.67 per cent of the girls as a reason for quitting school. In round numbers this represents fifty per cent of the drop-outs.
"Indifference or lack of interest" as a reason for leaving school may also cover many other reasons for leaving school which do not appear as acceptable or possibly more embarrassing to the drop-out.
"Work" was listed as the number two cause of withdrawing among the boys. It was not possible to tell if the 17.05 per cent who gave this as a reason for quitting school actually had a job or were just hopeful of finding one.

Among the girls "marriage" ranked number one reason for withdrawing. "Marriage" was listed by 24.24 per cent of the drop-outs as a cause of withdrawing. Another 16.67 per cent gave "pregnancy" as their reason for quitting school. The two causes taken together represent 40.91 per cent of the reasons given by the girls. It might be of interest to know how many of those who listed "marriage" as a reason for quitting would also list "pregnancy" as a reason for getting married. There were six boys, 6.82 per cent of the drop-outs among the boys, who listed "marriage" as a reason for withdrawing.

Although this community is identified as a low
socio-economic area, only eight boys and girls gave "financial reasons" as a cause for dropping out of school. One is apt to feel that this reason was not given often because of their sense of pride. The writer has known pupils whose families principal means of support were the grants from the County Welfare, who would rather go without lunch than let their schoolmates know they accepted a free lunch token.

There were eighteen boys and sixteen girls for whom no reason could be found for withdrawing.

# Characteristics of the Drop-outs and a Comparison of Certain of These Characteristics with <br> Those Who Graduated 

## Time of Entering School

Table 5 shows that of the boys who graduated 17 or approximately 81 per cent entered within what is considered the normal range, 13-0 years to 13-11 years of age. There were two boys who entered after 13-11 and two who entered earlier than age 13-0. The entering age for those who withdrew shows 31 boys or 36.46 per cent entering later than 13-1l. Whether the reason for entering high school late is due to entering the first grade late or being retained in a grade, the number is sufficiently high to warrant some consideration.

Table 6 shows that of the girls who graduated, 23 or 85.18 per cent entered school within the normal age range. Two or 50 per cent of the girls, who did not enter high school,

TABLE 5
AGE AT THE TIME THE BOYS FROM THE SEVENTH GRADE CLASS ENTERED OR WOULD HAVE ENTERED HIGH SCHOOL

| Age in Years and Months | Graduated |  | Did Not Enter |  | Withdrew |  | Total |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | No. | \% | No. | \% | No. | \% | No. | \% |
| 17-0 and over |  | - |  |  |  |  |  |  |
| 16-0 to 16-11 |  |  |  |  | 2 | 2.35 | 2 | 1.83 |
| 15-0 to 15-11 | 1 | 4.76 |  |  | 5 | 5.88 | 6 | 5.50 |
| 14-0 to 14-11 | 1 | 4.76 |  |  | 24 | 28.23 | 25 | 22.93 |
| 13-0 to 13-11 | 17 | 80.96 | 3 | 100.00 | 50 | 58.83 | 70 | 64.23 |
| 12-0 to 12-11 | 1 | 4.76 |  |  | 4 | 4.71 | 5 | 4.59 |
| 11-0 to 11-11 | 1 | 4.76 |  |  |  |  | 1 | 0.92 |
| Younger than 11-0 |  |  |  |  |  |  |  |  |
| Total | 21. | 100.00 | 3 | 100.00 | 85 | 100.00 | 109 | 100.00 |

TABLE 6
age at the time the girls from the seventh grade class ENTERED OR WOULD HAVE ENTERED HIGH SCHOOL

| Age in Years and Months | Graduated |  | Did Not Enter |  | Withdrew |  | Total |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | No. | \% | No. | \% | No. | \% | No. | \% |
| 17-0 and over |  |  |  |  | 1 | 1.61 | 1 | 1.07 |
| 16-0 to 16-11 |  |  |  |  | 1 | 1.61 | 1 | 1.07 |
| 15-0 to 15-11 |  |  | 1 | 25.00 | 6 | 9.68 | 7 | 7.53 |
| 14-0 to 14-11 | 3 | 11.11 | 1 | 25.00 | 19 | 30.64 | 23 | 24.73 |
| 13-0 to 13-11 | 23 | 85.19 | 2 | 50.00 | 33 | 53.24 | 58 | 62.38 |
| 12-0 to 12-11 |  |  |  |  | 2 | 3.22 | 2 | 2.15 |
| 11-0 to 11-11 | 1 | 3.70 |  |  |  |  | 1 | 1.07 |
| Younger than 11-0 |  |  |  |  |  |  |  |  |
| Total | 27 | 100.00 | 4 | 100.00 | 62 | 100.00 | 93 | 100.00 |

were within the normal age range, and two were older. Thirtythree or 53.23 per cent of those who withdrew entered school within the normal age range. Twenty-seven or 43.54 per cent of the girls who withdrew entered high school later than age 13-11.

Number of Brothers and Sisters
Tables 7 and 8 show the number of brothers and sisters that were found in the homes of the pupils studies. It would appear from one who had a knowledge of the people of this community that any number of children above two in these families would put a strain upon their resources. However, approximately 75 per cent of all the pupils studied were in families with more than two children.

Table 7 shows that of the boys who graduated the largest group, seven or 33.33 per cent of them, had five brothers and sisters. The next largest group was 5 or 23.81 per cent which had two brothers and sisters. Among the boys who withdrew the largest group was 18 or 21.18 per cent with six or more brothers and sisters. There were fifteen or 17.65 per cent in each of the groups with four and five brothers and sisters. This would place the largest group, approximately 35 per cent, of the drop-outs in families that have four or five children, while among the same group of the graduates there were found roughly thirty per cent of the boys in families of three or four children. Overall, the

TABLE 7

## NUMBER OF BOYS IN SEVENTH GRADE CLASS WHO GRADUATED, FAILED TO ENTER, OR WITHDREW FROM HIGH SCHOOL ARRANGED ACCORDING TO THE NUMBER OF CHILDREN IN FAMILY

| Number of Brothers and Sisters | Graduated |  | Did Not Enter |  | Withdrew |  | Total |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | No. | \% | No. | \% | No. | \% | No. | \% |
| None |  |  | 1 | 33.33 | 3 | 3.53 | 4 | 3.67 |
| One | 2 | 9.52 |  |  | 6 | 7.06 | 8 | $7 \cdot 34$ |
| Two | 5 | 23.81 |  |  | 9 | 10.59 | 14 | 12.84 |
| Three | 2 | 9.52 |  |  | 10 | 11.76 | 12 | 11.01 |
| Four | 4 | 19.05 |  |  | 15 | 17.65 | 19 | 17.43 |
| Five | 7 | 33.33 | 1 | 33.33 | 15 | 17.65 | 23 | 21.11 |
| Six |  |  |  |  | 8 | 9.40 | 8 | 7.34 |
| More Than Six | 1 | 4.77 | 1 | $33 \cdot 34$ | 18 | 21.18 | 20 | 18.34 |
| No Information |  |  |  |  | 1 | 1.18 | 1 | 0.92 |
| Total | 21 | 100.00 | 3 | 100.00 | 85 | 100.00 | 109 | 100.00 |

families of the drop-outs of the boys had more children than the families of the graduates.

Table 8 shows a distribution of the number of brothers and sisters among the girls. The graduates among the girls, as among the boys, had five brothers and sisters as the largest group. This group was composed of eight or 29.63 per cent of the girl graduates. The group with "more than six" brothers and sisters was the second largest group with six or 22.22 per cent of the girls who graduated. The groups of "two," "three," and "four" brothers and sisters of the girls who graduated were about evenly spread with three or four pupils each. Among the girls who withdrew, the two largest groups were those composed of "more than six" and "two" brothers and sisters. They had fifteen or 24.20 per cent and eleven or 17.74 per cent respectively. There were nine or 14.52 per cent in the "five" brothers and sisters group, and seven or 11.29 per cent in the "two" brothers and sisters group. There, also, were three with "no" brothers and sisters and six with "one" brother or sister who withdrew among the girls.

Persons With Whom Pupils Lived
Although no one situation or problem can be stated as the cause of boys and girls dropping out of school, there are a number, which may be listed as contributing factors. Therefore, if as it is generally believed that every child should have the privilege of growing up in a home with both

TABLE 8
NUMBER OF GIRLS IN SEVENTH GRADE CLASS WHO GRADUATED, FAILED TO ENTER, OR WITHDREW FROM HIGH SCHOOL, ARRANGED ACCORDING TO THE NUMBER OF CHILDREN IN FAMILY

| Number of Brothers and Sisters | Graduated |  | Did Not Enter |  | Withdrew |  | Total |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | No. | \% | $\begin{gathered} \text { No. } \\ \hline \end{gathered}$ | \% | No. | \% | No. | \% |
| None |  |  | 1. | 25.00 | 3 | 4.84 | 4 | 4.30 |
| One | 1 | 3.70 | 1 | 25.00 | 6 | 9.68 | 8 | 8.60 |
| Two | 3 | 11. 11 |  |  | 11 | 17.74 | 14 | 15.05 |
| Three | 4 | 14.81 | 1 | 25.00 | 7 | 11.29 | 12 | 12.90 |
| Four | 3 | 11. 1.1 |  |  | 5 | 8.06 | 8 | 8.60 |
| Five | 8 | 29.63 |  |  | 9 | 14.52 | 17 | 18.28 |
| Six | 2 | 7.42 |  |  | 5 | 8.06 | 7 | 7.53 |
| More Than Six | 6 | 22.22 | 1 | 25.00 | 15 | 24.20 | 22 | 23.66 |
| No Information |  |  |  |  | 1. | 1.61 | 1 | 1.08 |
| Total | 27 | 100.00 | 4 | 100.00 | 62 | 100.00 | 93 | 100.00 |

father and mother to maintain his or her maximum development, and it is then found that over one-half of the pupils studied do not live in homes with both parents, it may be assumed that this is a contributing factor.

Table 9 shows the distribution of boys living with both parents, with the father, with the mother, or with other persons. It was interesting to note that a large number of studies list broken homes as a contributing factor in juvenile delinquency and school drop-outs, yet in this study there was little difference in family composition of those who graduated and those who dropped out of school. In fact, 52.39 per cent of the boys who graduated were from broken homes, while 43.18 per cent of the drop-outs were from broken homes. In this case the per cent of broken homes is larger among the graduates than among the drop-outs.

Table 10 shows a distribution of the girls and with whom they lived. The girls show fourteen or 51.85 per cent of their graduates as having broken homes as compared with 37 or 56.06 per cent of the drop-outs. There were 44.45 per cent of the girl graduates as opposed to 25.76 per cent of the girl drop-outs who lived with both parents. There were five boys who dropped out who lived with the father, but no girl in either the drop-outs or graduates lived with her father. Only among the drop-outs were there instances in which the information could not be found.

TABLE 9
NUMBERS AND PERCENTAGES OF BOYS OF THE SEVENTH GRADE CLASS DISTRIBUTED ACCORDING TO PERSONS WITH WHOM THEY LIVED

|  | Boys Who <br> Graduated | Boys Who <br> Werson With Whom <br> Pupil Lived | No. |
| :--- | :---: | :---: | :---: |

TABLE 10

```
NUMBER AND PERCENTAGES OF GIRLS OF THE SEVENTH
    GRADE CLASS DISTRIBUTED ACCORDING TO
            PERSONS WITH WHOM THEY LIVED
```

| Persons With Whom <br> Pupil Lived | Girls Who <br> Graduated | Girls Who <br> Withdrew |  |  |
| :--- | :---: | :---: | :---: | :---: |
|  | No. | $\%$ | No. | $\%$ |
|  | 12 | 44.45 | 17 | 25.76 |

Father

| Mother | 14 | 51.85 | 37 | 56.06 |
| :--- | ---: | ---: | ---: | ---: |
| Other Person | 1 | 3.70 | 4 | 6.06 |
| Can't Find Information |  |  | 8 | 12.12 |
| Total | 27 | 100.00 | 66 | 100.00 |

Occupation of Major Wage Earner
Table 11 gives a distribution of the major wage earner in the families of the boys who graduated of this study. There were 28.58 per cent of the fathers who were the major wage earners who were semi-skilled or un-skilled. Two of the fathers were skilled workers and two held jobs in the sales or clerical category. Where the mother was the principal wage earner, among the boys who graduated, 33.34 per cent worked in the service category, mostly as maids in private homes and day workers. Only one mother was a skilled worker and one depended upon public welfare.

Table 12 shows a distribution of the major wage earners of the boys who withdrew. Among the boys who withdrew, 27.27 per cent of the fathers were in the un-skilled category. Where the mother was the major wage earner, the largest group 27 or 30.68 per cent, was in the service category. There were two fathers on pension and four mothers whose main support was the public welfare. The mothers who were listed in the service category worked principally as day workers in private homes. Fifteen or 17.04 per cent of the fathers of the boys who withdrew did not have an occupation listed. This was probably due to the fact that they were day workers at odd jobs and on and off public welfare rolls.

One-half of the girls, who graduated, lived in homes where the father was the major wage earner, and about one-half

TABLE 11
NUMBERS AND PERCENTAGES OF BOYS WHO GRADUATED OF THE SEVENTH GRADE CLASS, DISTRIBUTED ACCORDING TO THE MAJOR WAGE EARNER OF THE FAMILY, AND JOB CLASSIFICATION TO WHICH HE/SHE BELONGED

| Occupations | Father |  | Mother |  | Other |  | Total |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | No. | \% | No. | \% | No. | \% | No. | \% |
| Professional or managerial |  |  |  |  | 1 | 4.76 | 1 | 4.76 |
| Sales or clerical | 2 | 9.52 |  |  |  |  | 2 | 9.52 |
| Services |  |  | 7 | 33.34 |  |  | 7 | 33.34 |
| Skilled | 2 | 9.52 | 1 | 4.76 | 1 | 4.76 | 4 | 19.05 |
| Semi-skilled | 2 | 9.52 |  |  |  |  | 2 | 9.52 |
| Un-skilled |  | 19.06 |  |  |  |  | 4 | 19.06 |
| Welfare |  |  | 1 | $4 \cdot 76$ |  |  | 1 | 4.76 |
| Pension |  |  |  |  |  |  |  |  |
| Can't Find Information |  |  |  |  |  |  |  |  |
| Total | 10 | 47.62 | 9 | 42.86 | 2 | 9.52 | 21 | 100.00 |

TABLE 12

## NUMBERS AND PERCENTAGES OF BOYS WHO WITHDREW OF THE SEVENTH GRADE CLASS, DISTRIBUTED ACCORDING TO THE MAJOR WAGE EARNER OF THE FAMILY, AND JOB CLASSIFICATION TO WHICH <br> HE/SHE BELONGED

| Occupations | Father |  | Mother |  | Other |  | Total |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | No. | \% | No. | \% | No. | \% | No. | \% |
| Professional or managerial | 1 | 1.14 |  |  |  |  | 1 | 1.14 |
| Sales or clerical |  |  |  |  |  |  |  |  |
| Services | 6 | 6.81 | 27 | 30.68 | 1 | 1.14 | 34 | 38.63 |
| Skilled | 1 | 1.14 |  | 2.26 |  |  | 3 | 3.40 |
| Semi-skilled | 4 | 4.56 |  |  |  |  | 4 | 4.56 |
| Un-skilled |  | 27.27 |  |  |  |  | 24 | 27.27 |
| Welfare |  |  |  | 4.56 |  |  | 4 | 4.56 |
| Pension | 2 | 2.26 |  |  |  |  | 2 | 2.26 |
| Can't Find       <br> Information 15 17.04 1 1.14 16 18.18 |  |  |  |  |  |  |  |  |
| Total | 53 | 60.22 |  | 37.50 | 2 | 2.28 | 88 | 100.00 |

where the mother was the major wage earner. Table 13 shows a distribution of the major wage earner of the girl graduates. The largest category of employment for the fathers, as with the mothers, was in the service category. Six or 22.22 per cent of the fathers and twelve or 44.45 per cent of the mothers of the girl graduates worked in the service category. Three or 11.11 per cent of the fathers of the girl graduates worked at jobs classed as unskilled. There was one girl graduate who lived with persons other than her parents whose occupation was in the professional or managerial category. One major difference in employment of the father as a major wage earner in the families of the girls who withdrew, as contrasted with those who graduated, was the large number, fourteen or 21.21 per cent whose occupation was not listed. This is probably due to the fact that they worked at odd jobs and were unemployed a large portion of the time. If an inference were drawn here it would be that the employment of the fathers of the drop-outs, both boys and girls, is less stable than those of the graduates. Table 14 shows a distribution of the major wage earner in the families of the girl drop-outs. The fathers as a whole, among the girl dropouts, have more diversity in their employment than those of the girl graduates. There was one in the professional or managerial category, two skilled, two semi-skilled, eight unskilled, and one on pension.

It is not too difficult to see that the living

TABLE 13
NUMBERS AND PERCENTAGES OF GIRLS WHO GRADUATED OF THE SEVENTH GRADE CLASS, DISTRIBUTED ACCORDING TO THE MAJOR WAGE EARNER OF THE FAMILY, AND JOB CLASSIFICATION TO WHICH

HE/SHE BELONGED

| Occupations | Father |  | Mother |  | Other |  | Total |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | No. | \% | No. | \% | No. | \% | No. | \% |
| Professional or managerial |  |  | 1 | 3.70 |  |  | 1 | 3.70 |
| Sales or clerical | 2 | 7.41 |  |  |  |  | 2 | 7.41 |
| Services | 6 | 22.22 | 12 | 44.45 |  |  | 18 | 66.68 |
| Skilled | 1 | 3.70 |  |  |  |  | 1 | 3.70 |
| Semi-skilled |  |  | . |  | 1 | 3.70 | 1 | 3.70 |
| Un-skilled |  | 11.11 |  |  |  |  | 3 | 11.11 |
| Welfare |  |  |  | $3 \cdot 70$ |  |  | 1 | 3.70 |
| Pension |  |  |  |  |  |  |  |  |
| Can't Find Information |  |  |  |  |  |  |  |  |
| Total | 12 | 44.45 |  | 51.85 | 1 | 3.70 |  | 100.00 |

TABLE 14
NUMBERS AND PERCENTAGES OF GIRLS WHO WITHDREW OF THE
SEVENTH GRADE CLASS, DISTRIBUTED ACCORDING TO
THE MAJOR WAGE EARNER OF THE FAMILY, AND
JOB CLASSIFICATION TO WHICH
HE/SHE BELONGED

| Occupations | Father |  | Mother |  | Other |  | Total |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | No. | \% | No. | \% | No. | \% | No. | \% |
| Professional or managerial | 1 | 1.52 |  |  |  |  | 1 | 1.52 |
| Sales and clerical |  |  |  |  |  |  |  |  |
| Services | 2 | 3.03 | 26 | 39.39 | 1 | 1.52 | 29 | 43.94 |
| Skilled | 2 | 3.03 |  | 1.52 |  |  | 3 | 4.55 |
| Semi-skilled | 2 | 3.03 |  |  | 2 | 3.03 | 4 | 6.06 |
| Un-skilled | 8 | 12.12 |  |  | 1 | 1.52 | 9 | 13.64 |
| Welfare |  |  |  | 7.57 |  |  | 5 | 7.57 |
| Pension | 1 | 1.52 |  |  |  |  | 1 | 1.52 |
| Can't Find Information | 14 | 21.21 |  |  |  |  | 14 | 21.21 |
| Total | 30 | 45.46 | 32 | 48.47 | 4 | 6.07 | 66 | 100.00 |

standards of families whose incomes are reflected by the job categories of Tables 11, 12, 13, and 14 are relatively impoverished. This is brought even more in focus when viewed in conjunction with Tables 7 and 8 which show the number of children in these families.

## Educational Level of Fathers and Mothers of Both Graduates and Drop-outs

Educational Level of the Fathers of the Boys of Both the Graduates and the Drop-outs. One father, of the boys who graduated, entered and completed college as opposed to none among the drop-outs. There was, however, one father among the drop-outs, who entered but did not complete his college education. The per cent of fathers, of the boys who graduated, who completed high school is approximately five times larger than that of the drop-outs. Table 15 shows a distribution of the educational level of the fathers of the boys, both the graduates and the drop-outs. Eight or 38.09 per cent of the fathers of the graduates, and sixteen or 18.18 per cent of the drop-outs, entered but did not complete their high school education. There were five or 5.68 per cent of the fathers of the drop-outs who completed elementary school but did not enter high school. There were three or 14.29 per cent of the fathers of the graduates, and twenty or 22.73 per cent of the fathers of the drop-outs, who did not complete their elementary schooling. The above percentages are based on the total number of fathers of the drop-outs; the large number, forty or 45.46 per cent, whose records did not contain this

TABLE 15
NUMBERS AND PERCENTAGES OF BOYS IN THE SEVENTH GRADE CLASS, DISTRIBUTED ACCORDING TO THE EDUCATIONAL LEVEL OF THEIR FATHERS

| Levels of Schooling Completed | Graduates |  | Drop-outs |  |
| :---: | :---: | :---: | :---: | :---: |
|  | No. | \% | No. | \% |
| Elementary School Not Completed | 3 | 14.29 | 20 | 22.73 |
| Elementary School Completed |  |  | 5 | 5.68 |
| High School Not Completed | 8 | 38.09 | 16 | 18.18 |
| High School Completed | 6 | 28.57 | 5 | 5.68 |
| Coliege Not Completed |  |  | 2 | 2.27 |
| College Completed | 1 | 4.76 |  |  |
| No Information | 3 | 14.29 | 40 | 45.46 |
| Total | 21 | 100.00 | 88 | 100.00 |

information would affect the distribution if their educational attainment were known. From the available data, one would conclude that the educational attainment of the fathers of the graduates is better than that of the drop-outs.

## Educational Level of the Fathers of the Girls of Both

 the Graduates and the Drop-outs. The girls, both graduates and drop-outs, did not have any fathers to complete college training. The drop-outs had one father who entered but did not complete his college work. Table 16 shows a distribution of the educational level of this group. There were eleven or 40.74 per cent of the fathers of the graduates, and seventeen or 25.76 per cent of the drop-outs, who entered but did not complete their high school education. The percentages of those who entered but did not complete elementary school and those who completed it, for graduates and drop-outs, are about the same. Here again the fathers of the graduates of the girls seem to have a slight edge over the drop-outs. This information could not be found for nine or 33.33 per cent of the fathers of the graduates, and thirty-four or 51.52 per cent of the fathers of the drop-outs.Educational Level of the Mothers of the Boys of Both Graduates and Drop-outs. There was one mother of the boy drop-outs who completed her college training, and one mother of the boy graduates who entered but did not complete her college training. Table 17 shows a distribution of the educational attainment of this group. Six or 28.57 per cent of

NUMBERS AND PERCENTAGES OF GIRLS OF THE SEVENTH GRADE CLASS, DISTRIBUTED ACCORDING TO THE EDUCATIONAL LEVEL OF THEIR FATHERS

| Levels of Schooling Completed | Graduates |  | Drop-outs |  |
| :---: | :---: | :---: | :---: | :---: |
|  | No. | \% | No. | \% |
| Elementary School Not Completed | 4 | 14.82 | 11 | 16.67 |
| Elementary School Completed | 1 | 3.70 | 2 | 3.03 |
| High School Not Completed | 11 | 40.74 | 17 | 25.76 |
| High School Completed | 2 | 7.41 | 1 | 1.51 |
| College Not Completed |  |  | 1 | 1.51 |
| College Completed |  |  |  |  |
| No Information | 9 | 33.33 | 34 | 51.52 |
| Total | 27 | 100.00 | 66 | 100.00 |

TABLE 17
NUMBERS AND PERCENTAGES OF BOYS OF THE SEVENTH GRADE CLASS DISTRIBUTED ACCORDING TO THE EDUCATIONAL LEVEL OF THEIR MOTHERS

| Levels of Schooling Completed | Graduates |  | Drop-outs |  |
| :---: | :---: | :---: | :---: | :---: |
|  | No. | \% | No. | \% |
| Elementary School Not Completed |  |  | 4 | 4.55 |
| Elementary School Completed | 1 | 4.76 | 10 | 11.36 |
| High School Not Completed | 12 | 57.15 | 33 | 37.50 |
| High School Completed | 6 | 28.57 | 6 | 6.82 |
| College Not Completed | 1 | 4.76 |  |  |
| College Completed |  |  | 1 | 1.13 |
| No Information | 1 | 4.76 | 34 | 38.64 |
| Total | 21 | 100.00 | 88 | 100.00 |

the mothers of the graduates and six or 6.82 per cent of the mothers of the drop-outs completed their high school training. Twelve or 57.15 per cent of the mothers of the graduates entered but did not complete their high school education as opposed to thirty-three or 37.50 per cent of the drop-outs. One or 4.76 per cent of the mothers of the boy graduates entered but did not complete elementary school as opposed to ten or 11.36 per cent of the mothers of the drop-outs. There was one or 4.76 per cent of the mothers of the graduates, and thirty-four or 38.64 per cent of the mothers of the drop-outs, whose records did not contain this information.

The Educational Level of the Mothers of the Girls of Both the Graduates and the Drop-outs. There were no mothers of either the girl graduates or the drop-outs who completed their college education. Each group had one mother who entered but did not complete her college training. There were four or 14.82 per cent of the mothers of the girl graduates as opposed to seven or 10.61 per cent of the drop-outs who completed their high school training. Twelve or 44.44 per cent of the mothers of the graduates entered but did not finish high school as opposed to twenty-one or 31.81 per cent of the drop-outs. Table 18 shows a distribution of the educational attainment of this group. Approximately twenty-six per cent of the mothers of the girl graduates as opposed to approximately fourteen per cent of the drop-outs had educational attainment below the high school level. There were three or

TABLE 18
NUMBERS AND PERCENTAGES OF GIRLS OF THE SEVENTH GRADE CLASS DISTRIBUTED ACCORDING TO THE EDUCATIONAL LEVEL OF THEIR MOTHERS

| Level of Schooling Completed | Graduates |  | Drop-outs |  |
| :---: | :---: | :---: | :---: | :---: |
|  | No. | \% | No. | \% |
| Elementary School Not Completed | 5 | 18.52 | 7 | 10.61 |
| Elementary School Completed | 2 | 7.41 | 2 | 3.03 |
| High School Not Completed | 12 | 44.44 | 21 | 31.81 |
| High School Completed | 4 | 14.82 | 7 | 10.61 |
| College Not Completed | 1 | 3.70 | 1 | 1.51 |
| College Completed |  |  |  |  |
| No Information | 3 | 11.11 | 28 | 42.43 |
| Total | 27 | 100.00 | 66 | 100.00 |

11.1l per cent of the mothers of the girl graduates and twenty-eight or 42.43 per cent of the drop-outs whose records did not contain this information.

## The Intelligence Quotient of the Graduates and Drop-outs

Because there were many pupils who missed an intelligence test when it was given for a variety of reasons, it was felt that in order to get a score on as many pupils as possible, the scores would be used if taken in the sixth, seventh, or eighth grade. The latest score would be the one used.

The Intelligence Quotient of the Boys, Both Graduates and Drop-outs. Three or 14.29 per cent of the graduates, and three or 3.40 per cent of the drop-outs had scores within the average intelligence range of 90 to 104 . Eleven or 52.38 per cent of the graduates and forty-four or 50.00 per cent of the drop-outs had scores from 70 to 89. They would be classed as dull average ( $80-89$ ) or borderline (70-79) depending upon the group in which they fell. Table 19 shows a distribution of these intelligence quotients. Four or 19.04 per cent of the graduates and twenty-six or 29.55 per cent of the drop-outs fell within the range of 69 or below. One might want to ask questions about the four boys who graduated with IQ's below 69. I.Q. scores were not available for three or 14.29 per cent of the graduates and fifteen or 17.05 per cent of the drop-outs.

TABLE 19

## NUMBERS AND PERCENTAGES OF THE BOYS OF THE SEVENTH GRade CLASS, BOTH GRADUATES AND DROP-OUTS, DISTRIBUTED ACCORDING TO THEIR INTELLIGENCE QUOTIENT

| Intelligence Quotient | Graduates |  | Drop-outs |  |
| :--- | ---: | ---: | ---: | ---: |
|  | No. | $\%$ | No. | $\%$ |
|  | 4 | 19.04 | 26 | 29.55 |
| 70 to 89 | 11 | 52.38 | 44 | 50.00 |
| 90 to 104 | 3 | 14.29 | 3 | 3.40 |
| No information | 3 | 14.29 | 15 | 17.05 |
| Total | 21 | 100.00 | 88 | 100.00 |

The Intelligence Quotient of the Girls, Both Graduates and Drop-outs. Table 20 shows a distribution of the IQ scores of the graduates and drop-outs of the girls. Six or 22.22 per cent of the graduates and eleven or 16.67 per cent of the dropouts had intelligence quotients within the average range of 90 to 104. Sixteen or 59.26 per cent of the graduates as compared with twenty-five or 37.88 per cent of the drop-outs were within the dull average ( $80-89$ ) or borderline ( $70-79$ ) range. One or 3.70 per cent of the graduates and seventeen or 25.76 per cent of the drop-outs had IQ's of 69 or below. On the whole, the graduates seemed to score better than the drop-outs. However, except in the groups of "69 and below", and "70-89:
there is not a great deal of difference between the drop-out and the graduate.

TABLE 20
NUMBERS AND PERCENTAGES OF THE GIRLS OF THE SEVENTH GRADE CLASS, BOTH GRADUATES AND DROP-OUTS, DISTRIBUTED ACCORDING TO THEIR INTELLIGENCE QUOTIENT

|  | Graduates |  | Drop-Outs |  |
| :--- | :---: | :---: | :---: | :---: |
| Intelligence Quotient | No. | $\%$ | No. | $\%$ |
| 69 or below | 1 | 3.70 | 17 | 25.76 |
| 70 to 89 | 16 | 59.26 | 25 | 37.88 |
| 90 to 104 | 6 | 22.22 | 11 | 16.67 |
| No information | 4 | 14.82 | 13 | 19.69 |
| Total | 27 | 100.00 | 66 | 100.00 |

The Attendance Records of the
Graduates and Drop-outs
It was felt that the first semester attendance record would shed important information on a pupil's likelihood to continue in school. If his attendance is good throughout this period he is likely to make satisfactory adjustment to his school problems and remain in school. A large number of absences was usually considered indicative of some type of problem which if not corrected might be a factor in his withdrawal.

Attendance Records of the Boys Who Graduated and Withdrew. The graduates had eleven or 52.28 per cent as opposed to eighteen or 21.18 per cent of the drop-outs who were absent $3 \not / 2$ days or less during their first semester in high school. Six or 28.57 per cent of the boys who graduates and thirteen or 15.29 per cent of the drop-outs were absent from five to nine and one-half days. Table $2 l$ shows a distribution of the absentees of these pupils. Four or 19.05 per cent of the graduates did not have this information on their records. No graduate, on whom this information was available, was absent more than nine and one-half days. The drop-outs had pupils in each category. The largest group, twenty-two or 25.88 per cent, were absent twenty-two or more days

TABLE 21
NUMBERS AND PERCENTAGES OF THE BOYS OF THE SEVENTH
GRADE CLASS, BOTH GRADUATES AND DROP-OUTS, DISTRIBUTED ACCORDING TO DAYS ABSENT DURING THEIR FIRST SEMESTER IN HIGH SCHOOL

| Days Absent | Graduates |  | Drop-outs |  |
| :---: | :---: | :---: | :---: | :---: |
|  | No. | \% | No. | \% |
| $31 / 2$ days or less | 11 | 52.38 | 18 | 21.18 |
| 4 to $91 / 2$ days | 6 | 28.57 | 13 | 15.29 |
| 10 to $151 / 2$ days |  |  | 13 | 15.29 |
| 16 to $211 / 2$ days |  |  | 9 | 10.59 |
| 22 days or more |  |  | 22 | 25.88 |
| No information | 4 | 19.05 | 10 | 11.77 |
| Total | 21 | 100.00 | 85 | 100.00 |

## Attendance Records of the Girls Who Graduated and

Withdrew. The girl drop-outs as a whole did not have as good attendance records as the girl graduates. One girl who graduated was absent twenty-two or more days. Table 22 shows a distribution of the attendance of the girls. In the six categories listed the girls who withdrew were about evenly distributed. There were ten or 16.13 per cent in the $131 / 2$ days or less:" group, twelve or 19.35 per cent in the " 4 to $91 / 2$ days" group, nire or 14.52 per cent in the "10 to $15 \frac{1}{2}$ days" group, eleven or 17.14 per cent in the "l6 to $211 / 2$ days" group, ten or 16.13 per cent in the "22 days or more" group, and ten or 16.13 per cent in the "no information" group.

TABLE 22
NUMBERS AND PERCENTAGES OF THE GIRLS OF THE SEVENTH GRADE CLASS, BOTH GRADUATES AND DROP-OUTS, DISTRIBUTED ACCORDING TO DAYS ABSENT DURING THEIR FIRST SEMESTER IN HIGH SCHOOL

| Days Absent | Graduates | Drop-outs |  |  |
| :--- | :---: | :---: | :---: | :---: |
|  | No. | $\%$ | No. | $\&$ |
| $3 \not 1 / 2$ days or less | 13 | 48.15 | 10 | 16.13 |
| 4 to $91 / 2$ days | 6 | 22.22 | 12 | 19.35 |
| 10 to $151 / 2$ days | 3 | 11.11 | 9 | 14.52 |
| 16 to $21 \frac{1}{2}$ days | 1 |  | 11 | 17.74 |
| 22 days or more | 4 | 14.82 | 10 | 16.13 |
| No information | 27 | 100.00 | 10 | 16.13 |
| Total |  |  | 100.00 |  |

Number of Subjects Failed by the Drop-outs
Fifty-eight or 68.24 per cent of the boys and fortytwo or 67.74 per cent of the girls did not fail any subjects. One hundred or roughly sixty-five per cent of the boys and girls who withdrew did not fail any subjects. Table 23 shows. a distribution of the drop-outs according to the number of subjects failed. Ten or 11.76 per cent of the boys and six or 9.68 per cent of the girls failed one subject. Again one can see that approximately seventy-five per cent of the dropouts did not drop out because of failure in their course work. There were six boys and one girl who failed two subjects, and one boy and two girls who failed three subjects. Two boys failed four subjects, and four girls failed more than four subjects. There were eight boys and seven girls for whom this information was not available.

Subjects Failed by Pupils During First Semester. Language arts and mathematics are the two subjects that were failed by the largest number of boys and girls. The thirty-three subject failures by the boys were failed by nineteen boys, and likewise the thirty-four subjects failed by the girls were failed by thirteen of them. Table 24 shows a listing of the subjects failed by the drop-outs. There were four boys and six girls who failed social studies. Five boys failed shop, and five girls failed homemaking.

Among the electives, band had one boy and two girl
failures; while music had three girl failures.

## TABLE 23

NUMBERS AND PERCENTAGES OF DROP-OUTS OF THE SEVENTH GRADE CLASS, DISTRIBUTED ACCORDING TO THE NUMBER OF SUBJECTS FAILED DURING FIRST SEMESTER IN HIGH SCHOOL

| Number of <br> Subjects Failed | Boys |  | Girls |  |
| :---: | :---: | :---: | :---: | :---: |
|  | No. | \% | No. | \% |
| None | 58 | 68.24 | 42 | 67.74 |
| One | 10 | 11.76 | 6 | 9.68 |
| Two | 6 | 7.06 | 1 | 1.61 |
| Three | 1 | 1.18 | 2 | 3.23 |
| Four | 2 | 2.35 |  |  |
| More than Four |  |  | 4 | 6.45 |
| No Information | 8 | 9.41 | 7 | 11.29 |
| Total | 85 | 100.00 | 62 | 100.00 |

TABLE 24
NUMBERS AND PERCENTAGES OF DROP-OUTS OF THE SEVENTH GRADE CLASS, DISTRIBUTED ACCORDING TO THE SUBJECTS FAILED DURING FIRST SEMESTER IN HIGH SCHOOL

| Subjects Failed | Boys |  | Girls |  |
| :---: | :---: | :---: | :---: | :---: |
|  | No. | \% | No. | \% |
| Language Arts | 12 | 36.36 | 3 | 8.82 |
| Mathematics | 8 | 24.24 | 7 | 20.59 |
| Social Studies | 4 | 12.12 | 6 | 17.65 |
| Science | 1 | 3.03 | 3 | 8.82 |
| Shop | 5 | 15.15 |  |  |
| Homemaking |  |  | 5 | 14.71 |
| Band | 1 | 3.03 | 1 | 2.94 |
| Art | 1 | 3.03 | 2 | 5.88 |
| Physical Education | 1 | 3.03 | 4 | 11.76 |
| Music |  |  | 3 | 8.83 |
| Total | 33 | 100.00 | 34 | 100.00 |

A junior high school eighth grade pupil, to be promoted, must earn an average passing grade for the year in any two of these subjects, Language Arts, Social Studies, and Mathematics; and in one of these subjects, Science, Homemaking, and Industrial Arts. The grade in science, being taught only one semester, is considered an annual grade.

An analysis of the number failing the various courses, in the light of the first requirement for promotion, an average passing grade in any two of Language Arts, Mathematics, and Social Studies, shows that the highest number of pupils who would not satisfy the promotion requirement would be sixteen. Of the 154 boys and girls who withdrew, only sixteen could be considered academic failures. This is roughly ten per cent of the drop-outs.

## Academic Achievement of Pupils While in Elementary School

Some of the cumulative records of the pupils in this study were not complete enough to be used. Therefore, the records of two boys and three girls of the graduates were not used. Likewise, the records of twenty-three boys and ten girls of the drop-outs could not be used.

The average grade found in the tables was obtained by taking an average of the six-weeks grades over the seven years in the elementary school. The grade symbols used are "l," "2," "3," and "4." The, highest grade is a "l" and the lowest is a "4." There were four subjects in which pupils received
grades in the elementary school. They were: Language Arts, Mathematics, Social Studies, and Health-Science.

Table 25 shows a distribution of the average grade of the boys who graduated. No boy graduate made an average of "l" in any subject. There were eight who averaged "2's" in language arts and mathematics and nine who averaged "2's" in social studies and health-science. There were nine boys who made "3's" in each of the four subjects. Only two boys made "4's" in language arts and mathematics. Social studies and health-science each had one boy who made a "4."

TABLE 25
NUMBERS AND PERCENTAGES OF BOYS OF THE SEVENTH
GRADE CLASS WHO GRADUATED, DISTRIBUTED
ACCORDING TO THEIR AVERAGE ACHIEVEMENT GRADE IN THEIR ELEMENTARY

SCHOOL SUBJECTS

| Average Grade | Courses |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Language Arts |  | Mathematics |  | Social Studies |  | HealthScience |  |
|  | No. | \% | No. | \% | No. | \% | No. | \% |
| 1 |  |  |  |  |  |  |  |  |
| 2 | 8 | 42.11 | 8 | 42.11 | 9 | 47.37 | 9 | $47 \cdot 37$ |
| 3 | 9 | 47.37 | 9 | 47.37 | 9 | 47.37 | 9 | 47.37 |
| 4 | 2 | 10.52 | 2 | 10.52 | 1 | 5.26 | 1 | 5.26 |
| Total | 19 | 100.00 | 19 | 100.00 | 19 | 100.00 | 19 | 100.00 |

Table 26 shows a distribution of the average grades of the girls who graduated. The girls made six "l's," twelve "2's," give "3's," and one "4" in language arts. They did about as well in mathematics and social studies. In healthscience they made fewer "l's" but increased their "2's" to fourteen.

TABLE 26
NUMBERS AND PERCENTAGES OF GIRLS IN THE SEVENTH GRADE CLASS WHO GRADUATED, DISTRIBUTED ACCORDING TO THEIR AVERAGE ACHIEVEMENT GRADE IN THEIR ELEMENTARY SCHOOL SUBJECTS

| Average Grade | Courses |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Language Arts |  | Mathematics |  | Social <br> Studies |  | HealthScience |  |
|  | No. | \% | No. | \% | No. | \% | No. | \% |
| 1 | 6 | 25.00 | 5 | 20.83 | 5 | 20.83 | 2 | 8.33 |
| 2 | 12 | 50.00 | 10 | 41.67 | 13 | 54.17 | 14 | 58.33 |
| 3 | 5 | 20.83 | 7 | 29.17 | 6 | 25.00 | 7 | 29.17 |
| 4 | 1 | 4.17 | 2 | 8.33 |  |  | 1 | 4.17 |
| Total | 24 | 100.00 | 24 | 100.00 | 24 | 100.00 | 24 | 100.00 |

In summarizing the grades of the girls who graduated it was observed that about fifty per cent of them made "2's" with the other fifty per cent being split approximately evenly between "l's" and "3's".

Table 27 shows a distribution of the average grade
of the boys who withdrew. While the average grades among the boys who graduated were about evenly distributed between "2's" and "3's" it was observed that for the drop-outs the largest group was in the grade of "3." Over fifty per cent of the boys who dropped out of school made "3's." The percentages of the boys in this group who earned "4's" were significantly greater, subject by subject, than the percentages of boys who earned "4's" in the graduate group.

TABLE 27

## NUMBERS AND PERCENTAGES OF BOYS IN THE SEVENTH GRADE CLASS WHO WITHDREW, DISTRIBUTED <br> ACCORDING TO THEIR AVERAGE ACHIEVEMENT GRADE IN THEIR ELEMENTARY SCHOOL SUBJECTS

| Average Grade | Courses |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Language Arts |  | Mathematics |  | Social <br> Studies |  | HealthScience |  |
|  | No. | \% | No. | \% | No. | \% | No. | \% |
| 1 |  |  | 1 | 1.54 |  |  |  |  |
| 2 | 19 | 29.23 | 17 | 26.15 | 16 | 24.62 | 15 | 23.08 |
| 3 | 35 | 53.85 | 38 | 58.46 | 39 | 60.00 | 42 | 64.62 |
| 4 | 11 | 16.92 | 9 | 13.85 | 10 | 15.38 | 8 | 12.30 |
| Total | 65 | 100.00 | 65 | 100.00 | 65 | 100.00 | 65 | 100.00 |

Table 28 shows a distribution of the average grades of the girls who withdrew. Approximately fifty per cent of
them averaged "3's" in their courses. The next largest percentage had an average grade of "2." Roughly about twentynine per cent of them averaged "2's." They averaged about eight "4's" per subject. The range was from 5 or 8.93 per cent in language arts to eleven or 19.64 per cent in mathematics.

TABLE 28
NUMBERS AND PERCENTAGES OF GIRLS IN THE SEVENTH
GRADE CLASS WHO WI THDREW, DISTRIBUTED
ACCORDING TO THEIR AVERAGE
ACHIEVEMENT GRADE IN THEIR
ELEMENTARY SCHOOL
SUBJECTS

| Average Grade | Courses |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Language Arts |  | Mathematics |  | Social Studies |  | HealthScience |  |
|  | No. | \% | No. | \% | No. | \% | No. | \% |
| 1 | 4 | 7.14 | 2 | 3.57 | 3 | 5.36 | 2 | 3.57 |
| 2 | 15 | 26.79 | 16 | 28.57 | 16 | 28.57 | 22 | 39.29 |
| 3 | 32 | 57.14 | 27 | 48.22 | 30 | 53.57 | 24 | 42.86 |
| 4 | 5 | 8.93 | 11 | 19.64 | 7 | 12.50 | 8 | 14.28 |
| Total | 56 | 100.00 | 56 | 100.00 | 56 | 100.00 | 56 | 100.00 |

Both the boys and girls among the drop-outs had a higher percentage of "3's" and "4's" than those who graduated. Those pupils who had largely "3's" and "4's" on their records could be expected to find it increasingly difficult to earn passing grades in high school.

When one looks at Tables 25 and 26 and compares them with Tables 27 and 28 he will have to conclude that the dropouts did not do as well as the graduates, and that this in some manner was a contributing factor for withdrawing.

## Comparison With Other Studies

Four other studies because of their relatedness were selected to be used in comparison with this study. Harvey Clayton Johnson of Beaumont, Texas made a study of the dropouts in the high schools of that city. ${ }^{l}$ William David Igoe did his study in McKean County, Pennsylvania. ${ }^{2}$ He used two high schools in a rural, non-farm, area to try and ascertain the causes for dropping out of school by the pupils in that area. He took the seventh grade pupils of 1948, 1949, 1950, and 1951 who would have graduated in 1954, 1955, 1956, and 1957 for his study. Charles James Johnson, Jr. did a study of drop-outs in the two Negro high schools of Columbia, South Carolina. ${ }^{3}$ His pupils entered the seventh grade in 1944 and 1945 and would have graduated in 1950 and 1951. Harold J. Dillon in his study covered a much larger number of drop-outs in his study. ${ }^{4}$ His study involved pupils in Jackson County and Lansing in Michigan; Cleveland and Cincinnati in Ohio; Indianapolis, Indiana. He found 957 records of drop-outs that were sufficiently complete that they could be used.

[^8]Table 29 shows a distribution of the drop-outs according to their reason for withdrawing for each of the studies.

Because there have not been any generally accepted reasons for withdrawing from school that have the same meanings to all or most researchers, the comparison of several pieces of work presents a problem that is difficult to adjust without diverting meaning or intent of some of the researchers. However, the writer has combined reasons for dropping out of school that were similar with the hope that these causes were similar enough for comparative purposes. It was felt that the degree of likeness of meaning was much greater than the shades of differences that might be found in this utilization of terms. The writer combined the reasons for withdrawal of "Tired of School," "Disliked School," and "Lack of Interest - Tired of School" under a new heading "Lack of Interest." "Did not have Spending Money," "Had to Go to Work to Help Home," and "Financial" were combined under the new heading "Insufficient Money." "Work" and "Wanted to Go to "Work" were combined under the new heading "Work." This was done so that one or more studies could be compared with this study where they had similar reasons given for withdrawal of students. Table 30 shows this combining of reasons for the comparison of the studies.

In order to see whether this study followed closely the findings of other similar studies the standard error of a percentage was used with the critical value at the five per cent level to see if the mean percentage of the samples

TABLE 29
COMPARISON OF REASONS FOR WITHDRAWAL OF THIS STUDY WITH FOUR OTHER SIMILAR STUDIES

|  | Causes for Withdrawing |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Names of Studies |  |  |  | $\begin{aligned} & \text { y } \\ & \text { H } \\ & 3 \end{aligned}$ |  |  | $\begin{aligned} & \text { H } \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & \text { H } \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & \dot{H} \end{aligned}$ |  |  | $\begin{aligned} & 0 \\ & .0 \\ & .0 \\ & . \tilde{H}_{4}^{0} \\ & \text { H } \end{aligned}$ |
| Harvey C. Johnson Beaumont, Texas | No. \% | 369 | $\begin{array}{r} 45 \\ 12.17 \end{array}$ |  | $\begin{array}{r} 34 \\ 9.21 \end{array}$ |  | $\begin{array}{r} 28 \\ 7.59 \end{array}$ | $\begin{array}{r} 27 \\ 7.32 \end{array}$ | $\begin{array}{r} 19 \\ 5.15 \end{array}$ | $\begin{array}{r} 24 \\ 6.23 \end{array}$ |
| William D. Igoe McKean Co., Pa. | No. \% | 95 | $\begin{array}{r} 6 \\ 6.31 \end{array}$ |  |  |  |  | 3 3.16 | $\begin{array}{r} 7 \\ 7.37 \end{array}$ | $\begin{array}{r} 12 \\ 12.63 \end{array}$ |
| Harold J. Dillon | No. \% | 957 | $\begin{array}{r} 342 \\ 35.74 \end{array}$ |  | $\begin{array}{r} 55 \\ 5.75 \end{array}$ |  |  | $\begin{array}{r} 66 \\ 6.89 \end{array}$ |  |  |
| Charles J. Johnson South Carolina | $\underset{\%}{\text { No. }}$ | 273 | $\begin{array}{r} 32 \\ 11.72 \end{array}$ |  | $\begin{array}{r} 15 \\ 5.49 \end{array}$ |  |  | $\begin{array}{r} 27 \\ 9.89 \end{array}$ |  |  |
| This Study | $\underset{\%}{\text { No. }}$ | 154 |  | 12. |  | $\begin{array}{r} 8 \\ 5.19 \end{array}$ |  |  |  | $\begin{array}{r} 22 \\ 14.29 \end{array}$ |


| $\begin{aligned} & 0 \varepsilon \cdot \tau \\ & Z \end{aligned}$ |  |  | $\begin{aligned} & \angle 6 \cdot 52 \\ & \text { O\# } \end{aligned}$ |  | $\frac{{ }_{i} \mathrm{~T} \cdot \mathrm{~L}}{}$ |  | $.{ }^{\circ}{ }_{\mathrm{on}}$ | Kpn7s sful |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $\begin{aligned} & z 8^{\circ} \mathrm{zI} \\ & \end{aligned}$ |  | $\begin{aligned} & 6 z^{\circ} \dagger t \\ & 6 \varepsilon \end{aligned}$ |  |  |  |  | $\stackrel{\%}{._{\mathrm{O}}}$ | виттолеう чұ <br> иовичог $\cdot$ я setxeyo |
| ${ }_{2 \pi} 6^{\circ}{ }^{\circ}$ |  | $\begin{aligned} & S L \cdot S \\ & S S \end{aligned}$ |  | $\begin{aligned} & \angle 8^{\circ} 0 \mathrm{OT} \\ & \mathrm{HOT} \end{aligned}$ |  |  | $\stackrel{\%}{{ }^{\%}{ }_{\mathrm{on}}}$ | uottta - ¢ ptoxeh |
|  | ${ }_{z}^{T I \cdot \tau}$ | $\underset{\varepsilon}{9 \pi \cdot \varepsilon}$ |  | $\underset{L}{L E \cdot L}$ | $\begin{aligned} & z \varepsilon \cdot 9 \\ & 9 \end{aligned}$ | $\begin{aligned} & z \varepsilon \cdot 9 \\ & 9 \end{aligned}$ | $.{ }^{\%}$ |  -osi •a mettty |
| $\underset{\varepsilon T}{2 S \cdot \varepsilon}$ | $\begin{aligned} & 2 \pi \cdot 5 \\ & 0 Z \end{aligned}$ | $\begin{aligned} & 79^{\circ} 5 \\ & \pi Z \end{aligned}$ |  |  |  | $\begin{aligned} & 79^{\circ} 5 \\ & \mathrm{Tz} \end{aligned}$ | $\stackrel{\%}{{ }^{\circ}}$ | sexed 'quouneeg <br>  |
|  |  |  |  |  | $\begin{aligned} & \text { un } \\ & \text { H } \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 4 \end{aligned}$ |  |  | soṭpn7s Jo souren |
|  |  |  |  |  |  |  |  |  |

репитұиол-6z งтяVは

| ${\underset{\varepsilon}{5} 6^{\circ} \tau}^{\tau}$ | $\begin{aligned} & 65 \cdot 2 \\ & 7 \end{aligned}$ | $\begin{aligned} & 6 \pi \cdot \varsigma \\ & 8 \end{aligned}$ |  |  |  |  | $.{ }_{-}^{\%}$ | Spnzs stulu |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $\begin{aligned} & 96 \cdot 9 \\ & 6 \tau \end{aligned}$ |  |  |  | $\begin{aligned} & 86^{\circ} \mathrm{Tz} \\ & 09 \end{aligned}$ |  | $\begin{aligned} & z S \cdot 6 \\ & 9 z \end{aligned}$ | $.{ }_{-1}^{\%}$ | buṭoxej yqnos ио sичог •я sөтхячо |
| $\begin{aligned} & 2 \pi \cdot G \\ & 6 \pi \end{aligned}$ |  |  | $\begin{aligned} & \text { EO•ध } \\ & 6 z \end{aligned}$ | $\begin{aligned} & S 0^{\circ} S T \\ & \pi \pi^{\prime} T \end{aligned}$ |  | $\begin{aligned} & \varepsilon \tau \cdot \varepsilon \\ & 0 \varepsilon \end{aligned}$ | $.{ }_{\mathrm{ON}}^{\%}$ |  |
| $\underset{\varepsilon}{9 \mathrm{~T}} \cdot \varepsilon$ |  |  | $\begin{aligned} & 2 \pi \cdot 6 \\ & 6 \end{aligned}$ | ${ }_{\varepsilon}^{9 \pi \cdot \varepsilon}$ | ${ }_{\varepsilon}^{9 \pi \cdot \varepsilon}$ |  | $\stackrel{\%}{{ }_{\mathrm{ON}}}$ |  <br>  |
|  |  |  | $\underset{Z \tau}{S Z \cdot \varepsilon}$ |  | $\underset{\mp T}{6 L \cdot \varepsilon}$ |  | ${ }^{\%}{ }_{\mathrm{o}_{\mathrm{N}}}$ | sexpl 'quouneeg иоsuчoг Көл.тв |
| $\begin{aligned} & \underset{H}{H} \\ & \text { H } \\ & \stackrel{0}{0} \\ & \stackrel{\sim}{0} \\ & \text { O } \end{aligned}$ |  | $\begin{aligned} & \text { n} \\ & \stackrel{\circ}{\circ} \\ & \stackrel{\sim}{\sim} \\ & \sim \end{aligned}$ |  |  |  |  |  | sotppoz fo souve |
| suṭmexpufim xof sesney |  |  |  |  |  |  |  |  |

panuтquoj-62 gT日VI
deviated beyond the limits of the population percentage. If these sample percentages do not come within the confidence interval; that is, between the upper and lower confidence limits then there is high probability that there are factors other than chance affecting the reliability of these measurements.

The level of confidence is computed from the standard error of a percentage as formulated and illustrated by J. P. Guilford. ${ }^{1}$ It was used to test the level of confidence at the five per cent level by observing whether the means of the sample percentages came within the interval of the population mean.

In order to set up the confidence limits the standard error of a percentage must first be found. It is found by the formula below:

Standard error of a percentage $\left(\sigma_{\%}\right)=\sqrt{\frac{P Q}{N}}$ where $P$ is the percentage of the population that used the particular cause for dropping out of school of the total population, and $Q$ represented those who did not use this particular reason. Because we are dealing with percentages the formula for $Q=(100-P)$. After the standard error of a percentage was found, it was multiplied by the critical value (1.96) of the $z$ score at the five per cent level. This results was used to set the limits of the confidence interval.
$1_{J}$. P. Guilford, Fundamental Statistics in Psychology and Education, Third Edition (New York: McGraw-Hill Book Company, Inc., 1956), p. 177.

This was done by adding the number to the population percentage to get the upper limit, and subtracting it to get the lower limit. See Appendix II for the computation of the confidence interval using the standard error of a percentage. What is shown in the figures in Table 30 is that those means or sample percentages that fall within the confidence intervals can be interpreted as a reasonable expectation from the samples used if they are random samples. However, if they are outside the limits it is reasonable to suspect that there are other factors or variables, other than chance affecting the sample distribution.

It can be seen from Table 30 that this study and the others are not compatible in the distribution of sample percentages within the confidence limits set by the population percentage for most of the reasons given for withdrawing from school. Under the reason for withdrawing, "Wanted to Go to Work," none of the percentages fell within the confidence interval. This was also true of "Insufficient Money" and "Marriage." Under the reason for withdrawal of "Lack of Interest" the studies of Harvey C. Johnson and William D. Igoe came within the confidence limits. Under the reason for withdrawal of "Pregnancy" this study and the one by William D. Igoe came within the confidence limits. Only Harold J. Dillon's study came within the limits under the reason "Disliked Teachers." Harvey D. Johnson's and William D. Igoe's studies fell within the confidence limits under the reason for withdrawal of "Joined Armed Forces."

COMPARISON OF REASONS FOR WITHDRAWAL OF THIS STUDY WITH FOUR OTHER SIMILAR STUDIES WITH SIMILAR CAUSES COMBINED WITH THE FIVE PER CENT CONFIDENCE LIMITS SHOWN

| Names of Studies | Number of Drop-outs | Causes for Withdrawing |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Work |  | Insufficient Money |  | Lack of Interest |  |
|  |  | No. | \% | No. | \% | No. | \% |
| Harvey C. Johnson | 369 | 45 | 12.17 | 34 | 9.21 | 49 | 13.55* |
| William D. Igoe | 95 | 6 | 6.31 | 3 | 3.16 | 13 | 13.68* |
| Harold J. Dillon | 957 | 342 | 35.74 | 199 | 20.79 | 104 | 10.87 |
| Charles J. Johnson | 273 | 32 | 11.72 | 75 | 27.47 |  |  |
| This Study | 154 | 20 | 12.99 | 8 | 5.19 | 40 | 25.97 |
| Percentage of Total Drop-outs |  |  | 28.04 |  | 17.26 |  | 13.08 |
| Standard Error of a Percentage |  |  | 0.995 |  | 0.879 |  | 0.849 |
| 5\% Level of Confidence |  |  | 1.95 |  | 1.72 |  | 1.66 |
| Upper Confidence Limit |  |  | 26.03 |  | 18.88 |  | 14.74 |
| Lower Confidence Limts |  |  | 22.13 |  | 15.53 |  | 11.42 |

*This percentage does not deviate significantly beyond the $5 \%$ level of confidence from the corresponding percentage for the total group.

TABLE 30-Continued

| Names of Studies | Number of Drop-outs | Causes for Withdrawing |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Marriage |  | Pregnancy |  | Disliked Teachers |  |
|  |  | No. | \% | No. | \% | No. | \% |
| Harvey C. Johnson | 369 | 24 | 6.23 |  |  | 1.3 | 3.52 |
| William D. Igoe | 95 | 12 | 12.63 | 6 | 6.31* |  |  |
| Harold J. Dillon | 957 |  |  |  |  | 47 | 4.91* |
| Charles J. Johnson | 273 |  |  |  |  | 35 | 12.82 : |
| This Study | 154 | 22 | 14.29 | 11 | 7.14* | 2 | 1.30 |
| Percentage of Total Drop-outs |  |  | 9.39 |  | 6.82 |  | 5.53 |
| Standard Error of a Percentage |  |  | 1.173 |  | 1.59 |  | 0.546 |
| 5\% Level of Confidence |  |  | 2.30 |  | 3.12 |  | 1.07 |
| Upper Confidence Limit |  |  | 11.69 |  | 9.94 |  | 6.60 |
| Lower Confidence Limit |  |  | 7.09 |  | 3.70 |  | 4.46 |

*This percentage does not deviate significantly beyond the $5 \%$ level of confidence from the corresponding percentage for the total group.

TABLE 30-Continued

| Names of Studies | Number of Drop-outs | Causes for Withdrawing |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Arme | Forces | Illness |  | Totals |  |
|  |  | No. | \% | No. | \% | No. | \% |
| Harvey C. Johnson | 369 | 14 | 3.79* |  |  | 179 | 48.51 |
| William D. Igoe | 95 | 3 | 3.16* | 3 | 3.16 | 46 | 48.52 |
| Harold J. Dillon | 957 |  |  | 49 | 5.12* | 741 | 77.43 |
| Charles J. Johnson | 273 |  |  | 1.9 | 6.96 | 161 | 58.97 |
| This Study | 154 | 2 | 1.30 | 3 | 1.95 | 108 | 70.13 |
| Percentage of Total Drop-outs |  |  | 3.07 |  | 5.00 |  | 66.83 |
| Standard Error of a Percentage |  |  | 0.693 |  | 0.567 |  | 1.095 |
| 5\% Level of Confidence |  |  | 1.36 |  | 1.11. |  | 2.15 |
| Upper Confidence Limit |  |  | 4.43 |  | 6.11 |  | 68.98 |
| Lower Confidence Limit |  |  | 1.71 |  | 3.89 |  | 64.88 |

*This percentage does not deviate significantly beyond the $5 \%$ level of confidence from the corresponding percentage for the total group.

There are several things that possibly could cause the various sample percentages not to fall within the confidence limits. The variation in the size of the number of drop-outs in the studies would affect them. There is a fairly large spread in the number of drop-outs in William D. Igoe's study with ninety-five drop-outs and Harold J. Dillon's study of 957 drop-outs. The procedures or methods of research may also be a factor in causing a difference in the results expected. The fact that some school records are filled with information for withdrawing which is secured from other pupils and is not authenticated will also affect the reliability.

## CHAPTER IV

FINDINGS, CONCLUSIONS, AND RECOMMENDATIONS

## Procedures

The purpose of this study was to ascertain certain characteristics of a particular class in elementary school and high school, and to relate these characteristics to the drop-out problem in that class. Although there have been numerous studies made on drop-outs, it was felt that each situation is different, and that such a study would be of great assistance to a school system as it plans its educational program to meet the needs of its pupils.

It was intended that this study would provide some facts from which some generalizations and conclusions could be drawn which would aid in keeping the pupils of the community studied in school until they graduated from high school.

The descriptive survey method of research was used in this study. The data were secured from available records by the use of an individual student's schedule. A review of the literature provided important information about the various aspects of the drop-out problem and effective ways of dealing with it.

The study was limited to the records of the elementary and high school that the pupils attended. The population studied consisted of 202 pupils of the 1956-57 seventh grade class of the George W. Carver Elementary School of Dallas, Texas. An individual schedule was used to record the information for each student. Forty-eight or 23.76 per cent of the pupils were graduated and 154 or 76.24 per cent were dropouts.

The first part of the present chapter presents the general summary. This is followed by a statement of findings and conclusions which may be drawn from the study. The last part consists of recommendations concerning methods and procedures for studying the drop-out problem, and ways of reducing the incidence of school drop-outs.

## Findings and Conclusions

Of the 202 pupils in the seventh grade class being studied, there were eighty-eight boys and sixty-six girls who withdrew from school. Twenty-one boys and twenty-seven girls graduated. This represents a drop-out rate of 76.24 per cent. Twenty-one or 19.27 per cent of the 109 boys graduated, and eighty-eight or 80.73 per cent dropped out. Twenty-seven or 20.03 per cent of the ninety-three girls graduated, and sixty-six or 70.97 per cent deopped out before graduation.

Forty-seven per cent of the drop-outs withdrew
before the semester in which their compulsory attendance period would have ended; 14.29 per cent withdrew during the semester in which their compulsory attendance period ended; and 38.31 per cent withdrew after the beginning of the next semester, following the end of the compulsory attendance period.

Many reservations may be made about the validity of the findings of studies concerning the reasons students drop out of school. In this study the reasons were taken from the records.

Forty or 25.97 per cent of those who withdrew gave "indifference or lack of interest" as their reason for withdrawing. The next largest group, twenty-two or 14.29 per cent, gave "married" as the reason for withdrawing. If this reason is coupled with the eleven or 7.14 per cent who withdrew for "pregnancy" this would represent 21.43 per cent of the drop-outs. Twenty or 12.99 per cent of the pupils gave "work" as a reason for withdrawing. There is some question as to how many of these pupils were actually able to find employment. There were thirty-four or 22.08 per cent of the drop-outs' records that did not show why they withdrew. There were eight in each group who had "social" and "financial: as their reason for withdrawing. One can only guess as to what is involved in the interpretation of "social." "Financial" also is a bit vague. Does it refer to insufficient money to get minimal essentials to attend school, or
does it refer to not enough spending money to match that of the average member of the peer group? It appears that a better study design is needed that can approach more accurately the real reason for withdrawing before graduation. Possibly then there can be instituted real and effective remedies for this waste of human resources.

The following characteristics of the drop-outs were found and compared with those of the graduates:

1. Time of entry into high school. - The drop-out had a higher incidence of late entry into high school, according to age, than the graduate.
2. Number of brothers and sisters. - The size of the family of the drop-out was larger than the graduate when you reach six or more than six children in a family. Within both groups of boy and girl graduates, the percentage with five brothers and sisters was larger than for the drop-outs. Overall there was not a great deal of difference between the graduate and the dropout with fewer than five brothers and sisters.
3. Persons with whom pupil lived. - The percentage of drop-outs who lived with both parents was greater than those of the graduates by a fraction of a point. The drop-outs showed 38.64 per cent and the graduates 38.09 per cent. However, among the girls the advantage was with the
graduates. The graduates had 44.45 per cent living with both parents while the drop-outs had 25.76 per cent. The graduates among the boys had 52.29 per cent living with their mothers as opposed to 43.18 per cent for the drop-outs. The percentage of drop-outs among the girls, living only with the mother was 56.06 per cent, as compared with 51.85 per cent, for the graduates.
4. Occupation of major wage earner of family. - In this category there was not enough difference between boys and girls and between graduates and drop-outs to be really significant. The big difference between drop-out and graduates was the large number of pupils among the drop-outs for which the employment of their parents was not listed. This could mean that the parents did not have regular jobs and the pupils did not list anything by which their parents' job classification could be determined.
5. The educational attainment of father and mother. The educational attainment of the fathers of the boys who graduated was generally better than that of the drop-outs. There were, however, 45.46 per cent of the fathers of the drop-outs in which this information was not given. The fathers of
the girls who graduated had a higher level of educational attainment than the fathers of the drop-outs. The largest per cent of both graduate and drop-out was in the group of "high school not completed." This is also true of the mothers of both the boys and girls. The educational attainment of parents of graduates was slightly higher than for the parents of the drop-outs, but the difference was too small to be significant.
6. The intelligence quotient of the pupils. - The boys who graduated had higher intelligence quotients than the drop-outs. Almost thirty per cent of the drop-outs were in the group of scores of "69 and below." In each of the other groups for both boys and girls, the graduates faired better than the drop-outs.
7. The first semester attendance record. - In attendance, for both boys and girls, drop-outs were absent more days than the graduates. One might want to ask two questions relative to the number of days absent: Was the number of days absent a factor in withdrawing from school; or were other drop-out causes accountable for the large number of days absent? Another question arises when one looks at the days absent of some drop-outs:

Is there a consistent procedure for dropping pupils after a certain number of days of absence or is it done arbitrarily when other factors are involved?
8. The number of subjects failed. - The graduates did not fail any subjects during the first semester. Approximately sixty-eight per cent of the boys and sixty-seven per cent of the girls in the population studied did not fail any subjects. Among the drop-outs, the per cent of boys failing one or more subjects was larger than that of the girls. There was no indication as to whether some of the subject failures might have been due to the number of days absent rather than inability to do the work of the course.
9. The subjects failed and number of failures per subject. - There were not any subjects failed by the graduates during the first semester. The number of course failures of boys and girls among the drop-outs were about equally distributed. The boys had thirty-three cumulative failures in the various subjects as compared to thirty-four for the girls. The boys had their largest number of failures in language arts, mathematics, and shop in the order named. The girls had their greatest number in mathematics,
social studies, and homemaking in the order named. Since there were only thirty-three subjects failures among the boys, and thirty-four subjects failures among the girls, it was quite likely that the number of pupils involved was fewer than these figures because of the possibility of a pupil failing more than one subject. In comparing the academic achievement in the eleientary school of the drop-outs with the graduates, it was sinn that the graduates generally did better than the drop-ous. The graduates had more grades of "l" than the drop-outs and their overall performance included more "2's" than "3's" while the drop-outs overall performance included more "3's" than "2's" with a large number of "4's." Motivation could be a large factor in the difference in performance between the graduates and drop-outs.

It might be concluded that there were few characteristics of the drop-outs that stood out sufficiently from the graduate as to be considered significant in the search for causes of withdrawing from school before graduation. The more one explores the drop-out problem, the more he is convinced that it is next to impossible to take a single factor and label it as the cause for a pupil's withdrawing from school. In most cases it is a combination of several factors acting usually at the same time which causes the pupil to withdraw. Often the overt action of the pupil is not the
cause but only a symptom of the cause, and should elicit a more careful investigation of the pupil's action. It is not rare for the symptoms to be treated rather than the cause for withdrawal.

It was found from the comparison of this study with the four other studies that no valid conclusions can be drawn relative to the difference in percentages for the various reasons for withdrawal because of too many uncontrolled variables. Too few of the causes for withdrawal of the studies fell within the confidence limits to make any reliable inferences.

## Recommendations

The recommendations listed below are directed, first toward the methods and procedures for studying the drop-out problem, and secondly, to the listing of recomnendations that may help remedy the problem.

## Methods and Procedures for Studying the Drop-out Problem

1. It is recommended studies be made with trained investigators interviewing drop-outs in several regions using identical procedures to eliminate the bias of different investigators with possibly different frames of reference.
2. It is further recommended that the investigation elicit several responses from the drop-out that can be weighted according to importance so that more meaningful causes can be assigned for the pupil's withdrawal.

## Possible Means of Reducing <br> School Drop-outs

1. Each school district should periodically make a thorough and comprehensive study of its drop-outs and use the results to assess the offerings of the curriculum and the counseling services of the school.
2. It is strongly recommended that counseling services be extended into the elementary school beyond that which the classroom teacher may give. Also remedial and special help should be increased at this level before the potential drop-out has experienced so much failure that he is hopelessly lost.
3. There is a need for a strong guidance and counseling program at the ninth grade level to give pupils a view of the relationship between the educational and occupational world in which he must function as an adult. This is made even more necessary in view of the trend toward early marriage by teen-agers.
4. More subsidy for indigent pupils should be provided so that they may go to class without constant embarrassment where direct costs are involved. Not only should money for laboratory and shop fees be.provided, but also the cost of participating in the band, chorus, and various other academic clubs.
5. There should be a number of planned tours to museums, theatres, cultural programs, and industries to
broaden the understanding of these vital facets of life that the culturally deprived would otherwise not experience.
6. It is recommended that more "practical learning experiences" be included in the schedule of the potential drop-out.
7. Finally, it is recommended that a plan be devised by which the total environment of a pupil will be considered, especially the home, when steps are being proposed to prevent withdrawal.

BIBLIOGRAPHY

## BIBLIOGRAPHY

## Books

> Alberty, Harold. Reorganizing The High School Curriculum. New York: The Macmillan Company, 1957.
Alexander, William, and Saylor, J. Galen. Modern Secondary
Education: Basic Principles and Practices. New York:
Holt, Rinehart, and Winston, 1961.

Allen, Charles M. How To Conduct the Holding Power Study: Circular Series A, No. 5l, Illinois Secondary School Curriculum Program Bulletin No, 3, Office of the State Superintendent of Public Instruction. Springfield, Illinois, May, 1949.

Bell, Howard M. Youth Tell Their Story. Washington, D.C.: American Council of Education, 1938.

Bossing, Nelson L. Principles of Secondary Education. Englewood Cliffs: Prentice Hall, Inc., 1955.

Burchill, G. Work Study Programs for Alienated Youth: A Casebook. Chicago: Science Research Associates, Inc., 1961.

Chapple, Dorothy S. The School Drop-out: An American Calamity. New York: Birk \& Co., Inc., 1963.

Conant, James B. Slums and Suberbs. New York: McGrawHill Books Co., 1961.

Diamond, Solomon. Information and Error. New York: Basic Books, Inc., 1957.

Dillon, Harold J. Early School Leavers. New York: National Child Labor Committee, 1949. Work Experience in Secondary Education. Publication No. 394. New York: National Child Labor Committee, June, 1946.

Douglas, Harl R., ed. Education for Life Adjustment. New York: The Ronald Press Company, 1950.

Douglas, Harl R. and Grider, Calvin. American Public Education: An Introduction (New York: The Ronald Press Company, 1948), p. 263.

Eckert, Ruth E., and Marshall, Thomas O. When Youth Leaves School. The Regents' Inquiry. New York: McGraw-Hill Book Company, Inc., 1938.

Educational Policies Commissiary. Education and the Disadvantaged American. Washington, D.C.: National Education Association, 1962.

Education Policies Commission. Education For All American Youth. Washington, D.C.: National Education Association and American Association of School Administrators, 1944.

Educational Policy Commission. Education for all American Youth: A Further Look. Washington, D.C.: National Education Association of U.S. and American Association of School Administrators, 1952.

Fauce, Roland C., and Bossing, Nelson L. Developing the Core Curriculum. New York: Prentice-Hall, Inc., 1951.

Ford Foundation. Society of the Streets. New York: Ford Foundation, Office of Reports, 1962.

Good, Carter V., and Scates, Douglas E. Methods of Research. New York: Appleton-Century-Crofts, Inc., 1954.

Guilford, J. P. Fundamental Statistics in Psychology and Education. Third Edition. New York: McGraw-Hill Book Company, Inc., 1956.

Hand, Harold C. Principal Findings of the 1947-48 Basic Studies of the Illinois Secondary School Curriculum Program. Circular Series A, No. 51, Illinois Secondary School Curriculum Program Instruction. Springfield, Illinois, May, 1949.

Healy, Williams, and Bronner, Augusta. What Makes a Child Delinquent? Forty-Seventh Year Book, National Society for the Study of Education, Part I. Chicago: University of Chicago Press, 1949.

Hollingshead, A. B. Elmstown Youth. New York: John Wiley and Sons, Inc., 1949.

Hoppock, Robert. Occupational Information. New York: McGraw-Hill Book Co.

Houston, Victor M.; Seenford, Charles W.; and Trump, Lloyd, Jr . Guide to the Study of the Curriculum in the Secondary Schools of Illinois. Circular Series A., No. 51, Illinois Secondary School Curriculum Program Bulletin No. l. Office of the State Superintendent of Public Instruction: Springfield, Illinois, August, 1948.

Hunt, DeWitt. Work Experience Education Programs in American Education. Washington D.C.: Department of Health, Education and Welfare; U.S. Office of Education, Bulletin No, 5, 1957.

Keller, Franklin Jefferson. The Comprehensive Hish School. New York: Harper and Brothers Publishers, 1955.

Krug, Edward A. The Secondary School Curriculum. New York: Harper and Brothers, Publishers, 1960.

Kuaraceus, William C. Juvenile Delinquency and the School. New York: World Book Company, 1945.

National Committee for Children and Youth. Social Dynamite. Washington, D.C.: National Committee of Children and Youth, 1961.

Neisser, Edith G. School Failures and Dropouts. New York: Public Affairs Committee, 1963.

Lichter, Solomon E., et al. The Drop-outs. Glencoe, Illinois: Free Press, 1962.

Reissman, Frank. The Culturally Deprived Child. New York: Harper and Bros., 1962.

Riseman, Frank. The Culturally Deprived Child. New York: Harper and Brothers, 1962.

Schreiber, Daniel, ed. The School Drop-out. Washington, D.C.: National Education Association, 1964.

Schreiber, Daniel, ed. Guidance and the School Drop-out. Washington, D.C.: National Education Association and the American Personnel Guidance Association, 1964.

Sexton, Patricia. Education and Income. New York: Viking Press, 1961.

Smith, B. O.; Stanley, W. O.; and Shores, J. H. Fundamentals of Curriculum Development. New York: World Book Company, 1950.

Stetler, Henry G. Comparative Study of Negro and White Dropouts in Selected Connecticut High Schools. Hartford: Connecticut Commission on Civil Rights, 1959.

Tưllier, Paul C. "The Three U's--Unschooled, Unskilled, Unemployed." Special Report, The World Book Yearbooks. Chicago: Fields Enterprises Educational Corporation, 1963.
U.S. Department of Labor, Bureau of Labor Statistics. School and Early Employment of Youth. A Report on Seven Communities, 1952-57, Bulletin No. 1277. Washington, D.C.: Superintendent of Documents, Government Printing Office, August, 1960.

United States Department of Health, Education, and Welfare, Office of Education. Retention in High Schools in Large Cities. Washington, D.C.: United States Government Printing Office, 1957.

Van Dyke, L. A., and Hoyt, K. B. The Drop-out Problem in Iowa High Schools. Iowa City, Iowa: College of Education, State University of Iowa, 1958.

Warner, W. L. et al. Who Shall Be Educated? New York: Harper and Brothers, 1944.

## Articles and Periodicals

Alonzo, Curelia. "Y Forum Seeks Action on Drop-out Problem." The Dallas Morning News (Dallas, Texas), November 22, 1963.

Brerston, H. M. "School Drop-outs Problem." Clcaring House, XXXV (December, 1960), 207-10.

Birkmaier, Emma Marie. "What to Do About the Drop-out Who
Returns to School." North Central Association Quarterly, XXVIII (Spring Issue), 301-308.

Bledsoe, J. C. "Investigation of Six Correlates of Student Withdrawal From High School." Journal of Educational Research, LV (September, 1959), 3-6.

Boggan, E. J., and Patterson, W. G. "What Are the Major Causes of Student Drop-outs, and What Should the Schools Do About the Present Conditions?" National Association of Secondary School Principals Bulletin, XXXIX (April, 1955), 84-88.

Boggan, Earl J., and Hiram, Alexander. "What Is an Effective Program for Increasing the School's Holding Power?" National Association of Secondary School Principals Bulletin, XXXVIII (April, 1954), 26-27.

Boodish, H. M. "Educational Problems and Roadblocks." Social Studies, LIII (November-December, 1962), 228-32, 269-73.

Brewer, Welden. "Why Did They Quit?" Education Digest, XVI (November, 1950), 54-55.

Brown, N. W. "Why They Leave School." The Education Digest, XVI (February, 1950), 41.

Byrne, R. H. "Beware the Stay-In School Bandwagon!" Personnel and Guidance Journal, XXVI (March, 1958), 493-96.

Cantoni, Louis J. "Stay-Ins Get Better Jobs." Personnel and Guidance Journal, XXXIII (May, 1955), 351-53.

Caravello, S. J. "The High School Drop-Out Problem." High School Journal, XII (May, 1958), 335-340.

Carlsow, Theodora E., ed. "More Years in School." School Life, XXXXIX, No. 7 (April, 1957).

Carrothers, G. E. "Why Do High School Pupils Fail?" National Association of Secondary School Principals Bulletin, XXX (March, 1946), 29-36.

Cassell, Russell N. and Coleman, Jack C. "A Critical Examination of the School Drop-out, Reluctant Learner, and Abler Non College Student Problem." National Association of Secondary School Principals Bulletin, XLVI, No. 277 (November, 1962), 60-65.

Chamberlin, Gordon L., and Catterall, Calvin D. "Acceleration for the Average Potential Drop-out?" Phi Delta Kappan, XLV (November, 1963), 70-75.

Cook, Edward S., Jr. "An Analysis of Factors Related to Withdrawal From High School Prior to Graduation." Journal of Educational Research, L (November, 1954), 191-196.

Cook, Edward S., Jr. "How IQ Figures in the Drop-out Problem." School Executive, LXXIV (September, 1954), 56-57.

Davie, James S. "Social Class Factors and School Attendance." The Harvard Educational Review, XXIII (Summer, 1953), 184.

Dillon, Harold. "Early School Leavers." School Review, LVIII (January, 1950), 1-4.

Dresher, Richard H. "Factors in Voluntary Drop-outs." Personnel and Guidance Journal, XXXII (January, 1954), 287-89.
"Drop-outs." Senior Scholastic, LXXXI (November 7, 1962), 15-16.
"Drop-outs and the Draft." New Republic, CXLIX (August 17, 1963), 3-4.

Eargle, Z. E. "Social Class and Student Success." High School Journal, XLVI (February, 1963), 162-69.

Eckerson, Louise 0., and Smith, Hyrum M. "Successful Guidance in the Elementary School." (School Life) The Education Digest, XXVII, No. 3 (November, 1962).

First, Joan M. "Drop-out." Michigan Educational Journal, XXXVIII (November, 1960), 250-53.

Fornwalt, Russell J. "Toward an Understanding of Truancy." School Review, LV (February, 1947), 91.

Fulton, R. J. "Problems of Drop-outs in High School Language Classes." Modern Language Journal, XLII (March, 1958), 115-19.

Garbarini, M. "Delinquency, Drop-out and Related Problems." Michigan Education Journal, XL (January, 1963), 349-50.

Giesse, R. J. "Closer Look At Drop-Outs." Texas Outlook, XLVIII (January, 1963), 24-25.

Goldberg, A. J. "Keep Them in School." National Education Association Journal, L (April, 1961), 9 .

Gragg, William Lee. "Some Factors Which Distinguish Dropouts From High School Graduates." Occupations The Vocational Guidance Journal, XXVII (April, 1949), 457-59.

Gragg, William L. "Findings, in Ithica's Continuous Survey of Drop-outs." The Clearing House, XXVI (March, 1952), 413-14.

Gragg, William L. "School Leavers: They Can Be Spotted in Junior High." The Clearing House, XXV (October, 1950), 72-74.

Grant, W. V. "Holding Power of U.S. Schools Rises." School Life, XLV (November, 1962), 35.

Green, Donald A. "A Study of Talented High School Drop-outs." The Vocational and Guidance Quarterly, X, No. 3, (Spring, 1962), 171-72.

Green, Donald A. "School Drop-Outs, A Matter of Philosophy." The Vocational Guidance Quarterly, IX, No. 2 (Winter, 1960-1961), 124-27.

Greene, B. I. "Drop-out and the Elementary School." National Elementary Principal, XLII (November, 1962), 52-54.

Hightower, Howard and others. "Mystery of the Elementary Drop-out." Phi Delta Kappan, XXXVIII (November, 1956), 62-64.

Holbeck, E. S. "Seven Ways to Prevent Drop-outs." Nation Schools, XLV (May, 1950), 35-36.

Hoover, Dennis. "Drop-Outs Study Set." The Dallas Morning News (Dallas, Texas), April 25, 1963.

Hull, J. Dan, and Cummings, Howard H. "How Fare American Youth in 1962?" School Life, XLIV, No. 4 (JanuaryFebruary, 1962), 13-17.

Israel, Saul. "Don't Forget the Slow Learner." National Association of Secondary School Principals Bulletin, XIVI, No. 272 (March, 1962), 74-76.

Jacques, William T. "Tastings High School Works on the Dropout Problem." Personnel and Guidance Journal, XXXV (September, 1956).

Johnson, Elizabeth and Legg, Caroline E. "Why Young People Leave School." National Association of Secondary School Principals Bulletin, XXXII (November, 1948), 14-24.

Johnson, Eleanor M., Editor-in-Chief. "Diagnosis Points the Way to Learning Progress." My Weekly Reader, Education Center, Columbus, Ohio, October, 1962.

Jones, Nathaniel A. "Work Activity Programs for Delinquents." The Vocational Guidance Quarterly, XIII (Autumn, 1964), 45-49.

Kalish, A. "Re-entry?" High Points, XLIV (April, 1963), 5-13.

Kaplin, Bernard A. "Issues in Educating the Culturally Disadvantage." Phi Delta Kappan, XLV (November, 1963), 70-75.

Kelley, E. C. "Drop-Outs Our Greatest Challenge." Educational Leadership, XX (February, 1963), 294-96.

Kerr, Robert V. "We're Doing Something About Drop-outs." Scouting, LI (December, 1963), 10-11, 31.

Kohler, Mary K., and Fountaine, Andre. "We Waste A Million Kids A Year--The Job Situation." Saturday Evening Post, March 24, 1962, pp. 58-62. (Was in three issues, Vol. 235, No. 10, 11, and 12, March 10-17 and 24, 1962).

Kristan, C. V. "Meeting the Needs of School Drop-Outs." Chicago School Journal, XLIV (December, 1962), 11922 .

Lambert, Sam M. "Increasing Education's Holding Power." National Educational Association Journal, XXXIX (December, 1950), 664-66.

Lanier, J. Arman. "A Study of Student Withdrawals." Journal of Educational Research, XLIII (November, 1949), 205-12.

Lehaman, Joseph. "Juvenile Delinquency: A Social Dimension." Journal of Negro Education, XXVIII (Summer, 1959), Ch. IX.

Lichter, Solomon O.; Rapien, Elsie B.; Seihert, Frances M.; and Sklansky, Morris A. "Prevention of School Dropouts." School and Society, V (April 7, 1962), 159168.

Little, T. S. "Truancy Is A Sign That Something Is Wrong." The Texas Outlook, XXXV (April, 1951), 6-8.

Livingston, A. H. "Key to the Drop-out Problem." The Elementary School" Elementary School Journal, LIX (February, 1959), 267-70.

Livingston, A. Hugh. "High School Graduates and Drop-outs-A New Look at a President Problem." School Review LXVI (Summer, 1958), 195-203.

Maisel, Albert Q. "They Help Boys Want to Be Educated." Reader's Digest, LXXXIII (December, 1963), 100-04.

Matika, Francis W., and Sheerer, Rebecca. "Are the Causes of Drop-outs Excuses?" National Association of Secondary School Principals Bulletin, XLVI (November, 1962), 40-44, No. 277.

McDaniel, H. B. "Expertness in Preparing Youth for Employment." Journal of Secondary Education, XXXVIII (February, 1963), 65-67.

McGee, George A. "We Increased Our Holding Power." National Education Association Journal, XLII (November, 1953), 482 .

McMurrin, Sterling M. (U.S. Commissioner of Education). "Drop-Out Problem." Wisconsin Journal of Education. XCIV, No. 2 (October, 1961), 174.

Miller, C. G. "Why Not Say Yes to Teens? Youth Employment Service." Education Digest, XXVIII (January, 1963), 32-33.

Miller, C. L. "Educational Level and Junvenile Delinquency Among Negroes." Journal of Negro Education, XXXVIII, No. 3 (Summer, 1959), 268-75.

Miller, Leonard M., and Putnam, John F. "The Drop-out." Washington, D.C.: (Reprint from School Life, May, 1963) U.S. Department of Health, Education and Welfare, Office of Education, 1963, 16 pp .

Mock, Jozie. "They Want to Stay in School." The Texas Outlook, XLVII, No. 5 (May, 1963), 18-20.
$\begin{aligned} \text { Morman, } & \text { Robert R. "Auto-Mation, Drop-outs, Guidance." The } \\ & \text { Bulletin of the National Association of Secondary } \\ & \text { Principals. XLVIII (November, 1964), 83-98. }\end{aligned}$
Murk, V. "Follow-up Study on Students Who Drop Out of High School." National Association of Secondary School Principals Bulletin, XLIV (February, 1960), 73-75.

Myers, C. H. "Teachers' Friendliness Improves Student Attendance." National Association of Women Deans and Counselors Journal, XXV (April, 1962), 135-37.

Nancarrow, James E. "Reducing Drop-outs." National Association of Secondary School Principals Bulletin, XXXIV, No. 174 (December, 1950), 183-88.

Nancarrow, J. E. "How Can the School Reduce the Number of Early School Leavers?" National Association of Secondary School Principals Bulletin, XXXVIII (March, 1951), 3-4-330.

National Education Association. "High School Drop-Outs." National Education Association Research Bulletin, XXXVIII (February, 1960), 11-14.

National Education Association Research Division and Department of Classroom Teachers, Discussion Pamphlet No. 3, High School Drop-out (Washington, D.C.: The Association, September, 1959), p. 10.

Nelson, Lester W. "The Drop-Out Problem--A Growing Educational Concern Today." National Association of Secondary School Principals Bulletin, XLV, No, 264 (April, 1961), 275-80.

Nelson, L. W.; and Hunt, P. R., and Cohen, E. E. "Drop-out Problem." National Association of Secondary School Principals Bulletin, XLV (April, 1961), 275-80.

North, Willard E. "Field News." The Journal of Education Research, LVIII (April, 1965), 381.

Parker, Harry J. "High School Drop-Out Intentions of Seventh Grade Pupils." National Association of Secondary School Principals Bulletin, XLVI, No. 276 (October, 1962), 119-21.

Penty, R. C. "Reading Ability and High School Drop-Outs." National Association of Women Deans and Counselors Journal, XXIII (October, 1959), 11-15.

Porter, J. W. "Heart of the Drop-Out Problem: Early Identification." Michigan Education Journal, XL (January, 1963), 362-65.

Porter, Sylvia. "Help Wanted." Dallas Times Herald (Dallas, Texas), April 2l, 1965.

Preston, J. M. "Role of Continuation Education in Preparing Youth for Employment." Journal of Secondary Education, XXXVIII (February, 1963), 122-24.

Reetz, M. "Role of Adult Education in Preparing Youth for Employment." Journal of Secondary Education, XXXVIII (February, 1963), 125-28.

Ribicoff, Abraham. "Plain Words from Mr. Ribicoff on DropOuts." School Life, XLIV, No. 3 (November-December, 1961), 14-15.

Richardson, Robert A. "A School Board Member's View of School Drop-outs." The American School Board Journal, CL (February, 1965), 12.

Ritchie, Robert R. "The High School Drop-Out--An Educational Dilemma." National Association of Secondary School Principals Bulletin, XIVI, No. 277 (November, 1962) 45-47.

Roberts, R. O., and McGeever, J. F. "Junior Occupational Program." National Association of Secondary School Principals Bulletin, XII (November, 1957), 43-47.

Rosenfeld, Reba. "Junior High Programs for Potential Dropouts." The School Counselor, XII (March, 1965), 167-172.

Sando, Rudolph. "This They Believe." California Journal of Secondary Education, XXXI (January, 1956), 45-49.

Savitsky, Charles. "Work Experience Program for Potential Drop-Outs." National Association of Secondary School Principals Bulletin, XLVI (November, 1962), 53-59.

Schreader, B. M. "Detroit Job Up-Grading Problem.: Vocational Guidance Quarterly, X (Autumn, 1961), 53-54.

Schreiber, Daniel (Director, NEA Project on School Drop-Outs). "School Drop-Outs." National Education Association Journal, LI, No. 5 (May, 1962), 51-52.

Schreiber, Daniel (Project Director). "N.E.A. Project on Dropouts: Newsletter. H National Education Association, I, No. 1 (November, 1962), 4.

Schreiber, Daniel. "The School Drop-Out--Fugitive from Failure." National Association of Secondary School Principals, The Bulletin, XLVI, No. 274 (May, 1962), 233-44.

Schreiber, D. "School Drop-Out. The Female Species." National Association of Women Deans and Counselors Journal, XXV (June, 1962), 175-81.

Schreiber, D. "Drop-Out and the Delinquent. Promising Practices Gleaned from a Year of Study." Phi Delta Kappan, XLIV (February, 1963), 215-21.

Schaffer, Helen B. "School Drop-Outs." Editorial Research Reports, I (May 16, 1962).

Shapiro, S. "Operation Return, A New Program for High School Drop-Outs." High Points, XLV (April, 1963), 43-47.

Sharp, S. "Automobile and Pupil Adjustment." Clearing House, XXXII (October, 1957), 83-85.

Shaw, Frederick. "Educating Culturally Deprived Youth in Urban Centers." Phi Delta Kappan, XLV (November, 1963), 91-97.

Shea, D. P. "Drop-outs." Grade Teacher, LXXVII (December, 1959), 26.

Shibler, Herman L. "Attacking the Drop-out Problem." National Education Association Journal, XLIV (January, 1955), 24-26.

Slotkin, H. "New Program for Drop-Outs in New York City: A Coordinated Approach." Vocational Guidance Quarterly, X (Summer, 1962), 235-39.

Sorensou, M. A. "Low Ability Drop-Outs Versus Low Ability Graduates." Personnel and Guidance Journal, XXXIX (October, 1960), 144-45.

Super, Donald E. "The Critical Ninth Grade: Vocational Choice or Vocational Exploration." Personnel and Guidance Journal, XXXIX (October, 1960), 106-109.

Tesseneer, R. A., and Tesseneer, L. M. "Review of the Literature on School Drop-Outs." National Association of Secondary School Principals Bulletins, XIII (May, 1958), 141-53.

Thomas, Robert Jay. "An Empirical Study of High School Drop-Outs." Journal of Educational Sociology, XXVIII (September, 1954), 11-18.

Thompson, Michael L., and Nelson, Robert H. "The Drop-out Problem--Twelve Approaches Suggested." The Clearing House, XXXVIII (December, 1963), 200-203.

Tompkins, Ellsworth, and Gaumnitz, Walter H. "Reducing DropOuts." National Association of Secondary School Principals Bulletin, XXXIV (December, 1950), 188-95, No. 174.

Topetzes, Nick John and Ivanoff, John M. "The Drop-Out: How The School Can Help Him." Catholic School Journal, LXII, No. 2 (February, 1962), 35-36.

Vogel, Anita. "How to Check Drop-Outs." School Management, November, 1961, 73-83.

Warren, Doran. "Who Is Most Likely to Drop-Out." School Science and Mathematics, LIV (March, 1954), 185.

Warren, D. L. "Study of Drop-Outs in Austin." Minneapolis Journal of Education, XXXVIII (May, 1958), 23.

Weary, B. "Stay-in-School Campaign: National Stay-in-School Campaign: Handbook for Communities." School Life, XXIX (May, 1957), 13-15.

Weinrich, Ernest F. "How Can A School Increase Its Holding Power on Youth?" National Association of Secondary School Principals Bulletin, XXXVI (March, 1952), 125-30.

West, Dick. "Welfare--Just How Much Spoon Feeding?" The Dallas Morning News (Dallas, Texas), October 6, 1963.

Willis, Claude C., Jr. "A Program to Decrease the Number of Early School Leavers." National Association of Secondary School Principals Bulletin, XL (September, 1956), No. 221.

Wolfbein, Seymour. "Experience in Preparing Youth for Employment: The Need." Journal of Secondary Education, XXXVIII, No. 2 (February, 1963), 106-109.

Wolfbein, S. L. "Transition From School to Work. A Study of the School Leaver." Personnel and Guidance Journal, XXXVIII (October, 1959), 99-105.

Woollatt, Horne H. "Why Capable Students Drop-Out of High School." National Association of Secondary School Principals Bulletin, XLV, No. 268 (November; 1961), 1-8.

Wrage, John R. "How You Can Help Those Who Quit.: Wisconsin Journal of Education, XCIII, No. 1 (September, 1930).

## Reports

Council of Social Agencies of Dallas. Abridged Report-Presented to the Annual Meeting of the Council of Social Agencies of Dallas, June 5, 1962. (A mature and intellectually honest appraisal of the strengths and weaknesses of Dallas County health, welfare and character building services to youth.)

Dallas Independent School District. Pupil Personnel Accounting Report, Dallas, Texas, school year 1961-62. A report from the Superintendent of Schools to the Board of Education.

Dallas Independent School District. Pupil Personnel Accounting Report, Dallas, Texas. A Report from the Superintendent of Schools to the Board of Education concerning the Junior and Senior High Schools. School years 1961-62 and 1962-63.

Federal Security Agency Office of Education. Why Do Boys and Girls Drop out of School, and What Can We Do About It? (Work Conference on Life Adjustment Education, Chicago, Illinois, January 24-27, 1950). Report of Representatives of School Systems in Cities of more than 200,000 population. (Circular No. 269) Washington, D.C.: U.S.

McCreary, William H., and Kitch, Donald E. Now Hear Youth. Sacramento: A Report on the Cooperative Study of School Drop-outs and Graduates, California Department of Education, 1953.

Michigan Department of Public Instruction, State Curriculum Committee on Holding Power. Quickie Kit on School Holding Power. Publication No. 507. Lansing: The Depar tment, 1960.

National Education Association Research Division and Department of Classroom Teachers. Discussion Pamphlet No. 3, High School Drop-outs. Washington, D.C.: The Association, September, 1959.

St. Paul Public Schools. Second Drop-out Study: Based on Pupils Who Entered the Ninth Grade in the St. Paul Public Schools in September, 1955. St. Paul: Office of Secondary and Vocational Education, St. Paul Public Schools, Publication Number 259, 1961.

Segel, David, and Schruarm, Oscar J. Retention in High Schools in Large Cities. Washington, D.C.: U.S. Government Printing Office, 1957.
U.S. Department of Health, Education and Welfare, Office of Education. Retention in High Schools in Large Cities. Washington, D.C.: United States Government Printing Office, 1957.

Van Dyke, L. A., and Hoyt, K. B. The Drop-Out Problem in Iowa High Schools. Iowa City, Iowa: Iowa State Department of Public Instruction, 1938.

## Unpublished Material

Cantrell, William Paige. "Implication for Secondary School Curriculum Development in the Bay County Schools Derived from a Study of Drop-Outs." Unpublished Ed.D. Dissertation, Alabama Polytechnic Institute, 1958.

Fenelon, William John. "A Study of the Secondary School Drop-Out Problem at Port Washington, Wisconsin High School." Unpublished Ed.D. Dissertation, Northwestern University, 1960.

Igoe, William David. "Causal Factors of Drop-Outs from Upper Six Grades in Selected Fourth Class School Districts in McKean County, Pennsylvania." Doctor's Dissertation, The Pennsylvania State University, 1959.

Johnson, Charles James, Jr. "A Critical and Intensive Study
of Drop-Outs of Negro Students in Secondary Schools
in Columbia, S.C." Unpublished Doctor's Dissertation,
Pennsylvania State College, 1952.
Johnson, Harvey Clayton. "Pupil Dropouts in the High Schools of Beaumont, Texas, and Curriculum Implications." Unpublished Doctor's Dissertation, University of Southern California, 1960.

Opstad, Paul E. "Non Scholastic Factors Associated With DropOuts from Public Schools in Iowa." Doctor's Dissertation, State University of Iowa, 1958.

Plett, Joseph F. "A Study of Drop-outs of the Junior High Schools of Tulsa, Oklahoma, 1949-50." Unpublished Doctoral Dissertation, College of Education, Oklahoma A \& M College, Stillwater, Oklahoma, 1951.

Rioux, Joseph William. "The Extent, Form, and Future of Educational Provisions for Drop-outs." Unpublished Doctor's Dissertation, Wayne State University, 1961.

| Taylor, | Hugh Le. "Factors That Differentiate School Leavers |
| ---: | :--- |
| from Pupils Who Continue In School." Unpublished |  |
| Doctor's Dissertation, University of Cincinnati, 1952. |  |

Warren, Doron L. "Drop-Out Study of the Class of 1956. Austin Junior-Senior High School." Austin, Minnesota: Unpublished Study.

Wilson, Joseph Ernest. "Withdrawal from Three Selected High Schools for Colored Youth in Ouachita Parish School System, Louisiana." Unpublished Ed.D. Dissertation, Colorado State College, 1962.

## APPENDIX I

INDIVIDUAL STUDENT SCHEDULE FOR STUDY OF DROP-OUTS

Individual Student Schedule For Study of Drop-Outs

1. Name of student
Last name First Middle
2. Sex of this student (check one)

Male $\qquad$ Female $\qquad$
3. Did this student graduate? Yes $\qquad$ No $\qquad$
4. If answer is "no" to No. 3 above and not a transfer case; when did student leave school?
lst. semester $\qquad$ 2nd. semester $\qquad$ 3rd. semester $\qquad$
4th. semester $\qquad$ 5th. semester $\qquad$ 6th. semester $\qquad$
7th. semester $\qquad$ 8th. semester $\qquad$ 9th. semester $\qquad$
During summer between $\qquad$ and $\qquad$ semesters.
5. If this student failed to enter high school or withdrew before graduation (as shown by check above) check below to show the reason the student did not enroll or withdrew. Check only one.

1 Transcript sent or student transferred to another high school but do not know whether student enrolled in that high school.

2 Transcript sent or student transferred to or entered another school and records show that student actually enrolled in that school.
$\qquad$ 3 Moved residence from the attendance area of this school but transcript not sent to high school in the new place of residence.

4 Death of student or student institutionalized in penal or mental institution.

5 Illness of student.
6 Dismissed or expelled by school authorities.
7 Left school to work.
8 Left school because of indifference or lack of interest.
$\qquad$ 9 Left school to join armed forces.
$\qquad$ 10 Other reason, tell what $\qquad$
11 This information cannot be found.
6. Age at time this student entered or would have entered the lowest grade in high school. Check one to show age. Check Here Age in years Check Here Age in years and months and months

| 1 | Over 17-0 | 2 | 16-0 to | 16-11 |
| :---: | :---: | :---: | :---: | :---: |
| 3 | 15-0 to 15-11 | 4 | 14-0 to | 14-11 |
| 5 | 13-0 to 13-11 | 6 | 12-0 to | 12-11 |
|  | 11-0 to 11-11 | 8 | Younger | than |

$\qquad$ 9 This information cannot be found.
7. Check to show when the student withdrew (only for students who enroll in high school and later withdrew).
$\qquad$ l Before the semester in which the student's compulsory attendance period ended.
$\qquad$ 2 During the semester in which the student's compulsory attendance period ended.

3 After the beginning of the next semester following the end of the student's compulsory attendance period.
8. How many brothers and sisters did this student have at the time he first enrolled in high school (or, if he did not enter, at the time he completed the last preceding grade)?
$\qquad$ One; $\qquad$ Two; $\qquad$ Three; $\qquad$ Four ;
$\qquad$ Five; _Six; $\qquad$ Seven; $\qquad$
more than Eight; $\qquad$ None ; $\qquad$ This informa-

[^9]9. Does student live with both parents? Yes $\qquad$ No $\qquad$
If answer is "no" which parent or with whom $\qquad$
Occupation of parent (or of both if regularly employed) who was the major wage earner when the student first enrolled in high school, or, if student did not enter, at the time student completed the last preceding grade. The general classification of is as follows:
O. Professional and managerial occupations

1. Clerical and sales occupations
2. Service cccupations
3. Agricultural, fishery, forestry and kindred occupations
4. Skilled workers
5. Semiskilled workers
6. Unskilled workers

Father $\qquad$ 0-6 Tell what $\qquad$
_ Mother___0-6 Tell what $\qquad$
7 Occupation of parent who was major wage earner cannot be found.
10. What was the last school completed by this student's parent? Check one for each parent.

Father
Mother
$\qquad$ 1 Elementary School not completed
1 $\qquad$
$\qquad$ 2 Elementary school completed

2 $\qquad$
3 High school not completed
3 $\qquad$
4 High school completed
4 $\qquad$
5 College not completed
5 $\qquad$
6 College completed
6 $\qquad$
7 This information cannot be found $\qquad$
ll. If this student took any standarized intelligence test
in the sixth or seventh grade before entering high school or in high school, indicate the group into which this student's IQ falls. Check one.


Name of test used
Student's IQ
12. Did this student have an achievement test in the first year in high school (eighth grade)?

13. If "yes" is checked in item 12 above; then check the proper item below to show amount of difference, if any. Reading Arithmetic
$\qquad$ 1 More than four grades behind
1 $\qquad$
$\qquad$ 2 Four grades behind
___ Three grades behind
$\qquad$

$\qquad$ 4 Two grades behind
3 $\qquad$

5 One grade behind
5
$\qquad$
$\qquad$
$\qquad$

$\qquad$
6 Zero

6 $\qquad$
_ 7 One grade ahead $\qquad$

Reading
Arithmetic
_ 8 Two grades ahead 8 $\qquad$
_._9 Three grades ahead
9 $\qquad$
10 Four grades ahead
10 $\qquad$
11 More than four grades ahead
11 $\qquad$
_12 This inforaation cannot be found 12 $\qquad$
14. How many days was this student absent during his first full semester in high school? Check one.
$\qquad$ 1 Less than one day $\qquad$ 21 to $31 / 2$ days
_ 34 to $61 / 2$ days $\qquad$ 47 to $9 \not 1 / 2$ days

| 5 | 10 to $121 / 2$ days |
| :--- | :--- |
| 7 | 16 to $181 / 2$ days |
| 9 | 22 to $241 / 2$ days |


| 6 | 12 to $151 / 2$ days |
| ---: | ---: |
| 8 | 19 to $21 \frac{1}{2}$ days |

_10 25 days or more
_ll This information cannot be found.
15. In how many subjects did this student fail to get passing grades during his first full semester in high school? Check one.


ELEMENTARY SCHOOL RECORD

| Grade | 1 | 2 | 3 | 4 | 5 | 6 | 7 |  | 8 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 12 | 12 | 12 |  | 12 | 12 | 12 |  | 2 |
| Days |  |  |  |  |  |  |  |  |  |
| Present |  |  |  |  |  |  |  |  |  |
| Days |  |  |  |  |  |  |  |  |  |
| Absent |  |  |  |  |  |  |  |  |  |
| Average |  |  |  |  |  |  |  |  |  |
| Language |  |  |  |  |  |  |  |  |  |
| Arts Gr. |  |  |  |  |  |  |  |  |  |
| Average |  |  |  |  |  |  |  |  |  |
| Mathematics |  |  |  |  |  |  |  |  |  |
| Grade |  |  |  |  |  |  |  |  |  |
| Average |  |  |  |  |  |  |  |  |  |
| Sucial |  |  |  |  |  |  |  |  |  |
| Studies Gr. |  |  |  |  |  |  |  |  |  |
| Average |  |  |  |  |  |  |  |  |  |
| Hlth-Sci. |  |  |  |  |  |  |  |  |  |
| Grade |  |  |  |  |  |  |  |  |  |

## TESTS

Metropolitan Readiness Test Grade $\qquad$ Score $\qquad$ \%ile $\qquad$
Rating $\qquad$
California Mental Maturity Test Grade $\qquad$
Score $\qquad$


California Achievement Test
California Achievement Test
Grade $\qquad$ $\xrightarrow{-}$

Grade $\qquad$
Reading grade placement
Arithmetic grade placement
Language grade placement


## APPENDIX II <br> COMPUTATION OF THE CONFIDENCE INTERVAL BY THE USE OF THE STANDARD ERROR of a Percentage

COMPUTATIONS OF THE CONFIDENCE INTERVAL BY THE USE OF THE STANDARD ERROR OF A PERCENTAGE

| Names of Studies | Total Number of Drop-Outs | No. Who Wanted to Go to Work | Percentage |
| :---: | :---: | :---: | :---: |
| Harvey C. Johnson | 369 | 45 | 12.17 |
| William D. Igoe | 95 | 6 | 6.31 |
| Harold J. Dillon | 957 | 342 | 35.74 |
| Charles J. Johnson | 273 | 32 | 11.72 |
| This Study | 154 | 20 | 12.99 |
| Population (N)...................... 1848 |  |  |  |
| Sample. . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 445 |  |  |  |
| Percentage (P)........................................................... 24.08 |  |  |  |
|  |  |  |  |
| Standard Error of a Percentage $=\sqrt{\frac{P Q}{\mathrm{~N}}}=\sqrt{\frac{(24.08)(75.91)}{1848}}=\sqrt{.9891}=.9945$ |  |  |  |
| The $5 \%$ level of confidence $=(.9945)(1.96)=1.95$ |  |  |  |
| Therefore, the upper limit $=24.08+1.95$ or 26.03 |  |  |  |
| and the lower limit $=24.08-1.95$ or 22.13 |  |  |  |


[^0]:    ${ }^{1}$ U.S. Department of Health, Education, and Welfare, Office of Education, Retention in High School in Large Cities (Washington: United States Government Printing Office, 1957).

[^1]:    ${ }^{l}$ Carter V. Good and Douglas E. Scates, Methods of Research (New York: Appleton-Century-Crofts, Inc., 1954), pp. 604-25.

[^2]:    $1_{\text {William David }}$ Igoe, "Causal Factors of Drop-outs from Upper Six Grades in Selected Fourth Class School Districts in McKean County, Pennsylvania" (unpublished Ed.D. dissertation, The Pennsylvania State University, 1959), p. 20.

[^3]:    ${ }^{1}$ Virgil Murk, "Follow-Up Study on Students Who Drop Out of High School," National Association of Secondary School Principals Bulletin, XLIV (February, 1960), pp. 73-75.
    ${ }^{2}$ Robert Jay Thomas, "An Empirical Study of High School Drop-Outs in Regard to Ten Possibly Related Factors," Journal of Educational Sociology, XXVIII (September, 1954), pp. ll-18.
    ${ }^{3}$ Tesseneer and Tesseneer, loc. cit.

[^4]:    ${ }^{I}$ C. H. Myers, "Teacher's Friendliness Improves Student Attendance," National Association of Women Deans and Counselors Journal, XXV (April, 1962), pp. 135-37•
    ${ }^{2}$ Russell J. Fornwalt, "Toward an Understanding of Truancy," School Review, LV (February, 1947), p. 91.
    ${ }^{3}$ Dan J. Hull and Howard H. Cummings, "How Fare American Youth in 1962?" School Life, XLIV, No. 4, (Jan-uary-February, 1962), pp. 13-17.
    ${ }^{4}$ Nick John Topetzes and John M. Ivanoff, "The DropOut: How the School Can Help Him, " Catholic School Journal, LXII, No. 2 (February, 1962), pp. 35-36.

    5Cantrell, loc. cit.

[^5]:    ${ }^{1}$ Jozie Mock, "They Wanted to Stay in School," The Texas Outlook, XLVII, No. 5 (May, 1963), pp. 18-20.

[^6]:    ${ }^{1}$ Schreiber, loc. cit.

[^7]:    ${ }^{1}$ Herman L. Shibler, "Attacking the Drop-Out Problem," National Education Association Journal, XLIV (January, 1955), pp. 24-26.
    ${ }^{2}$ A. H. Livingston, "Key to the Drop-Out Problem: The Elementary School," Elementary School Journal, LIX (February, 1959), pp. 267-70.
    $3_{\text {Murk, }}$ loc. cit.

[^8]:    ${ }^{1}$ Harvey C. Johnson, op. cit. $\quad{ }^{2}$ Igoe, op. cit.
    ${ }^{3}$ Charles J. Johnson, op. cit.
    ${ }^{4}$ Dillon, op. cit.

[^9]:    tion cannot be found.

