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A STUDY OF DROP-OUTS FROM THE PUBLIC SECONDARY SCHOOLS OF OKLAHOMA CITY FOR THE YEAR 1954-1955

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## BY

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# A STUDY OF DROP-OUTS FROM THE PUBLIC SECONDARY SCHOOLS OF OKLAHOMA CITY FOR THE YEAR 1954-1955 

## CHAPTER I

## INTRODUCTION

Among today's pressing educational problems are those concerned with providing the educational facilities and services needed to accommodate adequately the ever-increasing numbers of youth who are swelling enrollments in our public schools. It seems somewhat paradoxical that while our public schools are seeking to resolve difficulties due to increased enrollments, they also are confronted with the problem of retaining the pupils they enroll. This too is a pressing problem. Almost half of today's youth drop Erom school before high school graduation.

The sheer magnitude of this latter problem suggests its seriousness. Viewed on the basis of the loss represented in terms of undeveloped human resources, the implications seem even more significant. Research studies (2, 32) reveal that a large per cent of juvenile delinquents come from the ranks of school drop-outs; that about two-thirds of the youth who drop from school enter the labor market to compete with adults for unskilled, insecure, marginal jobs which, if obtained, offer little opportunity for economic security; that many of these youths are idle because they are unable to meet present day hiring standards. In short,
the typical drop-out--young in years, lacking work experience, and limited in educational preparation--faces difficulties in making the social and economic adjustments necessary for the development of his full potential as a useful and productive citizen. Upon leaving school, he is confronted with adult roles which he is almost forced to assume if his time is to be profitably occupied. He is ill-prepared to do so.

The drop-out problem has still another implication. Pupils who withdraw from school prematurely are in many instances the very ones who stand to profit most from education. There is considerable evidence that, in comparison with youth who remain in school, members of the drop-out group tend to be of lower intellectual ability, more prone toward personal and social maladjustments and less privileged in terms of socio-cultural and economic advantages. Possessing these characteristics, they especially need the benefits of education if they are to rise above the stations in life which circumstances have determined for them.

Is the drop-out problem a new one? The answer to this question is "no." It has become increasingly significant in our time, since our society has become more complex and needs for an educated citizenry have become more acute. The problem, however, has been a persistent one for a long time. A statement of interest in this respect was made in 1903 by Caswell A. Ellis at the national convention of the National Education Association.
...statistics indicate that little over 5 per cent of the pupils who enter the elementary school remain to enter high school. Of those who enter high school, between 20 and 24 per cent are reported as graduating. That is, our elementary schools eliminate over 90 per cent of their pupils in eight years, and the high schools eliminate about 80 per cent of what is left during the
next four years, leaving to graduate from the high school about 2 per cent of the original number entering the elementary school...

The slaughter of the Light Brigade at Balaklava pales into insignificance then, besides the slaughter of educational hopes and possibilities of our children by the present school system (19; pp. 792-3).

Much progress has been made since Ellis made this provocative statement some fifty years ago. Today, over 85 per cent of school age youth are enrolled in the pubiic and private elementary and secondary schools of the nation. Generally, the pupil retention problem at the elementary school level is no longer acute. Great gains have also been made in the holding power of secondary schools. However, the problem still remains one of serious magnitude at the latter level and gains made during the last twenty-five years have been discouragingly slow and unsteady. The following table based on data contained in the latest Biennial Survey of Education in the United States (1955) reveals the situation adequately (58).

## TABLE 1

NUMBER OF STUDENTS COMPLETING THE FINAL YEAR OF HIGH SCHOOL PER 1,000 ENROLLED IN GRADE $V$

$$
\begin{array}{cc}
\text { Year of } & \text { Number } \\
\text { Graduation } & \text { Graduated }
\end{array}
$$

1940 ..... 455
1941 ..... 462
1942 ..... 467
1943 ..... 439
1944 ..... 393
1945 ..... 398
1946 ..... 419
1947 ..... 450
1948 ..... 481
1949 ..... 488
1950 ..... 505
1951 ..... 515
1952 ..... 522

As might be expected, the holding power of schools varies among states, among school systems within states, and among schools within school systems. According to statistical data contained in the United States Office of Education publication "High School Retention by States," (57) published in 1954 , the state with the best retention record was Wisconsin. In this state, only 203 students per l,000 enrolled in Grade 5 in 1943-1944 failed to enter the final year of high school in 1951. In contrast, Georgia, the state with the poorest record, lost 776 pupils during this same interval. Oklahoma ranked 32 nd among the 48 states, its loss being 511. The loss for the nation as a whole was 482.

On a regional basis, the states which have most consistently shown relatively high retention ratios are Wisconsin, New Hampshire, Minnesota, Nebraska, and Utah. All except one are classified as northwestern states. Those consistently showing low ratios-Mississippi, Louisiana, Tennessee, and Alabama-are located in the southeast quadrant of the United States.

A study by Hand (26) is of interest with respect to the variability of retention among schools within a state. In his study of 22 Illinois high schools, he found that the school having the greatest holding power lost only 10 per cent of its pupils before graduation. In contrast, the school ranking lowest lost 80 per cent. Thus, it becomes evident that holding power is a very variable condition.

Extent of previous research. Another matter of interest with reference to the pupil drop-out problem is the extent to which it has been studied. A number of studies appeared in the first decade of the present century. In more recent years, as the needs of secondary education have become increasingly important, the problem has taken on more significance
and the amount of research concerned with it has greatly increased. In the last two decades particularly it has been studied in numerous city school systems; state departments in almost one-fourth of the states have conducted or supervised studies; and the problem has received much attention as one of national significance by such agencies as the Office of Education, the National Education Association, the United States Labor Department, and the National Child Labor Committee.

These studies on different fronts have yielded much information concerning characteristics of the early-school-leaver, the circumstances associated with his leaving school, and other information pertaining to the scope and nature of the problem together with its many implications. The varied findings cannot be summarized in a few brief statements, but on careful scrutiny one conclusion seemed evident. The drop-out problem has been found to be one conditioned by unique features of particular school situations. Factors operative in cases of pupil drop-out, though reasonably consistent in their appearance, vary greatly in the degree to which they operate in different school settings. In effect, this means that school systems wishing to attack the problem intelligently must resort to local study as a basis for such action. Herein lies the justification for the present study.

The Problem
This study is particularly concerned with the pupil retention problem in the secondary schools of Oklahoma City. During each school term in recent years 1,200 to 1,500 of Oklahoma City's 18,000 to 19,000 junior and senior high school students have withdrawn from school. It
cannot be assumed that all of these withdrawals are of the permanent type and thus represent true drop-outs. Therefore, these figures are only roughly indicative of the holding power problem in Oklahoma City. Much more indicative of its true magnitude are data for successive years on the number of ninth grade entrants compared with the number graduated from grade twelve four years later. Holding power statistics prepared on this basis reveal that for all pupils entering grade nine since 1939 , only about 63 per cent have graduated from grade twelve with their respective classes. These data definitely suggest that the drop-out problem needs attention in Oklahoma City. Officials of the school system are very cognizant of this need and are much concerned about its resolution.

During recent years, the pupil retention problem has been given consideration, both directly and indirectly, in the formulation and execution of educational policy in Oklahoma City. Pupil personnel services have been centralized and expanded; guidance services have been strengthened, and curricular offerings have been broadened better to meet the needs of a heterogeneous pupil population. Also, the Director of Pupil Services and his staff have given attention and study to pupil absenteeism and have made diligent efforts to keep pupils in school. Likewise, some schools of the system have given specific study and attention to the problem. Despite these various efforts, the number of drop-outs remains relatively large. Officials of the school system are convinced that a concerted system-wide attack on the problem should be initiated and that a comprehensive study is urgently needed as a basis for such action. The present study represents an attempt to meet this need. Therefore, the central problem is to determine the essential character of pupil retention
difficulties faced by the Oklahoma City secondary schools and to identify the major factors most significantly associated with the conditions in question.

Statement of Objectives for the Study
This study represents an action type of research. Because of its purpose, it was planned cooperatively through a series of conferences involving the writer, his advisory committee chairman, and officials of the Oklahoma City school system. Through these deliberations, there was agreement that it should be a comprehensive, system-wide study concerned with ascertaining the present nature and extent of the drop-out problem; that it should serve to identify major factors associated with the problem. With this guiding thought, it was agreed that the objective of the study would be to gather, organize, and report information concerning the dropout problem as it existed in the secondary schools of the system during the 1954-1955 school year; that, specifically, it should be concerned with finding answers to the following questions:

1. What was the magnitude and general character of the drop-out problem during the 1954-1955 school year?
(a) What was the total number of drop-outs? What was the loss by school and by grade? Where were the weaknesses in holding power? For what reasons did pupils leave school prematurely?
2. What were the characteristics of those individuals who were classed as drop-outs?
(a) What were their socio-economic and family characteristics? What were their characteristics as pupils?
from these same grades selected by taking every fifth name alphabetically from class rolls.

## Sources and Procedures for Obtaining Data

Data for the study were gathered by the various schools involved. The school system's Director of Pupil Services coordinated this effort and made the information available to the writer.

Essentially all of the information utilized came from the following sources:

1. Drop-out reports submitted by each school to the Division of Pupil Services.
2. Results from an opinionnaire administered to in-school pupils and drop-outs by each of the schools.
3. Pupils' personal data sheets containing information about inschool pupils comparable to that contained in the drop-out reports.
4. Holding power data compiled by the Research Departinent of the school system.

Since copies of the report forms and the opinionnaire are available for the reader's examination in the appendices of this study, they are not described at this point. The drop-out reports were prepared by the school system's Director of Pupil Services. The opinionnaire was prepared under the auspices of the Oklahoma Curriculum Commission for use in studying the opinions of secondary school pupils regarding school. Essentially, it is a modified version of the better known "Illinois Inventory of Pupil Opinion" for secondary school students which was prepared by Dr. Harold Hand. In fact, Dr. Hand acted as consultant in its preparation.

Since it was not a copyrighted instrument, it was very slightly modified foz use in the present study. For example, in preparing the instrument for administration to the drop-outs, the title was changed from How Good Is Your School to How Good Was Your School and all items were changed to read in the past tense. Other than this, no significant revisions were made. This instrument was administered in such a manner that respondents retained their anonymity.

## Treatment of Data

All raw data for the present study were essentially of the frequency type. As such, the treatment procedures employed are very typical of those commonly used in the analysis, interpretation and description of such data. They include presentation through tables containing frequency distributions, description of such distributions in terms of percentage ratios, graphic presentation of a limited number of instances and, of course, treatment of findings and their implications through discussion. For the phase of the study concerned with ascertaining differences in the characteristics and opinions of drop-outs and retained pupils, the Chi Square technique was employed for determining the statistical significance of differences found.

## Limitations of the Study

Limitations encountered in research are basically of two types-those of a theoretical nature, and those of practical significance encountered in the research process.

Theoretically, this study has certain limitations in its depth. For example, from a theoretical standpoint, individual case studies would
appear very desirable in lending depth to a drop-out study of tinis type. However, the broad scope of the study, or more specifically, the size of the populations to be studied, precluded this approach. The objectives of the study were such that fourteen schools and several hundred cases were involved. Thus, study on a personal contact basis was beyond the realm of practicality.

Among limitations encountered in the actual research process, two seem particularly worth noting. First, there was a lack of complete information on drop-out report forms available for study. Many such reports were incomplete in part and a considerable number were almost wholly incomplete. Of course, this resulted in incomplete frequency data for the various factors studied. For most factors, sufficient data were available to depict general trends quite adequately. However, more complete information would have enhanced the value of findings in a number of instances.

A second difficulty was encountered by school personnel in contacting drop-out cases to obtain responses to the opinionnaire administered. In many instances, the individuals had left the state, entered the armed forces, and for other reasons could not be contacted. This, too, limited the data available for study.

## Organization of Presentation

In terminating this chapter, it seems fitting to dwell briefly on the organization of the presentation to follow. Chapter II is devoted to a review of related studies. This review has been presented prior to the treatment of findings of the present study to enable the reader to interpret such findings in the light of those typically found in previous studies.

## REVIEW OF RELATED RESEARCH FINDINGS

Much research related to the present study has been done during the past fifty years, particularly in recent years. Studies with bibliographies of seventy-five to one hundred titles are common-place. These studies are variously titled studies of pupil elimination, of holding power, or of drop-outs. Possibly holding power studies are distinguishable from those labeled elimination or drop-out studies. However, all deal with retention of youth in school and are pertinent to the present study.

Before giving attention to the specifics with which this chapter is concerned, some trends in drop-out studies possibly merit mention. As might be expected, time and experience have resulted in improvements in research technique. Among many of the early investigations, there was a notable lack of studies in which in-school populations were utilized as control groups. Characteristics of drop-outs were studied, but the uniqueness of these characteristics often was not clearly established. In more recent studies, this weakness in technique is not so common except in studies so broad in scope that the use of control groups is impractical.

Noticeable, too, among more recent studies, is less emphasis on investigation of drop-outs' stated reasons for withdrawal from school.

Experience has shown that reasons given by drop-outs are often superficial and unreliable; that typically several factors are operative in any given drop-out case; that to account for the influence of several factors with one reason is greatly to over-simplify a complex matter.

Apart from trends in approach and procedure, another trend may be noted among research studies of the last ten or fifteen years. This is the appearance of studies sponsored by state and federal agencies which are notable for their broad scope. These studies have certain advantages in that they usually embrace many schools located over a wide geographical region, thereby enhancing the possibilities for generalizations concerning drop-outs. However, they also have certain limitations in that they frequently lack the control which may be exercised in studies of smaller scope.

Approach Employed in Review
Many compromises are involved in preparing a review of research of such diversity and amount as that related to the present study. First, pertinent studies are too numerous to be reviewed individually. Second, varying objectives, procedures, scope, and content among the many studies make most difficult the task of synthesizing the array of findings into a unified, coherent report. To cope with these difficulties the following plan was employed. First, a list of factors frequently investigated in relation to pupil withdrawal was prepared. Second, selected studies were examined and essential findings were recorded as they pertained to these various factors. From this pool of information, significant findings were selected for presentation.

Following is a list of factors for which findings were gathered: I. ECONOMIC FACTORS

Occupation of father Rental value of home Socio-economic conditions generally Number of books and magazines in home
II. FAMILLAL FACTORS

Broken homes
Size of family
Parental attitudes toward school
Race or nationality
Education of parents
III. PERSONAL-SCHOOL FACTORS

Age
Sex
Attendance
School transfers
Grades where drop-outs occur
Retentions in grade
Subject failure
Intelligence
Curriculum
Participation in extra-class activities
Reasons for leaving school
It will be noted that these factors have been placed into three categories. This has been done to afford an organizational framework for the discussion to follow.

## Economic Factors and School Attendance

A number of approaches have been employed by different researchers to ascertain the economic status of pupils who drop from high school. In some studies, information has been gathered in various ways and combined as bases for conclusions. In other studies, inferences have been drawn from the study of specific factors such as occupation of father, number of books in home, type of dwelling, and others considered indicative of
economic status. Frequently, economic and social factors are treated together and classed as socio-economic considerations. Because of the diversity of approaches employed in various studies, certain liberties had to be taken in classifying findings to fit the scheme of reporting used in this chapter. This was necessary because brevity required that description of procedures employed by different researchers be minimized and that primary emphasis be devoted to findings. However, care has been taken to avoid distortions which may occur when research findings are taken out of context.

Occupation of Father
The father is the chief breadwinner in most families. His occupation affords a reasonably accurate index of family economic status. For this reason, occupation of father is frequently investigated in drop-out studies. Almost without exception, findings reveal that this factor is significantly related to the length of time children remain in school. Following are findings from selected studies.

The findings of Rowse (45), in a study reported in 1918 , are very similar to those of current studies. In this study conducted at Boston's High School of Comerce, Rowse reviewed the records of 2,529 drop-out cases and found that manual workers showed an excess of elimination and a small portion of graduates, while business and professional groups showed the condition just reversed.

Dear (10), in a study reported in 1933 including 87 Michigan cities of 10,000 to 12,000 population, concluded that non-laborers were less subject to early withdrawal from school. A study of junior high
school drop-outs in Minneapolis reported by Douglas and Wind (14) in 1937, revealed findings essentially the same.

Of special interest relative to the present study is Haller's investigation (24) of elimination from Capitol Hill High School in Oklahoma City. This study, reported in 1937, revealed that slightly over half of the parents of drop-outs were common laborers, Works Progress Administration workers and those with part-time employment. Slightly over one per cent came from homes in which the principal wage earner was engaged in a profession.

The well-known study by Hand, conducted in 1947-1948 in 22 Illinois schools, revealed findings similar to those cited above. Hand reported "scarcely more than 50 per cent of the adult population is engaged in occupations subsuned under the category of laborer, yet 72 per cent of the drop-outs in the schools studied come from families of such workers." (26; p. 15)

Other recent studies--Plett's (40), Sonstegard's (52), Dresher's (15), Thomas' (54), Hollingshead's (31), Dillion's (13) and Gragg's (23)-contained findings very consistent with those which have been reviewed. The findings of all studies examined unanimously confirm the conclusion that children whose fathers have low occupational status leave school in greater numbers than children whose fathers are at the upper end of the occupational ladder. Also, the lower the father's occupational status, the earlier his children are likely to leave school.

Rental Value of Home

The rental value of homes has not frequently been studied as a
basis for detemnining economic status of drop-outs.
Of all the studies reviewed, only three had given attention to this factor. Two early studies, Van Denberg's, reported in 1911, and Holley's in 1916, contain information on this point. Van Denberg concluded that "on the whole the economic status of these pupils, so far as it is shown by monthly rental rates, seems to be only a slight factor in the determination of length of stay in school..." (61; p. 113). Holley (30) in a study made in the Illinois cities of Urbana, Centralia, Champaign, Gibson City and Rochelle, in 1912, obtained quite different findings. He found a coefficient of correlation of .63 between schooling of children and the rental value of their homes.

A more recent study by Hollingshead (31), 1949, contains information similar in implication to Holley's findings. Hollingshead found that children of machine operators, laborers, proprietors, sales and service workers, etc., tend to drop from school; that likewise, the families involved tend to live in rented homes.

Inasmuch as the findings from one of these studies is at variance with the other two studies, and since there are only three studies considered, conclusions based entirely upon the findings cited are limited. However, economic status does seem to be related to continuance in school, and rental value of homes probably is a significant factor when related to the economic status of families.

## General Eccnomic Status

The following are conclusions from selected studies concerning general economic status as a factor in relation to drop-outs. These
studies, conducted in many different regions of the United States between the years 1916 and 1952, all point to a significant relationship between family economic status and continuance of children in school.

For example, in summarizing the results of his study reported in 1916, Holley concluded:

There is a high correlation between the economic, educational, and social advantages of the home and the number of years of schooling its children receive...this is the most significant conclusion of the study (30; p. 109).

Douglas and Wind, in their study of withdrawals from the junior high schools of Minneapolis, 1937, reported that the difference between the responses for the drop-out group and the group remaining in school were quite pronounced on the Sims Score Card for Socio-Economic Status. The upper quartile of the withdrawing pupils barely exceeded the lower quartile for the persisters. They found a Bi-serial Coefficient of Correlation of .62 between scores on the Sims instrument and retention, and concluded that economic status was the second most significant factor of those they studied in relation to drop-out.

Like Douglas and Wind, Seymour (47) also used data from the Sims Score Card for Economic Status for his study which was reported in 1950. He too found scores on this instrument second in importance among factors which distinguished drop-outs from pupils who graduated.

The well-known Illinois study conducted in 1947-1948 and reported by Hand bears out the findings of other studies. Hand states:

In a study conducted in over seventy secondary schools located in all the principal regions of Illinois outside the city of Chicago, it was found that 72 per cent of all youth who dropped out of high school come from families low on the economic scale. The schools ranged from less than 100 to well over 2,000 pupils. (27; p. 89).

Other studies--including Hollingshead's (31), Lanier's (34), Taylor's (53), and Sonstegard's (52)--reveal similar findings.

Number of Books and Magazines in the Home
In recognition of the fact that the economic status of a family has a direct influence on the cultural benefits it can afford its children, a few researchers have sought to determine the significance of the number of books and magazines in the home in relation to school attendance.

Holley, in a study made in 1912, concluded that "the number of books in a home is the best single index of the educational advantages open to children" (p. 118), He found a marked relationship between the number of books in the home and school attendance.

A later study, 1937, conducted by Douglas and Wind (14) in Minneapolis tends to confirm holley's findings. In this study, a Biserial Coefficient of Correlation of .366 was found between the number of books in the home and persistence of pupils in school. They also found that 60 per cent of the drop-outs had less than 25 books in their home; in contrast, only 30 per cent of the pupils retained had less than this number. Their findings regarding magazines were even more significant. The Bi-serial Coefficient of Correlation between number of magazines subscribed for and school retention was .50. Also, it was found that 47 per cent of the homes of drop-outs subscribed to no magazine regularly; only 7 per cent of the homes of pupils retained in school were in the same category. Further research in this area might prove fruitful.

Family Factors in Relation to School Attendance The basic social institution in our culture is the family. of
all our social institutions, its influence is the dominant one in the lives of children and youth. For this reason, a number of familial factors have been studied in relation to the drop-out problem. These include (1) broken homes, (2) size of family, (3) parental attitude toward school, (4) education of parents, and (5) race or nationality. Following are findings from selected studies concerning these factors.

## Broken Homes

Seven selected drop-out studies were examined concerning the broken home factor. Four of these studies contain findings which support the assumption that there is a significant relationship between broken homes and pupil withdrawal from school. Three reported no significant relationship. Following are some of the findings.

Among those studies in which a significant relationship was found was the carefully conducted one by Plett (40), reported in 1950. This study was carried on in Tulsa, Oklahoma. It involved a comparison of 103 drop-outs from 8 junior high schools with a carefully selected control group of 260 in-school pupils. The two groups were equated on the basis of socio-economic status and intelligence and were selected in proportionate numbers from each of the eight schools. It was found that 41 per cent of the drop-outs were from broken homes, while the figure for inschool pupils was only 11 per cent. On applying a Chi Square test, the difference was found significant beyond the one per cent level of confidence. In roughly two out of every three cases, divorce was the cause of the broken home, both for drop-outs and in-school pupils.

A comparable study by Lanier (34), reported in 1951 , revealed
findings similar to Plett's. This study, made at Austin, Texas, in the fall of 1948 , involved a comparative study of 135 high school drop-outs with a control group of in-school pupils. The groups were matched on the basis of intelligence test data. Forty-five per cent of the drop-outs were from broken homes, while only 28 per cent of the in-school pupils fell in this category--a difference significant at the 5 per cent level of confidence.

Gragg (23), in a study reported in 1949, involving high school dropmouts and a control group composed of high school graduates, also concluded that drop-outs came from broken homes to a significant degree more often than graduates. This study was made in Ithaca, New York, and New Haven, Connecticut. Likewise, Hollingshead (31), 1949, also reported a significant relationship between broken homes and early withdrawal from school.

In contrast to the findings just cited, three other studies contain different conclusions. Seymour (47), in a study reported in 1950 , based on data from the Harvard Growth Studies, compared a group of dropouts with a group who graduated from high school. He found that 20 per cent of the drop-outs and 14 per cent of the graduates were from broken homes; he concluded that the difference was not significant. In a similar study done in Cedar Falls, Iowa, reported in 1952, Sonstegard (52) found that 23 per cent of the drop-outs were from broken homes; that 20 per cent of the high school graduates of the control group also were; that the difference was not significant.

Dillon, in his study, Early School Leavers, reported in 1949,
makes this statement:

From the information on family background...it is apparent that the average school leaver did not come from a broken home, though the percentage from broken homes among the school leavers ( 20 per cent) was about 10 per cent higher than the national figures for children 14 through 17 years of age from broken homes... a clear majority- -40 per cent--came from homes where they lived with both parents (13; p. 22).

Some of the differences among findings of the various controlled studies may be due to differences in the control groups utilized. Some comparisons were made on a grade by grade comparison. In others, high school graduates were utilized as the control group. Despite the fact that findings differ regarding the broken homes question, it may be noted that in each study differences were found even though in some instances they were not great enough to be considered statistically significant; that in each study relatively more drop-outs came from broken homes than did youth who remained in school. The evidence seems to indicate that this factor is more operative in some localities than in others.

## Size of Family

Other factors being equal, it seems logical to assume that the size of a family might well determine the advantages and opportunities afforded the children; that children from large families might be more prevalent among the drop-outs. This possibility has been pursued in a number of drop-out studies. In most instances, the findings have not substantiated such an assumption.

Holley (30), in an early study reported in 1916 , concluded that size of family has no appreciable effect on persistence in school. Likewise, Gragg (23), 1949, found no significant relationship between size of
family and drop-out. Dillon (13), 1949, also concluded that there was no evidence of any significant relationship between size of family and percentage of school leavers. Hecker (28), in a study made in Kentucky, reported in 1953, came to the same conclusion as those just cited.

Seymour (47) and Plett (40) in separate studies reported in 1950 and 1951, respectively, both found that drop-outs come from larger families. Plett's study at the junior high school level in Tulsa, Oklahoma, revealed that families from which drop-outs came had an average of about one more child than did families of in-school children. However, none of these researchers seemed to attach major significance to this factor.

It would seem that size of family is not a crucial factor in relation to school attendance.

## Parental Attitudes Toward School

Parental attitude toward school would seem to be a very significant factor in relation to children's continuance in school. Surprisingly, this factor has not received much attention in drop-out studies. Difficulties in gathering pertinent data may partially account for this.

Snepp (51), in a study conducted in Evansville, Indiana, 1951, investigated the homes of 254 drop-outs according to the best information available from cumulative records, homeroom teachers, counselors, deans, principals, and attendance workers. On the basis of information gathered, he concluded that the attitude of the home and the influence parents have over the child contribute a great deal toward keeping him in school.

Seymour (47) and Dresher (15) in separate studies reported in 1950 and 1953, respectively, both found that a great majority of parents
of drop-outs professed a favorable attitude toward school and wanted their children to continue in attendance.

The findings which have been cited are not really adequate to serve as a basis for safe generalization concerning the relationship of parental attitudes to pupils' continuance in school.

Race or Nationality
The conclusions of studies differ concerning the relationship of race or nationality to pupils' continuance in school.

Van Denberg (61), in an early study conducted in New York City, 1916, found that children from Irish parentage were less inclined to be in school, that those of Italian and Scotch ancestry were next in rank, and that those of Hebrew parentage were most well represented. Douglas and Wind reported in 1937 (14) that four out of five foreign born children were not retained in school through grade nine. However, a bit more than ancestry is involved in the cases of children not born in this country.

A more recent study made in Austin, Texas, by Lanier in 1950, revealed that the Latin-American segment of the school population--10 per cent of the enrollment--incurred 18 per cent of the drop-outs.

In contrast to these findings, Gragg (23), and Thomas (54), in separate studies reported in 1950 and 1954 , respectively, concluded that ethnic-racial background was not significant in relation to drop-out incidence.

It seems probable that this factor would vary among different localities.

## Education of Parents

It seems well established that the level of formal education attained by parents has great bearing on the extent to which their children continue in school. Every drop-out study reviewed revealed similar findings in this respect. Following are findings and conclusions from few selected studies.

Holley, whose study was reported in 1916 , states "the education of parents, as a rule, ultimately determines the educational advantages open to children" (30; p. 110). Douglas and Wind, 1937, reported "in comparison with drop-outs, the parents of retained pupils were much better educated...more than twice as many families had some high school training and almost three times as many had gone to college" (14; p. 378). Hollingshead (31), Seymour (47), and Plett (40), in studies reported in 1949, 1950, and 1951, respectively, obtained findings similar to those just cited.

Personal-School Factors in Relation to School Attendance
The characteristics or traits of drop-outs as individuals and as pupils are of primary interest in studies of the drop-out problem. For want of a better scheme of organization, findings concerned with factors in this category are hereby treated under the heading Personal-School Factors. The ones included are: (1) age, (2) sex, (3) attendance, (4) school transfers, (5) grades where drop-outs occur, (6) grade failure, (7) subject failure, (8) achievement test performance, (9) intelligence, (10) curriculum, (11) participation in extra-class activities, and (12) reasons given for withdrawal from school. On the following pages, a
resume of findings for each of these factors is presented.

## Age

Possibly because of the accessibility of data from school records, the age factor has been investigated in practically all drop-out studies. Two aspects of this factor are frequently examined. These are: (1) the relative frequency of drop-outs at different age levels, and (2) the degree to which drop-outs deviate from the normal age-for-grade pattern.

Age when drop-outs occur. Findings vary to some degree regarding the age at which drop-outs are most frequent. Ages 15, 16 , and 17 are the ones in which the drop-out rate usually has been found greatest; age 16 is possibly the most crucial one. The following are typical findings.

In Detroit, Dresher, (15), 1953, found that for approximately 1,000 cases, almost 800 of the drop-outs occurred at age sixteen. However, this finding is not typical. Most studies indicate the frequency of drop-outs for ages 15,16 , and 17 to be fairly comparable in number, depending somewhat upon whether the study was made in junior or senior high school.

On the basis of the Pennsylvania study of drop-outs involving 4,863 cases from 184 schools, Pond (42) reported that 40 per cent of the drop-outs occurred at age 16 and 36 per cent occurred at age 17. Another rather comprehensive study by Dillon (13), 1949, revealed drop-outs occurred most frequently at age 16 ; that 50 per cent of the 1,171 early school leavers studied withdrew from school at this age.

Other studies revealing ages 15 and 16 as most crucial in relation to withdrawal from school include those by Snepp (51), 1951, and Taylor (53), 1952.

No doubt, socio-economic conditions, compulsory attendance laws, sex, and other factors interact to have bearing upon the particular age at which drop-outs most frequently occur.

The age-for-grade factor. A second aspect of the age factor, that of whether the drop-out is over- or under-age for grade, also has been given attention in a number of studies. Almost without exception, studies reveal that drop-outs tend to be over-age in grade. plett (40), 1951, for instance, found 70 to 75 per cent of drop-outs were over-age in grade. This study was at the junior high school level in Tulsa. Another Oklahoma study, reported by Poe in 1935 (41), revealed that 86 per cent of drop-outs were over-age. This was a holding power study including 29 small high schools of the state. Dillon's study (13), 1949, conducted under the auspices of the National Child Labor Comittee, revealed that 52 per cent of the group studied had repeated one or more grades prior to withdrawal from school and thus were over-age for grade. These findings are fairly representative. Inasmuch as this factor will be subsequently treated indirectly in relation to grade failure, there seems no point in citing additional findings essentially similar to those given.

## Sex

Essentially all drop-out studies reveal that more boys than girls drop from school. Findings vary on the extent of this difference. A few studies show rather large differences. For example, Gragg (23), 1949, found the ratio of boys to girls was two to one in his study conducted in the cities of New Haven, Connecticut, and Ithaca, New York. However, the differences are not usually found to be large. Typically, a ratio of
approximately five to four is found. Data from five recent studies included in the following table give a fairly representative picture of typical findings.

TABLE 2
FINDINGS FROM FIVE SELECTED STUDIES CONCERNING PERCENTAGE RATIOS BY SEX FOR DROP-OUTS

| Author <br> of Study | Year <br> Reported | No. of <br> Cases | \% Boys | $\%$ Girls | Total \% |
| :--- | :---: | :---: | :---: | :---: | :---: |
| Dillon (13) | 1949 | 1,360 | 54 | 46 | 100 |
| Hand* (26) | 1949 | $-\ldots$ | 54 | 46 | 100 |
| Lanier (34) | 1950 | 135 | 64 | 36 | 100 |
| Plett (40) | 1951 | 129 | 56 | 44 | 100 |
| Taylor (53) | 1952 | 350 | 60 | 40 | 100 |

*The number of cases was not reported in Hand's study. However, the data are based on drop-outs from twenty-two Illinois schools.

It may be noted that these data agree almost perfectly with a statement by Allen that "studies of holding power almost uniformly show that 55 to 60 per cent of drop-outs are boys" (2; p. 14).

Attendance
All studies reviewed, except one, revealed that the attendance record of drop-outs is rather poor, especially in the year or two just prior to withdrawal.

Ekstran's study (18), 1946, revealed that drop-outs were very
irregular in attendance; that only 20 per cent of the group he studied were present 95 per cent of the time. Delaney (12), 1950, investigated the attendance records of drop-outs on a city-wide basis in Chicago. He found that for schools located in the under-privileged areas, 73 per cent of the drop-outs were frequently absent or truant prior to leaving school; city-wide records indicated that 35 per cent were chronic absentees and more than 50 per cent had truancy records. Snepp (51), 1951, in Evansville, Indiana, found about half of the drop-outs had been chronic attendance problems.

Plett (40), 1951, in his study in Tulsa's junior high schools, noted absences progressively increased from grade seven on until time of dropping from school.

The only study reviewed with findings unlike those cited was one by Gragg (23), reported in 1949. He concluded that poor attendance was not a significant factor associated with early withdrawal from school.

## School Transfers

There is much evidence that our population is becoming an increasingly mobile one. If this is true, it seems logical to assume that the incidence of school transfers is also increasing. Do drop-outs change schools more frequently than pupils who complete high school? Inasmuch as adjustment problems may be provoked as a student breaks ties with one school and seeks to establish new relationships in another, this is an interesting question. The findings concerning it vary and are not altogether conclusive.

On the basis of his study in Kentucky, Hecker (28), 1953, found
that early school leavers had few if any transfers. In contrast, Dillon, 1949, found that "the school leavers had frequent transfers...two-thirds of the students had three or more transfers, exclusive of normal progress transfers, and 17 per cent had five or more..." (13; p. 45). Dillon's study included schools in Michigan, Ohio, and Indiana.

Plett's study (40) in Tulsa, Oklahoma, revealed findings similar to Dillon's. His study at the junior high school level revealed that twothirds of drop-outs had two or more transfers from the time they entered junior high school until they dropped from school; 36 per cent had three or more transfers.

In Alabama, Taylor (53), 1952, found a high incidence of transfers among drop-outs but concluded that the evidence was not conclusive when carefully analyzed.

No doubt, mobility of population is greater in some locales than in others and likewise the incidence of pupil transfers. Thus, varying findings are to be expected. However, in studies where the incidence of pupil transfers is great, the effect in relation to early withdrawal from school cannot be taken for granted unless comparisons are made with inschool populations to determine if significant differences exist. This procedure was not employed in the stidies cited. Therefore, the conclusions drawn from the findings cited should be considered tentative inferences.

Grade Level When Drop-outs Occur
Findings vary concerning the frequency of drop-outs at various grade levels in secondary schools. Typically, most drop-outs have been
found to occur in the tenth grade. Grades nine and eleven rank second with about equal frequency. The following table contains findings from four selected studies which are reasonably typical.

## TABLE 3

PERCENTAGE DISTRIBUTIONS OF DROP-OUTS
BY GRADE AS INDICATED BY FOUR REPRESENTATIVE STUDIES*

| Author <br> of <br> Study | Year <br> Reported | Percentage Distribution <br> by Grade | Total <br> Per Cent |  |  |
| :--- | :---: | :---: | :---: | :---: | :---: |
| Mitchell (39) | 1935 | 60 | 28 | 10 | 2 |

*Percentages were computed from frequency data reported.

It may be noted from the data in this table that in three of the four studies cited the percentage of drop-outs was greatest at grade ten; that grade nine ranked second in two of the studies, and grade eleven ranked second in the other two; that a relatively small per cent of dropouts occurred in the twelfth grade.

## Retention in Grade

A considerable number of youth are retained in grade each year because of unsatisfactory academic progress. Reeder places the figure at "approximately 10 per cent" annually for all schools of the nation (44;
p. 301). What effect does grade failure and retention have on pupils' continuance in school? Drop-out studies suggest that the effect is very crucial. In fact, some of the findings are rather startling. As an example, a junior high school study in Minneapolis reported in 1937, by Douglas and Wind (14), revealed that only 42 of 1,213 inschool pupils were retarded one or more grades; in contrast, 2,077 of 1,255 drop-outs were retarded from one to four or more years. The typical in-school pupil was found to be almost exactly at age for grade; the typical drop-out was found to be retarded over two years. Retardation when correlated with elimination yielded a Bi-Serial Coefficient of .867. Of the many factors studied in relation to drop-outs, retardation was found to be the most significant.

Gragg (23), in his study in New Havcn, Connecticut, and Ithaca, New York, reported in 1949, also found that retardation-in-grade was the most significant of the factors he studied in relation to drop-outs. Seymour (47), 1950, arrived at the same conclusion.

A study by Haller at Capitol Hill High School in Oklahoma City, 1937, revealed findings similar to those cited. On a percentage basis he found "51.1 per cent retardation among ninth grade drop-outs...77.9 per cent in the tenth grade group, 51.8 per cent in the eleventh grade and 26.5 per cent in the twelfth....an average of 53.3 per cent" ( 24 ; p. 54-55) . Among others, Dillon (13) and Hecker (28) obtained findings very consistent with these which have been cited. A very significant relationship exists between retardation through grade failure and early elimination from school. The pattern of failure is indicated to start early in the school career of many drop-outs and to be cumulative in its effect. The
mounting dissatisfactions finally are relieved by withdrawal from school.

School Achievement
School Marks. Very much a part of grade failure is the matter of failure in school subjects. The differences are only in the degree. The pattern is the same. Following is a resume of findings from selected studies on this factor.

The findings of a few early studies are of interest in comparison with more recent ones. For example, Dearborn (11), 1909, found two-thirds of the drop-outs ranked in the lower half of their class in academic achievement. Eaton (17), 1922, in a study in Syracuse, New York, found the failure rate for drop-outs to be two and one-half times as great as for students who continue in school. Buckner (5), 1931, found that 2.3 per cent of the graduates included in her study did some failing work in the freshman year, whereas 64.1 per cent of the drop-outs had at least some failures.

More recent studies reveal the same trend. For example, Ekstrom (18), 1946, found that 48 per cent of the drop-outs he studied ranked in the lower one-third of their class in school achievement as indicated by school marks. Dillon (13), 1949, found that three out of four school leavers failed subjects on either the junior or senior high school level and that nearly half of these failed more than three subjects.

Again, the conclusion seems evident that poor school achievement and failure are significantly related to early withdrawal from school.

Achievement Test Performance. Findings cited on the foregoing pages clearly indicate that the incidence of academic retardation and
subject failure is high among drop-outs; that in terms of the school marks obtained, many made unsatisfactory progress. Their achievement also has been investigated in terms of performance on standardized achievement tests. Some of the findings are rather interesting.

Upon investigating reading ability of drop-outs in the New Haven schools, 1931, Buckner (5), found that the Cooperative Reading Test was an excellent predictor of grades. However, in relating the scores on this test to drop-outs, they definitely were not an important factor. Lanier (34), 1950, found that, when matched on the basis of intelligence test data, in-school pupils were superior to drop-outs in reading, but not significantly so. This study was conducted on 135 drop-out cases in the schools of Austin, Texas.

In contrast to the findings just cited, Snepp (51), 1951, found that 110 boys who dropped from grades nine, ten, and eleven in Evansville, Indiana, had an average grade retardation of two years in reading. Girls from grade eleven and twelve were retarded only one year.

Turning now from findings specifically concerned with reading achievement, a number of studies dealing with achievement test performance generally are worth citing. Gragg (23), 1949, for example, in his study of factors distinguishing drop-outs from high school graduates, found that drop-outs scored significantly lower on group achievement tests; he concluded that pupils ranking at the first decile on such tests should be noted particularly as potential drop-outs. Taylor (53), 1952, in a very similarly conducted study also found significant differences in achievement test performance of drop-outs and in-school pupils.

Plett's study (40) in Tulsa, 1951, revealed findings which are
rather interesting in relation to those just cited. He found that dropouts were 1.2 years below the average of all pupils in their class in terms of grade placement scores on achievement. However, upon comparing mean scores for drop-outs and an in-school control group matched on the basis of intelligence test data, he found no significant differences. Considering all the evidence reviewed, it seems rather conclusive that drop-outs show up rather poorly on achievement tests just as they do when other indices of achievement are studied. However, the studies by both Lanier (34) and Plett (40) suggest that when matched with in-school pupils on the basis of intelligence, their performance is not significantly lower.

Intelligence
The incidence of grade and subject failure among drop-outs suggests the possibility that intelligence may be an important factor in relation to withdrawals from school.

An early study with findings very typical of later ones is Ellis' (20), reported in 1925. This study utilized data obtained from an administration of the Army Alpha Test in all the high schools of Knoxville, Tennessee. A comparison was made of members of a freshman class who graduated and those who did not. It was found that the median I.Q. for the class was 93.5 ; for the group who graduated, 100.8 ; for those who were eliminated, 89.2.

Lanier (34), 1950, in a study conducted at Austin, Texas, compared the scores obtained on the California Mental Maturity Test for drop-outs and high school seniors. The mean I.Q. for the drop-out group was 95 and
for seniors approximately 111.
Of special interest with respect to the present study are two conducted in Oklahoma. Haller (24), 1937), in a study conducted at Capitol Hill High School, Oklahoma City, found that the median I.Q. of a representative sample of the high school population was 105; for drop-outs a median I.Q. of 95 was obtained. A more recent study by Plett (40), 1951, at the junior high school level in Tulsa revealed a median I.Q. of approximately 88 for the drop-out group studied. The mean I.Q. for boys was approximately six points below the one of approximately 92 obtained for girls.

Most of the intelligence test data cited has been in terms of central tendencies. The evidence relative to variability reveals that the dispersion of scores for drop-outs approximates that for in-school populations. For example, in the above cited study by Plett, it was found that the standard deviation of I.Q. scores as obtained from a form of the Otis test, was 13.25. Five per cent of the group had I.Q.'s above 115, 11 per cent above 105, and 33 per cent had I.Q.'s above 95. Comparable data from the study by Dillon (13), 1949, revealed that approximately 40 per cent of the drop-outs for whom intelligence data were obtainable had I.Q.'s above 90. Slightly over 25 per cent of both sexes had L.Q.'s exceeding 100.

The findings concerning intelligence followed a very similar trend for all the studies examined. In general, they reveal that when measures of central tendency are computed, drop-outs as a group are typically about ten to fifteen I.Q. points down the scale from various in-school populations with which comparisons have been made. Studies also reveal a wide
range of intellectual abilities among drop-outs. Although a majority of drop-outs rate below average on intelligence tests, a considerable portion of them rate above average. It should be noted that many pupils who remain in school have comparable intelligence test ratings to those who do not remain. Therefore, even though intelligence is indicated to be a relative factor in many cases of drop-out, generalizations on just how significant it is are difficult to establish since the scores obtained are influenced by other variables.

## Curriculum

The need for curriculum revision frequentiy has been mentioned in the recommendations of drop-out studies. In many instances this need is inferred on the basis of general findings. In some studies, certain factors related to curriculum have been investigated directly. The following discussion is concerned with the findings of studies in which curricular questions have been investigated directly.

Thomas (54), 1954, for example, investigated the relative holding power of various academic programs. The holding power for all programs studied was 73 per cent--i.e., 73 per cent of those enrolled completed high school in some one of the five programs offered. Individually, the holding power was 88 per cent for the academic program, 75 per cent for the business program, 57 per cent for the general program, 75 per cent for the technical program and 51 per cent for the trades program. In all probability, an element of selectivity is involved in the retention power of these various programs. In other words, more than the relative quality of the several programs likely is operative. Whatever inferences are
drawn concerning the variability of holding power, the findings still suggest that a diversity of curricular offerings does not of itself solve the drop-out problem.

A study by Pond (42), 1953, contains interesting findings concerning reactions of drop-outs to various curricular questions. In this study of 4,863 drop-outs from 164 schools in Pennsylvania, Pond found that the group gave about equal support to English, social studies, mathematics, science, and vocational subjects as being "most interesting." Each of these subjects received approximately 15 per cent of the choices in this category. In answer to the question regarding "subjects of greatest good," mathematics was selected--31 per cent made this choice. English ranked second, being selected by 25.5 per cent of the group. Vocational courses ranked third and was selected by 15.6 per cent of the group studied. Social studies stood out as being considered "of least value"; 33 per cent of the group felt this way. Foreign language was also very unpopular with drop-outs. Over 40 per cent of the drop-outs stated that the school had been "much" help in successful living. As a group, they tended to answer affirnativeiy a question regarding the help received from the schools in learning to "get along with other people." They ranked school low on its helpfulness in "getting and holding a job."

In a study reported in 1953--sponsored by the Kentucky Association of Colleges, Secondary and Elementary Schools--Hecker (28) found that business, shop, and home economics were indicated by drop-outs as subjects most needed or desired since leaving school.

Upon examining the nature of educational programs pursued by school leavers, Dillon (13), 1949, found that the courses they had taken
were representative of those taken by the average school student. Taylor (53), 1952, found no evidence that the course of study pursued was a factor associated with early school leaving.

It may be noted that the studies cited deal with different questions concerning curriculum in relation to early withdrawal from school. Therefore, it is difficult to locate and identify common trends among the findings. However, among the general conclusions reached in many dropout studies are frequently found statements similar to that made by Holbeck. On the basis of his study at Passaic, New Jersey, 1951, he concluded that "the heart of the trouble is the curriculum. Passaic High School, like many of the high schools of the nation; is designed for college preparation" (29).

Among those who have studied the problem, there seems to be much feeling that secondary schools have perpetuated traditional curricula and instructional methods; that their offerings do not adequately and equally meet the educational needs of all segments of the pupil population they enroll; that they continue selective practices despite the fact they are committed to an educational philosophy which dictates that an attempt be made to provide for the educational needs of all the youth enrolled; that secondary schools are often guilty of seeking to fit students to the curricula offered than to adjust curricular content and method to individual student needs.

## Participation in Extra-class Activities

Drop-outs, as a group, tend not to participate in extra-class activities. Findings vary, but almost without exception the trend has
been found to be the same. When compared with youth who remain in school, their degree of participation is significantly less. Following are findings from selected studies with respect to this variable.

One of the studies with most significant findings was Thomas (54), reported in 1954. This study, conducted in Chicago, involved 434 drop-out cases. Thomas found that not one person who dropped from high school before completing the third year had participated in activities. In every method of comparison made, activities were found to be the factor most related to whether or not the student finished high school.

At the Work Conference of Life Adjustment Education held in Chicago in January, 1950, C. A. Christopher (60), Coordinator of Pupil Services for the schools of Columbus, Ohio, reported findings from a follow-up study of 2,058 pupils from their entrance in grade one until high school graduation. The findings were that 643 pupils of the group dropped before completing high school; that only 16 of the group participated in activities during the first six years of school; that 230 had never participated up until the time of leaving school.

Dresher (15), 1953, reported findings similar to those just cited. In his study, including data on 388 drop-out cases from the Detroit secondary schools, he found that only 44 of the group had participated in extraclass activities.

Studies by Gragg (23), 1949, in Ithaca, New York; Delaney (12), 1950, in Chicago, Illinois; Snepp (51), 1951, Evansville, Indiana; Sonstegard (52), 1952, in Cedar Falls, Iowa; Taylor (53), 1952, in Covington County, Alabama; and Hecker (28), 1953, in the state of

Kentucky, all reveal findings which follow the same pattern of those just discussed. Therefore, there seems no point in treating them separately. Failure to participate in extra-class activities seem a definite sign of vulnerability to withdrawal.

Reasons for Withdrawals from School

Research concerned with determining and tabulating the specific reasons youth drop has certain values but it also has many limitations. Typically, a number of factors are operative in cases of withdrawal from school. Many relevant factors may well be obscured when an attempt is made to account for withdrawal on the basis of a single reason, whether supplied by the individual concerned or by school authorities. Most researchers recognize this limitation. However, in conjunction with other factors, reasons given by students and school authorities are frequently investigated. As might be expected, findings vary.

Ranking high on the list of reasons are those concerned with (1) obtaining gainful employment, (2) grade or subject failure and/or general dissatisfaction with school, and (3) various economic factors.

The following table includes reasons which were found to rank first in a number of recent studies.

TABLE 4
FINDINGS FROM SELECTED STUDIES
ON THE PRIMARY REASONS FOR
PUPIL WITHDRAWAL

| Year of Report | Authors | Reason Ranked First |
| :---: | :--- | :--- |
| 1948 | Jotinson (32) | Dissatisfaction with school |
| 1950 | Holbeck (29) | Preferred to become employed |
| 1951 | Snepp (51) | Disliked school in general |
| 1951 | Plett (40) | Preferred to become employed |
| 1951 | Mack (36) | Preferred to become employed |
| 1953 | Hecker (28) | Preferred to become employed |
| 1953 | McGee (37) | Discouragement--poor academic progress |

Most of the reasons cited in the table above were obtained through interviews with drop-outs. Some represent conclusions reached by the researcher or by school personnel.

Thompkins and Gaumitz, of the research staff of the United States Office of Education, have summarized quite succinctly the reasons youth give for dropping from school. They state:

The reasons given by drop-outs for leaving school vary a great deal, as you might expect. About six out of nine say they dropped out because they "preferred work to school," "were not interested in school," "couldn't get along with teachers," etc. Approximately two of every nine gave financial reasons. They "wanted spending money," "needed to buy clothes to help at home." One out of every nine cited personal reasons--"ill health," "friends had left school," and "parents wanted me to leave." (55; p. 191).

## Summary

Findings concerning occupation of father were very consistent among all studies examined. In general, the higher the father's occupational status, the more education his children attain.

Information gathered concerning rental value of home as related to school attendance was meager; the findings cited involved only three studies, two of which reported that the drop-out rate is high among children from homes of low rental value.

Of the many drop-out studies examined, only three contained information on the number of books and magazines in the home as a factor associated with early withdrawal from school. In each of these studies, substantial relationships were found. Drop-outs had few magazines and books in their homes, particularly magazines.

Various findings pertaining to the general economic status consistently revealed that drop-outs tend to come from families of low economic status. In several studies, this was the factor most significantly associated with early withdrawal from school.

Parental attitudes toward school have not been investigated frequently in drop-out studies. The studies reporting this factor involved seemingly rather superficial investigations. The conclusions do not seem to warrant generalizations.

The broken homes issue is not well resolved by drop-out studies. Some studies indicate that it is a factor of some significance in relation to withdrawal from school; others indicate that it is of little stgnificance. In almost all comparative studies, more of the drop-out group come from broken homes than do in-school populations. However, the differences
are sometimes small.
Size of family is not indicated to be a significant influence on length of stay in school.

Findings regarding race or nationality do not appear highly significant. In some localities, this factor seems more operative than on others. Generally, it is not indicated to be a crucial factor.

Sex differences among drop-outs are small. Boys typically comprise 55 to 60 per cent of the drop-out group. The age at which drop-out occurs varies; age 16 seems to be most crucial. Ages 15 and 17 have approximately the same incidence. Typically, a large segment of the dropouts is over-age for grade.

Almost uniformly, earlier studies reveal that the attendance record for drop-outs is poor, especially in the year or two just preceeding withdrawal.

The relationship between transfer from one school to another and withdrawal is not well determined.

Findings vary concerning the school grade at which drop-outs most frequently occur. Most studies show grade ten to be the most crucial one. The incidence at grades nine and eleven are very comparable.

Of the different factors examined in relation to withdrawals from schocl, academic failure semed to be one of the most significant. Findings were very consistent both with respect to failure in individual school subjects and grade failure.

Academic achievement of drop-outs has also been studied by means of data from standardized achievement tests. Some studies show the typical drop-out to be comparatively weak in reading skills; some do not. As
a group, drop-outs tend to score lower on achievement tests than do inschool pupils.

On intelligence tests, mean scores for drop-outs have typically been found to be 10 to 15 I .Q. points lower than for in-school populations. However, the variability of scores approaches what one would expect of normal populations.

The relationship of curriculum to early withdrawal from school is difficult to treat adequately in a summary such as this. Need for curriculum revision was frequently emphasized in studies reviewed.

A relatively small percentage of drop-outs participates in extraclass activities. This finding is most consistent and in some studies has been found to be the most significant factor differentiating drop-outs from pupils remaining in school.

Turning last to the reasons given for withdrawal, we find a variety of answers. High on the 1 ist in terms of frequency are such reasons as "preferred work to school," "not interested in school," "disliked school in general," "couldn't learn and got discouraged," "failed subjects," and "couldn't get along with teachers." Also high in frequency were reasons related to financial problems.

## CHAPTER III

## the extent and nature of the drop-out problem IN OKLAHOMA CITY

One of the primary considerations of this study was to determine the extent and general nature of the drop-out problem as it existed in the Oklahoma City Secondary Schools during the 1954-1955 school year. This chapter is concerned with findings related to this objective. It deals with the holding power of the system and its various secondary schools, the relative frequency of withdrawals at various grade levels, and other matters relative to the general character of the problem.

Holding Power of the System During Recent Years
As background for the presentation to follow, data on the holding power for years previous to the one with which this study is concerned are very pertinent. First, they afford a long range perspective of the holding power problem. Second, they afford a more accurate basis for determining the true extent of the problem than is obtainable by a tabulation of drop-outs for a single year.

In a school system the size of Oklahoma City's, it is impossible to determine the number of true drop-outs by merely tabulating withdrawals which occur during a given school year. Many of those who withdraw leave the state and may or may not enter school elsewhere. Also, a number of
pupils complete a given school year but fail to re-enter the next year. To circumvent some of these difficulties in accounting for drop-outs, it is common practice to compute drop-out data for secondary schools by comparing the number of grade nine entrants with the number who were graduated from grade twelve four years later. The following table contains data for successive years thus determined. It reveals the holding power of Oklahoma City's High Schools for the period beginning in September, 1939, and extending through the year in which data for this study were gathered.

TABLE 5
HOLDING POWER OF THE OKLAHOMA CITY HIGH SCHOOLS FOR THE PERIOD 1939 THROUGH 1955

| Membership in the 9th Grade |  | Membership at Close of Graduating Semester |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Year (Sept.) | Number | Year (May) | Number | Percentage |
| 1939 | 2,818 | 1943 | 1,655 | 58.73 |
| 1940 | 2,784 | 1944 | 1,395 | 50.11 |
| 1941 | 2,666 | 1945 | 1,438 | 53.94 |
| 1942 | 2,659 | 1946 | 1,624 | 61.08 |
| 1943 | 2,760 | 1947 | 1,649 | 59.75 |
| 1944 | 2,758 | 1948 | 1,850 | 56.08 |
| 1945 | 2,686 | 1949 | 1,826 | 67.98 |
| 1946 | 2,732 | 1950 | 1,799 | 65.12 |
| 1947* | -•... | 1951 | -•••• | -•••• |
| 1948 | 2,528 | 1952 | 1,838 | 72.71 |
| 1949 | 2,801 | 1953 | 1,757 | 62.72 |
| 1950 | 2,749 | 1954 | 1,877 | 68.28 |
| 1951 | 2,910 | 1955 | 2,042 | 70.17 |
| Total | 32,851 |  | 20,750 | 63.16 |

From the foregoing table it may be noted that there is considerable variation in the retention percentages for successive ninth grade classes. During the years of World War II, for example, the percentages were low. For the class entering the ninth grade in 1940 , only about 50 per cent remained to be graduated in 1944; for the class entering in 1941 , only about 54 per cent were graduated in 1945. Following World War II, retention improved considerably. For example, almost 68 per cent of those who entered the ninth grade in 1945 remained to be graduated in 1949. In the early $1950^{\prime} s$, another slump in retention may be noted, this one coinciding with the years of the Korean conflict. Following this period, the trend was again upward. All of these trends are in keeping with those rew vealed by national holding power statistics. During wax times, youth have unprecedented opportunities to enter the labor market to earn above average wages. Also, during such periods of unrest, many join the armed forces. For these and possibly other reasons, withdrawals increase and the effect is reflected in holding power statistics for war years.

Turning now from the variations in holding power for different years, a glance at the totals column in Table 5 reveals that for all ninth grade entrants enrolled during the period 1939 through 1951, approximately 63 per cent were retained in school to be graduated with their respective classes. Conversely, the loss was about 37 per cent. These figures approximate comparable national statistics. For example, Gaumitz reported that 62.5 per cent of ninth graders who enter public high schools over the nation in 1947-1948 remained to be graduated in 1951; the loss was thus 37.5 per cent (57).

The holding power data just reviewed do not take into consideration losses in grade seven and eight. If these grades were included, retention in Oklahoma City schools probably would not exceed half of the students enrolled in grade seven. The data on the gross number of withdrawals from grades seven through twelve for the 1954-1955 school year reveal that twenty-five per cent occurred in grades seven and eight.

Oklahoma City's Drop-out Problem in 1954-1955
During the 1954-1955 school year 1,339, or about eight per cent of the 17,252 pupils enrolled in grades seven through twelve, withdrew from the fourteen secondary schools included in this study. For reasons previously stated, it is impossible to determine which and how many of these withdrawals were permanent and could thus be characterized as true drop-outs. A scant two dozen of the group were not because they withdrew to enroll in non-public schools. Half of the group left the state upon withdrawal and may or may not have continued their education elsewhere. Most of the remainder are very probably permanent drop-outs. In fact, 648 of the group were classed as such by the school system. Because of the uncertainties involved in identifying the true drop-outs from among the gross number of withdrawals, the relative magnitude of the drop-out problem of various secondary schools is probably best depicted by comparing the gross number of withdrawals from each with its total enrollment. The following table provides data for such a comparison and thus serves to identify schools in which the drop-out problem is likely most acute.

In Table 6, schools are listed in order of their indicated holding power. It may be noted that the per cent of enrollees who withdrew

TABLE 6
ENROLLMENTS AND WITHDRAWALS BY SCHOOLS
IN 1954-1955

varied from 3.27 at Taft Junior High School to 16.43 at Franklin Junior High School. The loss for all schools for withdrawals was 7.76 per cent. Junior and senior high schools were equally represented in above and below average categories with respect to percentage of enrollment lost. It may be observed that size of enrollment does not appear to be a crucial factor with respect to holding power in the schools studied. Classen Senior High School, for example, had the largest enrollment but still ranked above the system as a whole in holding power. On the other hand, Central Senior High School with a very comparable enrollment had next to the largest per cent of withdrawals. Franklin Junior High School, the school with the smallest enrollment, had the greatest per cent of withdrawals. Still another point of interest is that the combination junior-senior high schools of the system all had proportionately small losses in enrollment through withdrawals. This may well be due to socioeconomic and other conditions operative in the vicinities where these schools are located rather than to organization and additional study would be required to find adequate reasons. However, it is an interesting finding and one which might warrant further investigation.

Reasons for Drop-outs
Whenever a pupil drops from school in Oklahoma City, a report containing the primary reason is filed with the Department of Pupil Services by the school concerned. The following summary, Table 7, was prepared from these reports. It contains the various reasons why pupils dropped from the schools studied and the number and per cent of withdrawals attributed to each.

## TABLE 7

REASONS FOR WITHDRAWAL FROM SCHOOL BY SEX

| Reasons | Male |  | Female |  | Total |  | \% of Total Group |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | No. | \% | No. | \% | No. | \% |  |
| Left State | 336 | 53.7 | 290 | 46.3 | 626 | 100 | 50.2 |
| Married | 16 | 10.1 | 142 | 89.9 | 158 | 100 | 12.7 |
| Non-attendance | 96 | 75.6 | 31 | 24.4 | 127 | 100 | 10.2 |
| Hardship | 52 | 67.5 | 25 | 32.5 | 77 | 100 | 6.2 |
| Entered Armed Forces | 76 | 98.7 | 1 | 1.3 | 77 | 100 | 6.2 |
| Over-age | 34 | 87.2 | 5 | 12.8 | 39 | 100 | 3.2 |
| Illness | 12 | 33.3 | 24 | 66.7 | 36 | 100 | 2.9 |
| Suspended | 25 | 83.3 | 5 | 16.7 | 30 | 100 | 2.4 |
| Transferred to NonPublic School | 8 | 29.6 | 19 | 70.4 | 27 | 100 | 2.2 |
| Police Custody | 14 | 58.3 | 10 | 41.7 | 24 | 100 | 1.9 |
| Death | 3 | 100.0 | 0 | 0.0 | 3 | 100 | . 2 |
| Non-educable | 2 | 100.0 | 0 | 0.0 | 2 | 100 | . 1 |
| Other | 8 | 53.3 | 7 | 46.7 | 15 | 100 | 1.2 |
| Unknown | 4 | 80.0 | 1 | 20.0 | 5 | 100 | . 4 |
| Totals | 686 | 55.0 | 560 | 45.0 | 1,246 |  | 100.0 |

Note: No reasons were given for 93 cases of withdrawal.

Table 7 reveals several significant facts. As previously mentioned, half of the withdrawals occurred because the pupils involved left the
state. This led the list in frequency reported, and boys and girls withdrew in approximately proportionate numbers for this reason. For the other reasons, sex differences were much in evidence. For boys, reasons ranking two through six in order of frequency reported were non-attendance, entrance into the armed forces, hardship, over-age, and suspension. For girls, marriage, non-attendance, hardship, illness, transfer to a nonpublic school, and police custody were the ones reported.

Twice as many boys as girls withdrew for reasons of hardship, three times as many for non-attendance, five times as many for suspension and seven times as many withdrew for reason of being over age. Of course, essentially all withdrawals for entrance into the armed services were made by boys. Girls, on the other hand, outnumbered boys nine to one in with drawals for marriage and two to one for illness. However, illness accounted for a very negligible number of withdrawals.

This analysis of reasons for withdrawal by sex suggests that boys react more unfavorably to school authority and control than girls in that relatively more of them withdraw for reasons of suspension and non-attendance. Also, economic limitations seem to be more prevalent as a factor in withdrawal among boys.

Withdrawals by Grade
Most studies show that grade ten is the most crucial one with respect to drop-outs. As data in Table 8 reveal, this was also the finding for Oklahoma City schools.

TABLE 8
GRADE DISTRIBUTION OF WITHDRAWALS BY SEX

| Grade <br> Left | Male |  | Female |  | Total | Per Cent of <br> Withdrawals <br> from All <br> Grades |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 7 | No. | $\%$ | No. | $\%$ | No. | $\%$ | 12.2 |
| 8 | 75 | 54.6 | 74 | 45.4 | 163 | 100 | 12.9 |
| 9 | 111 | 52.4 | 100 | 57.1 | 47.6 | 212 | 100 |
| 10 | 196 | 58.9 | 137 | 41.1 | 333 | 100 | 100 |
| 11 | 157 | 52.9 | 140 | 47.1 | 297 | 100 | 13.1 |
| 12 | 93 | 58.5 | 66 | 41.5 | 159 | 100 | 22.2 |

Approximately 25 per cent of withdrawals occurred at grade ten. Withdrawals were next most frequent in grade eleven, where 22 per cent occurred. Relatively more boys than girls withdrew at each grade level except at grade eight, where the trend was almost exactly reversed; at this grade, approximately 57 per cent of the withdrawals were girls.

Withdrawals by Months
The relative frequency of withdrawals for different months of the 1954-1955 school year followed a rather interesting pattern. September and May, the beginning and ending months of the school terms, were intervals in which withdrawals were least in number. The withdrawal rate was
also relatively low in December, possibly because Christmas holidays make it a short school month. January stands out as the month in which the greatest number of withdrawals occurred. Figure 1 reveals the pattern of withdrawals for the successive months of the school term.


Fig. l.--Distribution of Withdrawals by Month

There are several possible explanations for the higher incidence of withdrawals in January. First, this is a period of transition marking the end of the first semester and the beginning of the second. Mid-term examinations may loom as a threat to the peace of mind of some pupils, especially those who consider themselves backward or unprepared academically. Also, it follows the Christmas vacation, a time when students who were dissatisfied with school are given a brief reprieve. Many may have decided to prolong this vacation by dropping from school rather than return to a situation in which they are dissatisfied.

Following January, there was a steady decline of withdrawals each
month during the remaindex of the school year.

## Summary

This chapter has been concerned with description of the extent and general nature of the drop-out problem in Oklahoma City, particularly for the 1954-1955 school year. Following are some of the major findings relative to the holding power of the system, the relative holding power of secondary schools within the system, the reasons for pupils' withdrawing from school, the frequency of withdrawals at various grade levels and other relative considerations.

Since 1939, approximately 63 per cent of all ninth grade entrants to Oklahoma City's public secondary schools remained in school to be graduated from grade twelve with their respective classes; conversely, 37 per cent did not remain. During the 1954-1955 school year, 1,339 pupils-about 8 per cent of the 17,252 enrolled--withdrew from the secondary schools studied. Comparative data on the number of enrollments and withdrawals by school reveal that Taft Junior High School had the best retention rate, its enrollment loss for withdrawals being 3.2 per cent. Franklin Junior High School represented the other extreme with a loss of 16.4 per cent. Junior and senior high schools were very proportionately represented along the continuum between these extremes. Size of school enrollment was not indicated to be a relative factor with respect to holding power. However, it was noted that all of the combination juniorsenior high schools had relatively good retention records. Whether this is mainly due to organization or to other factors was not determined.

An examination of primary reasons for withdrawal revealed that
boys withdrew (1) to leave the state, (2) for non-attendance, (3) for entrance into the armed forces, and (4) because of hardship, in this order respectively. Girls' withdrawals in order of frequency were for (1) leaving the state, (2) marriage, (3) illness, and (4) hardship. Boys greatly outnumbered girls in withdrawals for such reasons as entrance into the armed forces, non-attendance, hardship, suspension, and over-age. In contrast, girls withdrew much more frequently than boys for reasons of marriage and illness. When reasons for both sexes were combined, those six most frequently indicated were, in order of frequency, for (1) leaving the state, (2) marriage, (3) non-attendance, (4) hardship, (5) entrance into armed services, and (6) over-age.

Data on withdrawal by grade revealed that grade ten was the most critical one in Oklahoma City. Grade eleven was a close second. Fortyseven per cent of all withdrawals occurred at these two grade levels. Findings on the distribution of withdrawals among different months of the school year revealed that the greatest number occurred in January. September and May were months in which the fewest number occurred.

## CHARACTERISTICS OF THE DROP-OUTS

The preceding chapter contained findings concerning the extent and general nature of the drop-problem in Oklahoma City. The present chapter is a continuation of this survey with attention shifted to characteristics of the individuals who dropped from school during the 19541955 school year. It deals with the home backgrounds of the drop-outs and their traits as pupils.

Data for this chapter were gathered from drop-out reports submitted to the Department of Pupil Services by the various schools studied. The reports utilized exclude those of withdrawals for reasons of leaving the state, transfer to non-public school, death, or illness. Withdrawals for these reasons are not classified and treated by the school systen as drop-outs. Therefore, of 1,339 withdrawals during the $1954-1955$ school year, only 648 cases were classified as known drop-outs by the school system and were included for consideration in this phase of the study. It was found that many of the reports for the drop-out cases were incomplete, some almost wholly and a great number in part. Mention is made of this limitation because of its pertinence in explaining why the frequency data reported in the presentation to follow, in practically all instances, fall short of that which normally would be expected. However,
for almost all factors studied, data on enough cases were available to depict general trends and for findings to be reasonably representative.

## Home and Family Characteristics

Several types of information relative to home and family characteristics were available on the drop-out reports. Included were information on whether the drop-out lived with both parents, occupation of the father, number of children in the family, number of children at home, and information indicating whether the family received public welfare assistance. This information was somewhat insufficient to provide a complete picture of home and family considerations, but it was adequate for ascertaining in a limited fashion the kinds of homes from which the drop-outs came.

## The Broken Homes Question

In the study of social problems involving youth, the broken homes question is usually considered as a factor worthy of investigation. The findings of related studies vary concerning the significance attributed to this factor as one affecting the drop-out problem. Some studies contain evidence indicating that it is significant. In others, the evidence is inconclusive. In Oklahoma City it would appear that it may be a significant one.

When information on the question of whether the drop-out was living with both parents was tabulated, it was found that slightly over 44 per cent were not. Excluding the relatively small per cent of cases, mostly girls, who were not living with both parents because of marriage,
it seems reasonable to assume that most of this 44 per cent represent cases in which there was a broken home. Table 9 contains a summary of findings relative to the number and per cent of drop-outs living with versus those not living with both parents.

TABLE 9

A COMPARISON BY SEX OF DROP-OUTS LIVING WITH, VERSUS THOSE NOT LIVING WITH, BOTH PARENTS

| Residence | Male |  | Female |  | Total |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | No. | \% | No. | \% | No. | $\%$ |
| Living with Both Parents | 144 | 55.7 | 106 | 56.1 | 250 | 55.7 |
| Not Living with Both Parents | 116 | $44 \cdot 3$ | 83 | 43.9 | 199 | 44.3 |
| Totals | 260 | 100.0 | 189 | 100.0 | 449 | 100.0 |

The data cited in Table 9 reveal that sex differences for each variable are insignificant. For both sexes, the relative number not living with both parents appears great enough to suggest a positive relationship between the broken homes variable and early withdrawal from school.

## Occupation of Father

Among the data included on drop-out reports, occupation of father was included for a goodly number of cases. These data were somewhat difEicult to classify because only job titles, and in some instances merely places of employment, were reported. To reduce possible errors, only
those cases in which a job title was given were included for study. The distribution of occupations among the different occupational classifications is shown in Table 10.

TABLE 10
CLASSIFICATION OF FATHERS' OCCUPATIONS FOR THE DROP-OUTS


Interpretation of the data in Table 10 beyond noting very general
trends is difficult in the absence of similar data for a control group. However, the findings regarding occupation of father for drop-outs in Oklahoma City schools appear to be typical of those revealed by other studies. Slightly over two-thirds of the job titles were subsumed under occupations classed as agricultural, skilled trades, and semiskilled and unskilled workers. Since pupils in Oklahoma City come from an almost exclusively urban population, agricultural and related occupations were negligible in number.

Approximately 36 per cent of all the occupations were in the semi-skilled-unskilled category. This percentage is probably somewhat conservative in that a number of occupations of the apprentice and helper types may have been reported to the schools by titles indicating skilled trades. For example, such occupations as Carpenter's Helper and Apprentice Machinist may have been reported by such titles as Carpenter and Machinist, thus removing them from the unskilled and semiskilled category.

In the following chapter, comparative data are presented for the drop-outs and an in-school population.

## Families Receiving Public Welfare Assistance

Apparently few families of drop-outs are recipients of public welfare assistance. Of the reports containing information on this factor, only fourteen, or about six per cent, were indicated as receiving such financial aid. Percentages for boys and girls were almost identical. Whether the findings were valid is somewhat open to question due to the fact that a stigma is often attached to the idea of being a recipient of welfare aid. Thus, in certain instances, some whose families were receiving such assistance may not have wished to admit it.

Two types of information were available relative to the size of the families of drop-outs. These were: (1) number of children in the family and (2) number of children at home.

Two hundred forty-four reports contained information relative to the number of children in the family. A tabulation of these data revealed an average of 3.5 children per family. Thirty-seven per cent of the families had two or less children and approximately 75 per cent of them had four children or less. Thus a majority of the families were not unduly large.

Data on the number of children at home for 234 cases further substantiated the fact that size of family is probably not a crucial factor in most instances of early withdrawal from school. When average size of family was computed on this basis, the figure was 2.7 children per family. Seventy-six per cent of the families had three or less children at home and over half of them had two or less.

Did Drop-outs' Parents Come to School for Conference?
Information on the above question was available for 300 of the cases studied. In almost 70 per cent of these cases, parents had come to school for a conference. This would suggest that a majority of parents of drop-outs are sufficiently interested in their children's welfare to come to school for a conference when withdrawal has occurred or is eminent.

Since reports containing information relative to the above question represent less than half of the 648 in which such information should have been recorded, it is difficult to ascertain the extent of efforts
being extended by schools in working with parents when a pupil's withdrawal is eminent. One conclusion does appear well founded. This is that the various schools of the system should exercise more care to insure that the drop-out reports they submit contain complete information.

## Personal-School Characteristics

Turning now from familial characteristics, what were the drop-outs like as individuals and, more particularly, as students? The remainder of this chapter deals with this question. Findings are presented regarding sex, intelligence, achievement, attendance and other factors which for purposes of organization have been classed as personal-school characteristics.

## Sex of the Drop-outs

Data for the $1954-1955$ school year on all pupil withdrawals $(1,339$ cases) from the schools studied reveal that 55 per cent were boys and 45 per cent were girls. For the portion of these withdrawals considered by the school system as drop-outs, 59 per cent were boys and 41 per cent girls. These data indicate sex differences very comparable to those typically found in numerous other studies.

There are several possible explanations why boys leave school in greater numbers than girls. In our culture, boys of high school age have more freedom from home control than girls of comparable age. They tend to be more aggressive in their behavior and less inclined to accept school control which they may view as arbitrary. They usually find it easier than girls to obtain jobs and have greater motivation for doing so because ours is a culture in which they are more oftcn expected to stand the
expenses of dates, to help with the up-keep of the home, and to earn spending money for various incidentals. Last but not least, the present study shows, as will be indicated in succeeding pages of this chapter, that the incidence of poor achievement and failure at the high school level was decidedly greater among boys than among girls. This could well mean that boys find school less satisfying.

## Intelligence

Historically, the American high school has been a selective institution. No doubt, its selective character has been modified as enrollments have increased and as changes in educational philosophy have evolved. Despite these changes, there is much evidence that even today it still tends to be selective. If this assumption is valid, then it follows that intelligence may well play a significant part in how well the individual student can withstand the selective educational processes; that pupils of lower mental ability may be progressively weeded out. The findings of the present study throw at least some light on the validity of these assumptions. Data pertaining to intelligence were obtained for 325 drop-out cases. To insure comparability of scores, Intelligence Quotients from only one test were utilized. This was the California Test of Mental Maturity, Short Form. In almost all instances, the individuals studied had taken this test at grade seven. Table 11 reveals the distribution of I.Q. scores. Frequency data and percentages were listed for the total group studied and by sex, together with expected percentages for a normal population.

TABLE 11
DISTRIBUTION OF I.Q.'S BY SEX FOR THE DROP-OUTS

| I.Q• | Male |  | Female |  | Total |  | Per Cent Included in Typical Population* |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | No. | \% | No. | \% |  | \% |  |
| 130 and above | 2. | . 8 | 1 | 1.3 | 3 | . 9 | 3 |
| 115-129 | 10 | 4.1 | 8 | 10.1 | 18 | 5.5 | 12 |
| 100-114 | 76 | 30.8 | 25 | 31.6 | 101 | 31.2 | 35 |
| 85-99 | 88 | 35.8 | 31 | 39.3 | 119 | 36.6 | 35 |
| 70-34 | 57 | 23.2 | 12 | 15.2 | 69 | 21.2 | 12 |
| 69 and below | 13 | 5.3 | 2 | 2.5 | 15 | 4.6 | 3 |
| Totals | 246 | 100.0 | 79 | 100.0 | 325 | 100.0 | 100 |

*These are expectancy percentages suggested by the authors of the California Test of Mental Maturity in the Manual for the 1951 Edition of the Intermediate Form (grades 7 to 10)--p.5.

Mean I.Q.'s, computed from the group data in Table ll, are listed in Table 12.

TABLE 12
MEAN I.Q.'S OF DROP-OUTS BY SEX

|  | Male | Female | Total Group |
| :--- | :---: | :---: | :---: |
| Mean I.Q. | 93.1 | 96.9 | 94.2 |

These mean I.Q.'s are eight to twelve points below those typically found when in-school populations at the high school level are tested. For
example, Cronback (9), in summarizing numerous studies of the intelligence of various groups of children and adults, concluded that the mean I.Q. of high school seniors is 107. Of interest, also, is his conclusion that an I.Q. of 104 is the minimum essential for satisfactory (i.e. average) work in academic curricula at the high school level.

It would appear that the assumptions stated earlier to the effect that intelligence may play a significant part in how well a student can withstand the selective process in high school has some validity with reference to the situation in Oklahoma City. Approximately 63 per cent of the drop-out group had I.Q.'s below 100 and 25 per cent had I.Q.'s of 85 or lower. However, it should also be noted that almost 37 per cent of the drop-outs studied had I.Q.'s of 100 and above with some ranging into superior and very superior categories. For these it would seem likely that intelligence was not a crucial factor affecting their withdrawal. Therefore, the phrase "some validity," as applied to the assumption stated, seems an appropriate qualification for any conclusions concerning it.

Aside from points already cited concerning the I.Q. data for dropouts, some additional observations seem worth noting. A mere glance at Table 11 reveals that, intellectually, members of the drop-out group vary considerably. Even though the central tendency of the scores was lower than that to be expected for a comparable in-school population, the variability of the scores closely approximated that to be expected of such a group. As evidence of this fact, the standard deviation computed from the I.Q. data was found to be 15. This is within one I.Q. point of the standard deviation of 16 which the test is designated to yield.

Thus, even though the drop-outs as a group tended to rank relatively low in intelligence, many levels of intelligence were represented in the group. Many of the group were indicated to have ample intellectual ability to achieve success in a typical high school program of studies. It might be said also that relatively few of them were indicated to have such limited ability that they could not profit from a high school program geared to meet their needs and abilities. Herein lies a real challenge to high schools today. How to meet the needs of the slow learner at the high school level is a very real and complex problem confronting nearly all secondary schools today. There is much evidence that it is one of the very significant ones for serious consideration if the drop-out prob1 em is to be resolved satisfactorily.

## School Achievement of Drop-outs

The foregoing findings regarding intellectual abilities of dropouts naturally lead to some expectancies concerning their school achievement. Measures of intellectual ability are predictive of scholastic attainment. Therefore, a comparison of their achievement records at this stage of discussion would seem appropriate.

Three types of information were contained in the drop-out reports concerning school achievement. These were school marks, achievement test scores, and data on retentions-in-grade. All of these types of information were rather sketchy and incomplete in the records available for study. However, enough information was available to determine general trends with reasonable reliability.

School marks. Attention shall first be given to school marks since
they are usually considered to represent school achievement best. The data available were average marks made each year by the drop-out during his tenure in school. In almost all instances, marks for grades one through six were recorded as "S" or "U." Marks otherwise recorded were changed to these categories. For grades seven through twelve, practically all marks were recorded in letter grades of $A, B, C, D$ and $F$. The few cases otherwise reported were omitted.

Since marks recorded for grades one through six were of a different type than those for grades seven through twelve, the former will be given first attention. As a point of departure for discussion, a summary of the findings is presented in Table 13.

TABLE 13

DISTRIBUTION OF SATISFACTORY (S) AND UNSATISFACTORY (U) MARKS ATTAINED BY DROR-OUTS IN GRADES 1 THROUGH 6

| Grade | Marks |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | S |  | U |  | Total |  |
|  | No. | \% | No. | \% | No. | \% |
| 1 | 67 | 85 | 12 | 15 | 79 | 100 |
| 2 | 89 | 89 | 11 | 11 | 100 | 100 |
| 3 | 100 | 92 | 9 | 8 | 109 | 100 |
| 4 | 117 | 90 | 13 | 10 | 130 | 100 |
| 5 | 131 | 94 | 8 | 6 | 139 | 100 |
| 6 | 144 | 97 | 5 | 3 | 149 | 100 |
| All <br> Grades | 648 | 92 | 58 | 8 | 706 | 100 |

The data in Table 13 reveal a low incidence of unsatisfactory grades among the drop-outs during the interval they were in elementary school. Almost 92 per cent of all marks for all grades were in the satisfactory category. This finding is not typical for drop-out studies. Most studies reveal a high incidence of unsatisfactory achievement at the elementary school level. Some studies have found as high as 70 to 99 per cent of the drop-out cases studied failed one or mare grades in elementary school. A finding which was typical was that grades one, two, and four, in this respective order, were the ones where the highest percentages of unsatisfactory marks were obtained. This is especially typical of findings with respect to grade one where many adjustment and maturational factors have bearing on school success during the first year.

Because of the relatively meager number of cases, frequency data and percentages are not presented by sex for marks achieved by the dropout group while in elementary school. However, such a break-down was made for tentative analysis by the writer. The essential finding was that for all marks made by girls for all grades, 11.1 per cent were in the unsatisfactory category. The comparable figure for boys was 7.6 per cent. Thus, for the group studied, girls obtained more unsatisfactory marks than boys.

At the secondary school level, the findings were very typical of those reported in numerous studies. There was a progressive decline in scholarship beginning early in junior high school and extending through the senior high school grades. Table 14 contains a summary of the findings for the total group studied. The marks represent yearly averages. Frequency data and per cent ratios are included for each level of achievement. In addition, the right hand column of the table contains numerical
point averages computed on a four point basis--i.e., A=4, $B=3, C=2, D=1$, F-Zero. The table should be read horizontally. For example, at the seventh grade level, 5 cases, or 2 per cent, had marks for the year averaging "A", 62 cases, or 26 per cent, had "B" averages, etc; 239 cases were studied and the grade point average for this grade computed on a 4 -point basis was 2.08.
table 14

## MARKS AND GRADE POINT AVERAGES ATTAINED BY DROP-OUTS at various grade levels during THEIR SCHOOL CAREERS

| Grade | Marks |  |  |  |  |  |  |  |  |  |  |  | Grade Point <br> Average |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | A |  | B |  | C |  | D |  | F |  | Total |  |  |
|  | No. | \% | No. | \% | No. | \% | No. | \% | No. | \% | No. | \% |  |
| 7 | 5 | 2 | 62 | 26 | 126 | 53 |  | 18 | 3 | 1 | 239 | 100 | 2.08 |
| 8 | 3 | 1 | 64 | 25 | 112 | 43 | 72 | 28 | 9 | 3 | 260 | 100 | 1.93 |
| 9 | 6 | 2 | 66 | 19 | 148 | 44 | 105 | 31 | 12 | 4 | 337 | 100 | 1.85 |
| 10 | 2 | 1 | 27 | 9 | 110 | 39 | 92 | 33 | 52 | 18 | 283 | 100 | 1.42 |
| 11 | 0 | 0 | 16 | 9 | 65 | 38 | 58 | 33 | 34 | 20 | 173 | 100 | 1.36 |
| 12 | 2 | 4 | 5 | 10 | 10 | 21 | 21 | 22 |  | 43 |  | 100 | 1.31 |
| $\begin{gathered} \text { All } \\ \text { Grades } \end{gathered}$ | 18 | 1 | 240 | 17 | 571 | 47 |  | 27 | 121 | 8 | 1,341 | 100 | 1.76 |

In Table 14, the colum containing numerical point averages reveals the general trend of the school marks achieved by drop-outs quite well. Here, the progressive decline in scholarship is quite evident.

Beginning at grade seven where the average mark for the group is approximately "C," a gradual yearly decline is evident for each successive year in junior high school. At grade ten, the decline is quite abrupt. An average mark of "D" is more nearly approached with each successive year at the senior high school level.

At the senior high school level, the combined percentages of cases with marks in the "D" and "F" categories equaled 51 per cent at grade ten; 53 per cent at grade eleven; 67 per cent at grade twelve. Thus, over half of the cases studied were achieving at a very low or unsatisfactory level during their stay in senior high school. That this level of academic performance affected their decision to drop from school would seem to be a very tenable assumption.

A tabulation of marks by sex revealed some additional information of interest. At all grade levels, the achievement of girls was decidedly superior to that of boys. On this point, numerical point averages again tell the story quite well. Table 15 includes these averages for each sex. For purposes of comparison, averages for both sexes combined, as cited in the previous table, are also included.

Despite the sex differences apparent upon examination of Table 15, the progressive decline in scholarship during secondary school still is in evidence for both sexes.

## THE DROP-OUTS' GRADE POINT AVERAGES <br> by Grade and sex

| Grade | Male | Female | Both Sexes <br> Combined |
| :---: | :---: | :---: | :---: |
| 7 | 1.91 | 2.41 | 2.08 |
| 8 | 1.77 | 2.27 | 1.93 |
| 9 | 1.67 | 2.15 | 1.85 |
| 10 | 1.25 | 1.68 | 1.42 |
| 11 | 1.32 | 1.13 | 1.83 |
| 12 | 1.59 | 2.01 | 1.31 |

Marks at time of drop-out. Whether the typical drop-out withdraws from school because of pür school achievement or in looking forward to withdrawal lets down in scholastic endeavors is a difficult ques ion to answer. Both possibilities are likely. Regardless of the reason, half of the cases studied were failing in their school work at the time of withdrawal. Data relative to level of achievement at the time of withdrawal were available for 378 drop-out cases and are presented in Table 16.

Again, the evidence points to a significantly lower incidence of poor scholarship among girls than among boys. Fifty-nine per cent of the boys were failing in their school work at the time they dropped from school; 34 per cent of the girls were achieving at this level. When percentages for marks in the "D" and "F" categories are combined, the figure
obtained for boys is approximately 80 per cent; for girls, approximately 60 per cent; for both sexes, approximately 73 per cent. Thus, on a ratio basis, 4 out of 5 boys and 3 out of 5 girls were achieving at a very low level at the time of withdrawal. For both sexes combined, the ratio was 3 to 4.

TABLE 16
ACHIEVEMENT LEVEL FOR DROP-OUTS BY SEX AT TIME OF WITHDRAWAL FROM SCHOOL

| Grade Average | Male |  | Female |  | Total |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | No. | \% | No. | \% | No. | \% |
| A | 0 | 0 | 3 | 2.2 | 3 | . 8 |
| B | 11 | 4.6 | 13 | 9.4 | 24 | 6.3 |
| C | 35 | 14.6 | 40 | 29.0 | 75 | 19.9 |
| D | 52 | 21.7 | 35 | 25.3 | 87 | 23.0 |
| F | 142 | 59.1 | 47 | 34.1 | 189 | 50.0 |
| Totals | 240 | 109.0 | 138 | 100.0 | 378 | 100.0 |

Retention-in-grade among drop-outs. Data on retentions-in-grade were quite limited. Only 136 of the reports studied contained information on this point. However, the evidence is possibly adequate to depict general trends. Of these cases, approximately four of every ten had been retained in one or more grades during their elementary school careers. The findings by sexare summarized in Table 17.

TABLE 17
RETENTIONS-IN-GRADE AMONG DROP-OUTS BY SEX

| Retained <br> in Grade? | No. Male $\%$ |  | No. Female $\%$ | No. Total |  | $\%$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Yes | 34 | 38.2 | 21 | 44.7 | 55 | 40.4 |
| No | 55 | 61.8 | 26 | 55.3 | 81 | 59.6 |

A comparison of percentage ratios reported in the above table reveals that retentions were slightly more in evidence among girls than boys. The number of cases in each instance is rather meager; thus, the significance to be attached to this finding is open to question. However, it will be remembered that findings cited on immediately previous pages revealed a greater incidence of unsatisfactory marks for girls than boys at the elementary school level. These indications do tend to substantiate the finding.

Drop-outs' achievement as measured by standardized tests. The evidence concerning drop-outs' school achievement as represented by school marks has been presented. Likewise, findings concerning the incidence of retentions-in-grade among this group have been reviewed. Achievement test data provide still another source of information relative to the question in consideration.

Several different achievement tests are used on an individual and group basis by various schools of the Oklahoma City system. However,
scores obtained from administrations of the California Achievement battery at grade seven were most frequently included on the drop-out reports. Thus, they were used exclusively in this study. Again, as on other items of information, the data available were rather limited. For the three parts of the California Achievement Test, scores on the reading part were available for 129 cases; for language arts, 60 cases; for arithmetic, 61 cases. Scores recorded were of the grade placement type. For purposes of organization, they were tabulated in terms of their deviation from grade level for the grade at which the test was taken. Table 18 contains a summary of the findings.

TABLE 18
ACHIEVEMENT OF DROP-OUTS ON VARIOUS PARTS
OF THE CALIFORNIA ACHIEVEMENT TEST
in Reference to grade level*

| Grade Level Achieved | Reading |  |  | Language Arts |  |  | Arithmetic |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | No. | \% |  | No. | \% |  | No. | \% |  |
| +3 |  | 1.57 |  | 0 | 0.0 |  | 0 | $0.0{ }^{-1}$ |  |
| +2 | 7 |  | 19.3\% | 0 | 0.0 | 10\% | 0 | 0.0 | 6.6\% |
| +1 | 16 | 12.4 |  | 6 | 10.0 |  | 4 | 6.6_1 |  |
| At Grade | 36 | 27.9 |  | 12 | 20.0 |  | 15 | 24.6 |  |
| -1 |  | 20.2- |  |  | 21.7 |  |  | 31.17 |  |
| -2 |  | 13.9 | 52.8\% | 16 | 26.6 | 70\% | 19 | 31.1 | 88.8\% |
| -3 |  | 18.7 |  |  | 21.7_ |  | 4 | 6.6_ |  |
| Totals | 129 | 100.0 |  | 60 | 100.0 |  | 61 | 100.0 |  |

The achievement test data in Table 18 were obtained when the dropouts represented were in grade seven. To determine the number and per cent of cases achieving at the various grade levels represented, data for each subtest should be read vertically downward.

Several observations may be made upon examining the achievement test data in Table 18. One observation of interest is the per cent of cases above grade level in comparison with the per cent below. By combining per cent ratios, we find approximately 19 per cent achieved above grade level on the reading part of the test; that approximately 53 per cent, or just over half, obtained scores placing them below grade level. On the language arts and arithmetic parts, the performance was even poorer. For language arts, about 10 per cent were above and 70 per cent below grade level; for arithmetic, about 7 per cent above and 69 per cent below. Again, as was indicated by school marks, poor achievement is very much in evidence.

Number of Schools Attended by Drop-outs

Changing schools presents the likely possibility that a number of adjustments will be required on the part of a pupil. New acquaintances with teachers, administrators, and fellow pupils must be made and status must be re-established. These and other related adjustments are possibilities which may confront the individual as he comes into an unfamiliar school to establish new ties. The curnulative effect of frequent transfer from one school to another with such an array of attendant adjustments often has an adverse result on the pupil's attitude toward school and ultimately on his progress. In light of this possibility, the matter of
whether drop-outs as a group change schools frequently warrants investigation. The drop-out reports contained information on this question; thus, evidence was tabulated for examination.

Data on number of schools attended since grade one in Oklahoma City and elsewhere were available for 197 cases. The average number attended was 3.7 schools. Sex differences on this factor were insignificant. Table 19 contains the data gathered. It appears that the number of schools attended was not great for most drop-outs. By reason of normal progression, a majority of drop-outs at the senior high level would have been required to attend three different schools. For the same reason, all who withdrew from junior high school were required to attend at least two schools. Excluding normal progression, the frequency of changes from one school to another does not appear great. Only about one pupil in ten attended more than five schools.

TABLE 19

NUMBER OF SCHOOLS DROP-OUTS HAD ATTENDED
(197 CASES)

| No. of Schools <br> Attended | Pupils Attending <br> No. | No. of Schools <br> Attended | Pupils Attending <br> No. |  |
| :---: | :---: | :---: | :---: | :---: |
| 2 | 51 | 25.9 | 6 | 11 |

Attendance Record of Drop-outs
Drop-out studies frequently reveal that the attendance record of the typical drop-out becomes increasingly poor prior to his withdrawal. This trend often starts a year or two previous to the one in which withdrawal occurs and becomes increasingly evident as the time of withdrawal approaches. Findings in Oklahoma City revealed these same trends.

Attendance data available on the drop-out reports revealed the number of days absent for successive years. These data were by no means complete; but they are possibly adequate to indicate general trends. Table 20 was prepared from the data available. It contains relative per cents of absences for different time intervals by grade. Frequency data corresponding to the percentage ratios are not included because it was felt that doing so would unduly complicate the table. However, at each grade level, the total number of cases for which data were available is indicated.

Data in Table 20 indicate that, as a group, drop-outs' attendance became increasingly better with each successive year in elementary school until grade six. At this point a decline in attendance began and continued year by year through high school with exception of an almost imperceptible rise at grade 12.

TABLE 20

ABSENCE RECORD BY GRADE FOR THE DROP-OUTS

| Grade | No. of Cases | Per Cent Absent |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | $\begin{aligned} & 0-10 \\ & \text { Days } \end{aligned}$ | $\begin{array}{r} \text { 11-20 } \\ \text { Days } \end{array}$ | $\begin{gathered} 21-30 \\ \text { Days } \end{gathered}$ | $\begin{array}{r} 31-40 \\ \text { Days } \end{array}$ | Over 40 Days | $\begin{gathered} \text { Total } \\ \% \end{gathered}$ |
| 1 | 107 | 37.4 | 37.4 | 17.8 | 3.7 | 3.7 | 100 |
| 2 | 110 | 43.6 | 41.8 | 12.8 | 1.8 | --- | 100 |
| 3 | 124 | 59.7 | 21.0 | 16.1 | 3.2 | --- | 100 |
| 4 | 137 | 61.4 | 22.6 | 10.9 | 4.4 | . 7 | 100 |
| 5 | 146 | 71.9 | 17.8 | 8.9 | . 7 | . 7 | 100 |
| 6 | 161 | 60.8 | 21.8 | 10.6 | 3.7 | 3.1 | 100 |
| 7 | 172 | 53.5 | 24.4 | 12.8 | 6.4 | 2.9 | 100 |
| 8 | 205 | 40.0 | 26.3 | 19.0 | 8.4 | 6.3 | 100 |
| 9 | 209 | 35.9 | 27.3 | 22.0 | 10.5 | 4.3 | 100 |
| 10 | 263 | 28.1 | 29.3 | 19.8 | 16.0 | 6.8 | 100 |
| 11 | 161 | 29.8 | 24.2 | 26.1 | 8.1 | 11.8 | 100 |
| 12 | 67 | 32.8 | 32.8 | 23.9 | 7.5 | 3.0 | 100 |

Table 21 contains data extracted from Table 20 depicting the decline in attendance from grade six through high school years. It will be noted that from a third to almost half of the drop-outs were absent over 20 days at grade eight and above. This means that these individuals were absent the equivalent of a school month or longer during the school year.

TABLE 21

## PER CENT OF CASES ABSENT IN EXCESS OF TWENTY DAYS FOR GRADES SIX THROUGH TWELVE

|  | 6 | 7 | 8 | 9 | 10 | 11 | 12 |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: | | Grades . . . |
| :--- |
| Per Cent Absent <br> Over 20 Days |

The foregoing discussion has emphasized the progressive decline in attendance at grade six and successive grades. By way of control, Table 22 presents data for these same grades on the per cent of cases for which absenteeism was relatively low. Again, the decline in attendance is evident, but the data reveal that a substantial per cent of drop-outs had relatively good attendance records at each of the successive grade levels indicated.

TABLE 22

PER CENT OF CASES ABSENT LESS THAN TEN DAYS
FOR GRADES SIX THROUGH TWELVE

|  | 6 | 7 | 8 | 9 | 10 | 11 | 12 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |

In conclusion, it would seem that there is a tendency for dropouts as a group to have poor attendance records, but that this is by no
means universal among the group. As a crude estimate, it could be said that poor attendance might not be considered a significant factor in from a third to half of the cases. It would appear to be more frequently a factor at the senior high school level.

Drop-outs' Utilization of Guidance Services
A frequent recommendation made in drop-out studies is that guidance services be improved. Implicit in this recomnendation are the assumptions that inability to adjust satisfactorily to demands of the school environment is a prime possibility in drop-out cases, and that given effective guidance, pupils could be assisted in overcoming school adjustment problems which provoke withdrawal. These assumptions seem quite tenable. Indeed, if they are not, the whole role of guidance is questionable. Therefore, the extent to which drop-outs in Oklahoma City availed themselves of guidance services or were afforded such services is very much a pertinent question with respect to this study.

Data from the drop-out reports utilized in this study contained evidence of certain value regarding the number of drop-outs who conferred with school personnel prior to their withdrawal, and the positions of the various personnel with whom they had conferences.

There is no way to ascertain the number of drop-outs having conferences which were not reported on the drop-out reports, but 397 of the 648 cases studied were indicated as having had conferences with one or more school personnel prior to their withdrawal. Of this number 245 , or 62 per cent, were boys and 151 , or 38 per cent, were girls. These per cents reasonably approximate the number of boys and girls represented
among the drop-outs, thus, the sex differences indicated is minor. It does seem significant that 251 , or almost 40 per cent, were indicated as not receiving assistance with their school adjustment problems prior to leaving school. If this fact is true, it very definitely points to a guidance need which is not being met. More specifically, it implies need for greater emphasis on guidance procedures of the positive-preventive type designed to identify and assist the potential drop-out before his adjustment problems reach a stage provoking his withdrawal from school.

By whom were the drop-outs counseled? A checklist on the dropout report form indicated the different school personnel with whom each drop-out had conferred. A tabulation of 397 reports on which this information had been recorded revealed that principals and counselors most frequently had conferences with drop-outs prior to their withdrawal. Table 23 lists various school personnel and the number of drop-outs with whom each counseled. It reveals that the 397 drop-outs had a total of 1,077 conferences with various school personnel. Thus, on an average, each had 2.7 conferences with different school personnel. This figure is not too meaningful, but it affords the best estimate available of the extent of counseling rendered. No data were available on the number of conferences each drop-out had with each of the several school personnel who rendered counseling services.

TABLE 23
NUMBER OF DROP-OUTS COUNSELED by various school personnel (for 397 drop-out cases)

| School Personnel | No. of Drop-outs <br> Counseled | Per Cent of <br> All Conferences |
| :--- | :---: | :---: |
| Assistant Principal | 292 | 27.1 |
| Counselor | 263 | 24.4 |
| Homeroom Teacher | 193 | 17.9 |
| Visiting Counselor | 146 | 13.6 |
| Attendance Worker | 103 | 9.6 |
| Principal | 56 | 5.2 |
| School Psychologist | 16 | 1.5 |
| Other Teachers | 8 | 100.0 |

Participation of Drop-outs in Extra-class Activities
Almost without exception, drop-out studies reveal that drop-outs participate to a very limited extent in co-curricular activities. The findings in the present study are no exception. For 323 cases on which information were available, it was found that approximately 82 per cent did not participate in such activities. Of interest also is the fact that sex differences on this factor were insignificant. The difference in per cent of non-participation for boys and for girls was less than one.

Sumary
In this chapter, an attempt has been made to characterize the drop-out group which withdrew from Oklahoma City's secondary schools during the 1954-1955 school year. More specifically, attention has been focused upon the types of homes from which drop-outs came and upon the dropouts' characteristics as pupils.

Findings relative to home and family background suggest that a substantial portion of the drop-outs came from homes in which the influence might not have been especially favorable for their continuance in school. First, 44 per cent of them were living with only one parent or with some person other than a parent. Thus, it would seem safe to infer that a substantial segment of the group came from broken homes. Second, findings regarding occupation of drop-outs' fathers suggest that a majority of the group were from families of low socio-economic status.

Families of drop-outs were not found to be extremely large. The average was 3.5 children per family. Data on the number of children at home revealed that three-fourths of the families had three or less children at home and half had two children or less.

Findings pertaining to personal-school characteristics of the drop-outs reveal some additional information of interest. Fifty-five per cent of the group were boys. The mean I.Q. of the drop-out group was found to be 94.2--for the boys, 93.1; for the girls, 96.9. Approximately 62 per cent of the group had I.Q.'s less than 100 , and about 25 per cent had scores below 85. Thus, relatively low intellectual ability was in evidence to a considerable degree. Coinciding with this finding, various indices of school achievement--school marks, retentions in grade and
achievement test data--revealed a definite pattern of low and unsatisfactory school achievement among the group. A progressive decline in school marks was particularly noticeable at the secondary school level. At the time of withdrawal, half of the drop-outs were failing in their school work and an additional fourth were achieving marks in the "D" category. Members of the drop-out group apparently had not changed schools frequently. As an average, each had attended 3.7 schools. Absenteeism was relatively high at the secondary school level, increasing with each successive grade level.

Approximately 400 of the 648 drop-out cases studied indicated that they had conferred with one or more school personnel prior to withdrawal. School personnel most frequently involved in this counseling were assistant principals and counselors.

Last, it was found that few drop-outs participated in co-curricular activities.

To conclude this sumary, general trends revealed by the findings suggests that the typical drop-out in Oklahoma City in about 4 out of 10 instances is from a broken home; is from a family of low socio-economic status in which there are less than three children at home; has an I.Q. of about 94; is a poor achiever in school; does not participate in school activities; and is likely to have a poor attendance record. Admittedly, this so-called typical drop-out is a somewhat mythical individual. Probably few of those who dropped from school fit this characterization in toto. However, most of them have some of the characteristics described.

## CHAPTER V

## HOW DROP-OUTS DIFFER FROM RETAINED PUPILS IN FAMILY-PERSONAL-SCHOOL CHARACTERISTICS AND IN OPINIONS REGARDING SCHOOL

## Introduction

In studying the characteristics of drop-outs, a basic approach is almost always that of determining traits which best distinguish members of this group. The problem involved is essentially one of finding answers to the following question. How do drop-outs differ from their peers who continue in school? This chapter represents an attempt to uncover some of the answers to this question as it pertains to drop-outs in Oklahoma City.

The investigation has included two classes of differences: (1) those related to family, personal, and school characteristics; (2) those pertaining to opinions toward school. Differences pertaining to family-personal-school characteristics were studied by comparing drop-outs from grades nine and eleven with a 20 per cent sample of in-school pupils from these same grades. As mentioned in Chapter One, this sample was chosen by selecting every fifth name alphabetically from class rolls. A similar approach was employed in the study of opinion differences. However, this phase of the study was limited to grade eleven for the reason that insufficient data were obtained for grade nine drop-outs to afford a meaningful
comparison at this level.

Sources and treatment of data. Data pertaining to family-personal-school characteristics are of the same type as those treated in the previous chapter. For the drop-outs, the regular drop-out reports were the source of information. For in-school pupils, data were gathered by the participating schools and made available for study.

Data employed in studying opinjon differences were obtained by use of an opinionnaire entitled How Good Is Your School, prepared by the Oklahoma Curriculum Commission. This instrument was administered to the designated sample of in-school pupils and to the drop-outs by the various schools included in the study.

Both classes of data mentioned above were tabulated in frequency form as a hasis for making comparisons. To ascertain the significance of differences found, the null hypothesis was employed and a Chi Square test was applied as a basis for its acceptance or rejection. The hypothesis set forth was that differences found were not real, but rather were due to random sampling errors. To test this hypothesis, Chi Square values were computed by the use of contingency tables, and obtained values significant at levels of .05 or less were deemed necessary for rejection of the hypothesis. This criterion for rejecting the hypothesis is consistent with established procedure of setting the level of significance at or beyond the 5 per cent level of confidence.

Limitations encountered in this phase of study. In the introductory chapter of this report, mention was made of limitations encountered due to incomplete data. These limitations posed difficulties in the statistical analysis of data treated in the present chapter. A word of
explanation would, therefore, seem appropriate at this time.
In computing Chi Square values from contingency tables, none of the cells may contain zero as an observed frequency. Also, under certain conditions, theoretical or expected frequencies of less than five may adversely affect the validity of the values derived. Due to the limited number of cases and to their distribution, both of these conditions presented difficulties with reference to certain factors studied. These difficulties were resolved as follows. When observed frequencies were extremely small in corresponding cells for both the drop-out and the control groups, it was evident by inspection that no significant differences existed; thus, the cases involved were omitted entirely from the computation. For instances in which this was not feasible, it was possible to reorganize the data by combining adjoining cells to enlarge the frequencies. In certain instances, neither of these approaches could be employed and computations were made despite limitations in the size of expected frequencies. However, in the latter case, caution was taken that seldom did more than one of the cells contain an expected frequency less than five and that the degrees of freedom involved exceeded two. Walker and Lev (63) state that by observing this precaution when small expected frequencies are encountered, fair approximations of the exact probabilities are obtained.

Organization of chapter. Two classes of findings are treated in this chapter. Part $I$ contains findings pertaining to the question of how drop-outs differ from in-school pupils with reference to family-schoolpersonal characteristics. Part II pertains to differences in opinion regarding school.

Part I
Comparison of Family-School-Personal Characteristics
The preceding chapter contained a description of the family-school-personal characteristics for the total drop-out group studied. The findings cited made possible certain tentative assumptions regarding traits which are likely to distinguish drop-outs from youth who continue in school. However, the evidence to support such assumptions was not conclusive in that data for a control group of in-school pupils were not cited to afford direct comparisons. Such data are presented in this part of the present chapter.

Only grades nine and eleven were chosen for the present phase of the study. Reports of all drop-outs at these grades were employed. However, findings pertaining to certain factors were not treated because the data were too incomplete to be considered representative. The number of cases studied was 98 at grade nine and 178 at grade eleven. The grade nine group included 53 boys and 45 girls; the grade eleven group, 104 boys and 74 girls. Data for the control groups were obtained for 20 per cent samples of in-school pupils drawn from grades nine and eleven. The control groups numbered 501 and 426 for grades nine and eleven respectively. The grade nine group included 252 boys and 249 girls; the grade eleven group, 193 boys and 233 girls.

Generally, separate comparisons have been made at each grade level. However, an exception or two was made in this procedure when data were so limited that a meaningful comparison could not be made. Also, as a general procedure, the Chi Square test has been applied in treatment of data for each factor studied. However, in a few instances, the data were such
that this technique could not be employed. These variations in procedure are explained as findings are treated.

## Family Characteristics

Findings treated in the preceding chapters suggested that a considerable portion of the drop-outs were from broken homes; that they were predominantly from homes in which the father's occupational status was low; that few were from homes receiving welfare assistance; that they were not from excessively large families. Let us now examine these generalizations in light of comparative findings for drop-outs and in-school pupils at grades nine and eleven.

Evidence of broken homes. . Our study of the drop-out group gener-ally--i.e., those from all grades--reveal that approximately 56 per cent of them were living with both parents. The findings obtained in studying drop-outs from grades nine and eleven were very comparable. In contrast, as is revealed in Figure 2, nearly 80 per cent of the in-school pupils studied at these two grade levels were living with both parents. Upon applying the Chi Square test, the differences at each grade level were found to be significant beyord the 1 per cent level of confidence.

These findings suggest that the broken home factor is associated with early withdrawal from school to such an extent that attention is warranted in studies devoted to the identification of potential drop-outs.

Living with both parents:


Fig. 2.--Per cent of drop-outs and in-school pupils in grades nine and eleven who were living with both parents. Totai cases studied in each group were: 65 and 134 for drop-outs at grades nine and eleven, respectively; 388 and 339 for control groups.

Occupation of father. Essentially all studies reveal that the fathers of drop-outs tend to rank low in occupational status. Findings presented in the previous chapter were consistent with this finding. Upon comparison of drop-outs with the control group, the findings again coincide with those generally obtained. Table 24 reveals the nature and extent of differences found when data on occupation of father were compared for drop-outs and pupils continuing in school. Because of limited data, the findings for both in-school control groups are combined for comparison with combined data for drop-outs from all grades.

Among the differences revealed by Table 24 , it may be noted that roughly one-fourth of the drop-outs' fathers were employed in white collar occupations, or occupations in Group I and II; in contrast, half of the fathers for the control group were engaged in such occupations. The percentage of fathers engaged in semi-skilled and unskilled occupations
was twice as great for drop-outs as for the control group-- 36 per cent versus 18 per cent. The differences in occupational status for the two groups were found to be very significant statistically--far beyond the 1 per cert level of confidence (Table 26, p. 96).

TABLE 24

> COMPARISON OF FATHERS' OCCUPATIONAL STATUS FOR DROP-OUTS AND IN-SCHOOL PUPILS

| Occupational Group | Drop-outs | Control Group |  |  |
| :---: | :---: | :---: | :---: | :---: |
| I. Professional, Semi- |  |  |  |  |
| professional, Technical <br> and Managerial | No. | $\%$ | No. | $\%$ |
| II. Clerical and Sales | 26 | 14.3 | 201 | 29.7 |
| III. Service Occupations | 17 | 9.3 | 139 | 20.5 |
| IV. Agricultural Occupations | 75 | 8.2 | 35 | 5.2 |
| V. Skilled Trades |  |  |  |  |
| VI. Semi-skilled and |  |  |  |  |
| Unskilled Occupations |  |  |  |  |

Comparison of welfare assistance received. No significant differences were found in the comparison of drop-outs with control groups relative to the question of whether the families involved received public welfare assistance. Five or less per cent of the cases studied at each grade level--both drop-outs and in-school pupils-were reported as being
recipients of such assistance. It would appear of little value to investigate this factor as one indicative of socio-economic status affecting withdrawals from school.

Size of family. In studying drop-outs from all grades, it was found that the average number of children per family was 3.5; that the number of children residing at home average 2.7 per family. These averages suggest that the families from which drop-outs come are not especially iarge. A question of interest is how do they compare in size with those of pupils continuing in school. Table 25 affords such a comparison.

TABLE 25

COMPARISON OF FAMILY SIZE FOR DROP-OUTS
AND IN-SCHOOL PUPILS

| Grade 9 | Grade 11 |  |  |
| :--- | :---: | :---: | :---: |
| Mean No. of Children <br> in Family | 4.23 | 3.35 | 2.29 |
| Mean No. of Children <br> at Home | 3.16 | 2.53 | 2.96 |

The data in Table 25 reveal that drop-outs are from slightly
larger families than youth who remained in school. However, the differences are not great. Differences in the number of children in the family were found to be significant at the 1 per cent level of confidence at grade nine; at grade eleven, the differences were not significant. Differences in the number of children at home approached the 5 per cent level
of significance at grade nine but were not significant at grade eleven. In light of these findings, it seems probable that size of family may be a factor associated with early withdrawal from school at the junior high level, but not a significant one at the senior high school level. However, further study would be necessary to validate this assumption. To conclude the presentation of findings concerning the differences in the family characteristics of drop-outs and retained pupils, Table 26 is presented. It reveals Chi Square values obtained in the analysis of differences together with probabilities determined.

TABLE 26
COMPARISON OF DROP-OUTS WITH CONTROL GROUPS
IN RELATION TO FAMILY CHARACTERISTICS

*P's in this and succeeding tables may be interpreted as at or beyond the level of confidence indicated.

Personal-School Characteristics of Drop-outs and Retained Pupils
In the foregoing presentation of comparative findings regarding family characteristics of drop-outs and in-school pupils at grades nine and eleven, the discussion also embraced findings presented in Chapter IV --i.e., those pertaining to drop-outs from all grades. Since this approach should enable the reader to better assimilate findings of the previous chapter with those of the present one, it seems fitting to continue the discussion in this vein.

Among the findings pertaining to drop-outs generally-i.e., those from all grades and all schools--there was much evidence to indicate that drop-outs tend to be of relatively low intellectual ability; that their school achievement is poor; that they participate little in extra-class activities; that they are irregular in attendance; that they do not change schools with great frequency. Let us now see how well the generalizations hold true in light of empirical findings relative to differences among drop-outs and in-school pupils from grades nine and eleven.

Intelligence. The mean I. Q. for drop-outs at grade nine (42 cases) was found to be approximately 89; at grade eleven ( 54 cases), 94. In contrast, the means for the control group were 103 and 105 for grades nine ( 454 cases) and eleven ( 358 cases), respectively. Thus, at grade nine, the mean I.Q. of drop-outs was 14 points lower than that for their peers who remained in school. At grade eleven, the difference was 11 points in favor of the control group.

In addition to these data relative to central tendencies, the distribution of scores is of interest. Table 27 affords a comparison in this respect.

PERCENTAGE DISTRIBUTION OF I.Q.'s FOR DROP-OUTS
AND CONTROL GROUPS AT GRADES NINE AND ELEVEN

| I.Q. | Grade 9 |  | Grade 11 |  |
| :---: | :---: | :---: | :---: | :---: |
|  | D.O.* | C.G.* | D.O. | C.G. |
| 130 and above | 0 | 3.7 | 0 | 4.5 |
| $115-129$ | 2.4 | 20.5 | 5.3 | 21.2 |
| $100-114$ | 19.0 | 36.6 | 29.8 | 41.9 |
| $85-99$ | 45.2 | 25.5 | 42.1 | 27.1 |
| $70-84$ | 23.8 | 12.8 | 21.0 | 5.0 |
| Below 69 | 9.6 | .9 | 1.8 | .3 |
| Totals | 100.0 | 100.0 | 100.0 | 100.0 |

*Abbreviation D.c. refers to drop-outs and C.G. to control group.

By combining percentages within column in Table 27, it may be noted that about 78 per cent of the drop-outs at grade nine and 65 per cent of those at grade eleven had an I.Q. of less than 100. In contrast, comparable percentages for the control groups were almost exactly half as large-- 39 per cent of the controi group at grade nine and 32 per cent of the group at grade eleven had an I.Q. of less than 100. Figure 3, on the following page, reveals these differences graphically.

School achievement. Findings treated in Chapter IV suggested rather conclusively that drop-outs in Oklahoma City rank poor in school achievement. A comparison of the scholastic attainments of drop-outs and pupils who were retained in school confirms this conclusion. For this

```
I.Q. less than 100:
```

Grade 9: $\begin{aligned} & \text { C.G. } \quad \text { D.0. }\|\|\|\|\|\|\|\|\|\|\|\|\|\|\|\|\|\|\|\|\|\|\|\|\| \\ & \text { D. }\end{aligned}$
Grade 11: C.G.
D.O.


| 0 | 10 | 20 | 30 | 40 | 50 | 60 | 70 | 80 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |

Per Cent of Total
in Each Group

[^0]comparison, Table 28 is presented. It contains numerical grade-point averages achieved by each of the groups studied during its grade to grade progression in school. The point averages are based on the 4 -point numerical grade scale.

The data in Table 28 show a progressive yearly decline in scholarship for both the drop-outs and the control groups. However, the decline is much more pronounced for the drop-outs. The over-all grade point averages provide a reasonably good index of the extent to which drop-outs differ from the control groups in scholarship. The grade point averages for the control groups are roughly equivalent to a mark of "B-"; those for the drop-outs are roughly equivalent to a low "C-." The raw data on marks were not very suitable for the application of the Chi Square test for significance of differences. However, the differences are readily apparent by inspection.

TABLE 28
COMPARISON OF NUMERICAL GRADE-POINT AVERAGES
attained at various levels by drop-out
AND CONTROL GROUPS*

| Grade Level | 9th Grade Group |  | 11th Grade Group |  |
| :---: | :---: | :---: | :---: | :---: |
|  | D.O. | C.G. | D.O. | C.G. |
| 7 | 2.04 | 2.73 | 2.02 | 2.72 |
| 8 | 1.44 | 2.69 | 1.91 | 2.74 |
| 9 | . 96 | 2.68 | 1.74 | 2.63 |
| 10 | ---- | ---- | 1.44 | 2.51 |
| 11 | ---- | ---- | 1.15 | 2.54 |
| All Grades | 1.59 | 2.70 | 1.70 | 2.61 |

*The number of cases involved in the computation of the above data varied within each group at different grade levels. N. for ninth grade drop-outs varied from 26 to 32 ; for the eleventh grade, from 39 to 71. For the control groups, $N$. varied from 208 to 335 for the ninth grade and from 303 to 405 for the eleventh grade. Even though the N's are small for the drop-out groups, the obtained data coincide very closely with those obtained for drop-outs from all grades--ref. Chapter IV, p. 74.

Participation in extra-class activities. In the study of dropouts from all grades, data pertaining to participation in extra-class acm tivities were available for 323 cases. About 82 per cent of this group were non-participants in activities. This finding was deemed quite significant. Let us examine its possible significance in light of comparable data for drop-outs and retained pupils at grades nine and eleven. Table 29 is presented to afford a comparison.

TABLE 29

## COMPARISON OF DROP-OUT AND CONTROL GROUPS' PARTICIPATION IN EXTRA-CLASS ACTIVITIES

|  | 9th Grade Group |  |  |  | 11th Grade Group |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | D.O. |  | C.G. |  | D.O. |  | C.G. |  |
|  | No. | \% | No. | \% | No. | \% | No. | \% |
| Participants | 4 | 9.7 | 273 | 54.6 | 20 | 19.6 | 299 | 71.9 |
| Non-participants | 37 | 90.3 | 227 | 45.4 | 82 | 80.4 | 117 | 28.1 |
| Totals | 41 | 100.0 | 500 | 100.0 | 102 | 100.0 | 416 | 100.0 |

Table 29 reveals that differences in the extent of participation in activities are pronounced when drop-outs are compared with retained pupils. The magnitude of the difference is great at grade nire and even greater at grade eleven. At grade nine, about 90 per cent of the dropouts were non-participants in activities, whereas about 45 per cent of the control were in this category; the difference between these per cents is 45. At grade eleven, roughly 80 per cent of the drop-outs were nonparticipants, whereas the comparable figure for the control group was about 28 per cent; here the difference in percentages is 52. At both grade levels, the differences in frequency of participation were found to be significant far beyond the 1 per cent level of confidence.

Number of schools attended. Findings cited in Chapter IV revealed that the mean number of different schools attended by the drop-outs (some 200) was 3.7. Considering changes due to normal progression, this figure does not appear significantly large. The comparison of drop-outs with
control groups at grades nine and eleven tends to confirm this assumption。 Data for the drop-outs were rather inadequate- -36 cases at grade nine and 89 cases at grade eleven. However, upon making comparisons, there was no evidence that drop-outs change schools with greater frequency than pupils who continue in school. In fact, at grade eleven, members of the control group were indicated as changing schools with greater frequency than dropouts from this same grade, the differences being significant at the 1 per cent level of confidence.

The following table reveals the mean number of schools attended by the various groups.

TABLE 30
COMPARISON OF MEAN NUMBER OF SCHOOLS ATTENDED BY DROP-OUT AND CONTROL GROUPS

| No. of Cases | Mean No, of <br> Schools Attended |  |  |
| :--- | :--- | :---: | :---: |
| Grade 9 | Drop-outs |  |  |
| Control Group | 36 | 3.55 |  |
| Grade 11 | Drop-outs <br> Control Group | 493 | 3.50 |

[^1]revealed by the limited data were much the same as those noted in Chapter IV, i.e., absenteeism increased noticeably in succeeding grades at the secondary level, especially in senior high school. For the control groups, such a trend was not in evidence. In fact, attendance for both the ninth and eleventh grade control groups was better in the secondary grades than at the elementary level.

In tabulating attendance data, the total days absent per year for each individual was tallied within class intervals of ten, i.e. if a given student was absent eight days in grade one, a tally was placed in the zero to ten day interval opposite grade one. Likewise, the total days absent was tabulated for each successive year the individual attended school. After all attendance data for each group were thus recorded, the cumulative total for each class interval was computed. For purposes of comparison, the totals for each of the groups studied are presented in Table 31.

TABLE 31
COMPARISON OF DATA ON TOTAL ABSENCES FOR DROP-OUT AND CONTROL GROUPS

| Days Absent Per Year | Grade 9 |  |  |  | Grade 11 |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | D.O. |  | C.G. |  | D.0. |  | C.G. |  |
|  | No. | \% | No. | \% | No. | \% | No. | \% |
| 0-10 | 58 | 37.18 | 1,904 | 68.56 | 296 | 50.25 | 1,912 | 71.45 |
| 11-20 | 47 | 30.13 | 607 | 21.86 | 136 | 23.10 | 540 | 20.18 |
| 21-30 | 32 | 20.51 | 175 | 6.30 | 87 | 14.77 | 150 | 5.61 |
| Over 30 | 19 | 12.18 | 91 | 3.28 | 70 | 11.88 | 74 | 2.76 |
| Totals | 156 | 100.00 | 2.777 | 100.00 | 589 | 100.00 | 2,676 | 100.00 |

Analysis of the percentages in Table 31 reveal that half or more of the cumulative absences for drop-outs exceeded ten days per year. In contrast, less than one-third of the cumulative absences for the control groups exceeded ten days. The percentages for cumulative absences exceeding 20 days reveal differences of the same character.

Upon application of the Chi Square test to the frequency data in Table 31, the differences were found to be significant beyond the 1 per cent level of confidence both at grade nine and grade eleven.

Age. The age-for-grade factor was not investigated for the dropouts generally. However, data were gathered for drop-outs from grades nine and eleven and likewise for members of the control groups from these grades. A comparison of the findings are presented in Table 32.

TABLE 32
COMPARATIVE AGE DISTRIBUTIONS FOR
DROP-OUT AND CONTROL GROUPS
AT GRADES NINE AND ELEVEN

| Age | Grade 9 |  |  |  | Grade 11 |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | $\begin{aligned} & \text { D. } 0 . \\ & \text { No. } \end{aligned}$ |  | C. ${ }^{\text {c }}$ |  | D. O. |  | C. G. |  |
|  |  |  | No. | \% | No. | \% | No. | \% |
| 13 | 1 | 1.0 | 3 | . 6 | --- | - | --- | - |
| 14 | 26 | 26.5 | 210 | 41.8 | - | --- | -- | -- |
| 15 | 36 | 36.7 | 241 | 47.9 | 3 | 1.7 | 4 | . 9 |
| 16 | 19 | 19.4 | 45 | 8.9 | 42 | 23.6 | 226 | 50.4 |
| 17 | 11 | 11.3 | 4 | . 8 | 85 | 47.7 | 194 | 43.2 |
| 18 | 4 | 4.1 | - | --- | 35 | 19.7 | 23 | 5.1 |
| Over 19 | 1 | 1.0 | --. | --- | 13 | 7.3 | 2 | . 4 |
| Totals | 98 | 100.0 | 503 | 100.0 | 178 | 100.0 | 449 | 100.0 |

Ages for drop-outs were those recorded on drop-out reports prepared after each individual withdrawal. from school. For the control group, the age data was secured in May, toward the end of the school year. The data in Table 32 reveal that a tendency toward being over-age-for-grade is considerably greater among the drop-outs than among members of the control groups. For example, by combining percentages in this table it becomes evident that approximately 90 per cent of the ninth grade control group was less than 16 years of age; for drop-outs, the comparable figure was about 64 per cent. The same trend was in evidence in grade eleven. At both grade levels, age differences between the drop-outs and control groups were found to be significant beyond the I per cent level of confidence.

The mean age for each drop-out group was found to be about onehalf year greater than for each comparable control group. These means were: 15.20 for drop-outs and 14.65 for the control group at grade nine; at grade eleven, 17.07 for drop-outs and 16.65 for the control group.

Comparison of Differences in Relation to Several Personal-School Characteristics Studied

In the foregoing comparison of drop-outs with control groups relative to various personal-school factors, several references were made to the significance of differences found upon application of the Chi Square test. Table 33 contains a summary of these statistical findings. It includes Chi Square values and probabilities obtained when personal-school characteristics of the groups were compared.

TABLE 33

## COMPARISON OF DROP-OUTS WITH CONTROL GROUPS <br> IN RELATION TO SELECTED PERSONAL-SCHOOL CHARACTERISTICS

| Variable |  | Group | d.f. | $\underline{x}^{2}$ | P |
| :---: | :---: | :---: | :---: | :---: | :---: |
| I. | I.O. | Grade 9 | 3 | 30.407 | . 01 |
|  |  | Grade 11 | 3 | 34.096 | . 01 |
| I.I. | Activities | Grade 9 | 1 | 30.322 | . 01 |
|  |  | Grade 11 | 1 | 94.591 | . 01 |
| III. | Absenteeism | Grade 9 | 3 | 63.742 | . 01 |
|  |  | Grade 11 | 3 | 139.721 | . 01 |
|  | Age | Grade 9 | 3 | 75.113 | . 01 |
|  |  | Grade 11 | 3 | 78.509 | . 01 |

## Summary

Before turning our attention to opinion differences which are treated in the next part of this chapter, it seems fitting to sumarize the findings concerning differences in the family-personal-school characteristics of drop-outs and retained pupils.

Five factors were studied relative to the family characteristics of the groups studied. These were concerned with (1) whether the individuals involved were living with both parents, (2) occupation of father (3) welfare assistance (4) number of children in the family and (5) number of children at home.

A significantly smaller portion of the drop-outs were living with both parents than was true for the control group. For the drop-outs, the per cents living with both parents were 60 at grade nine and 53 at grade
eleven. Comparable per cents for the control groups were 77 and 80 for grades nine and eleven, respectively. Significantly, more of the fathers of drop-outs were in occupations often associated with low economic sta-tus--i.e., those in the unskilled and semiskilled categories. Few members of the drop-out or control groups were from families receiving welfare assistance. Differences on this factor were not significant. At grade nine, drop-outs were from slightly larger families than were members of the control group and the differences were significant at the 1 per cent level of confidence. However, at grade eleven, the differences were not significant. Differences in the number of children at home were slight at both grades nine and eleven and were not statistically significant at either grade level.

The personal-school factors studied were (1) intelligence, (2)
school achievement, (3) participation in extra-class activities, (4) attendance, (5) number of schools attended, and (6) age. For all of these factors, with exception of the one pertaining to number of schools attended, significant differences were found at each grade level when dropouts were compared with the control group.

At grade nine, the mean I.Q. of the drop-outs was 89 , whereas, for the control group it was 103. At grade eleven, the drop-outs had a mean I.Q. of 94 and the control group had 105. At grade nine, 78 per cent of the drop-out group had I.Q.'s of less than 100 ; only 39 per cent of the control group were in this category. For the grade eleven groups, 64 per cent of the drop-outs had I.Q.'s below 100 , whereas only 32 per cent of the control group had such scores.

School marks were employed as indices of school achievement. The
cumulative grade point average for grade nine drop-out group was 1.59; for the grade nine control group, the average was 2.70 ; at grade eleven, the averages were 1.70 and 2.61 for the drop-outs and the control group, respectively.

Great differences were found with respect to participation in extra-class activities. Only about 10 per cent of drop-outs at grade nine and 20 per cent at grade eleven participated in activities. In contrast, 56 per cent of the control group at grade nine and 72 per cent of those at grade eleven were participants.

Drop-outs had significantly poorer attendance records than members of the control groups. They also tended to be older by about onehalf year than members of the control group. No significant differences were found with respect to number of schools attended.

## Part II

Comparison of Drop-outs' and Retained Pupils' Opinions Regarding School

Introduction

There seems little question that attitudes, values, beliefs, opinions, and other such products of experience afford frames of reference which greatly determine individual behavior. In light of this fact it then follows that investigation in this realm is in order if certain insights are to be gained regarding the question of why some individuals see fit to drop from school while others chooose to remain. There are several possible approaches to such an investigation. For this particular study, an opinionnaire was employed to gather the data desired. Whether the responses obtained represent attitudes, values, or opinions is somewhat
difficult to establish with finality. Therefore, we shall merely label them opinions. More specifically, the data represent opinions held regarding various aspects of the school situation.

The opinionnaire was administered to drop-outs from grade eleven and a control group of in-school pupils at this same grade level. The drop-out group studied included 77 cases-- 37 males and 40 females. The control group numbered 449, of which 203 were males and 246 were females. Percentage-wise, the drop-outs studied comprised about 44 per cent of the total group at grade eleven; the remainder could not be contacted for administration of the opinionnaire. The control group represents a 20 per cent sample of all grade eleven pupils in the schools studied.

Analysis and treatment of data. The responses for each group were first tabulated by sex for each item. Next percentage distributions were prepared to ascertain sex differences. By inspection, it was determined that the differences were so slight that their consideration could be eliminated without serious consequences. With this question resolved, frequency data for the total number of respondents within esch group were prepared, together with percentage distributions. This is the form in which the item responses for the two groups are presented for comparison.

Generally speaking, differences in the responses of the two groups were examined for statistical significance by use of the Chi Square test. However, a few of the items were of such nature that this was not feasible in that multiple responses were allowed and the degrees of freedom could not be satisfactorily established.

Presentation of findings. The opinionnaire employed in this study had three parts. Part I merely provided for the recording of such
identifying information as age, sex, and grade by each respondent. Part II contained miscellaneous items pertaining to teacher-pupil relationships, pupil-pupil relationships, grading, study habits and other general aspects of the school situation. Part III contained items all of which pertained to curricular offerings.

The presentation to follow includes responses to the items contained in Parts II and III. In the presentation of responses for Part II, items of similar content have been re-grouped into three sub-groups--a group pertaining to pupil-teacher relationships, a group concerned with the pupils' roles in school, and a group concerning miscellaneous considerations relative to school. Each of these groups is identified and presented separately。

Items in Part III are presented in two sub-groups. The first contains items pertaining to specific school subjects and the second includes items concemed with miscellaneous offerings not necessarily a part of specific school subjects.

Numbers by which items are identified in the various groups coincide with those by which they appear in the opinionnaire. The pattern of presentation for each of the various groups of related items is as follows: First, the actual items are presented together with response data. In general, their order of presentation within each group is governed by the degree to which responses for the two groups were significantly different. Those in which responses differed most significantly are placed first in each grouping. Second, a table containing Chi Square values and probability data is included to facilitate interpretation of differences obtained. Third, interpretative remarks are included for
each group of items. A summary of all findings is presented in concluding the presentation.

## Opinions Regarding Teachers

Among the items contained in Part II of the opinionnaire were eight which pertained to teachers and teacher-pupil relationships. These items, together with the responses obtained for the drop-out and control groups, are presented in the following group.

Item 7. How helpful to pupils are the counselors in your school?
(check one)

Responses:
(1) Very helpful
(2) Helpful
(3) Of little help
(4) No opinion
D.O.

24 (32.0\%)
20 ( $26.6 \%$ )
23 (30.7\%)
$8(10.7 \%)$
C.G.

203 (45.3\%)
177 (39.5\%)
46 ( $10.3 \%$ )
$22(4.9 \%)$

Totals: 75 (100.0\%)
$448(100.0 \%)$
Item 3. How many teachers in your school know and understand their pupils well? (check one)

Responses:
(1) All of them do
(2) Most of them do
(3) Few of them do
(4) No opinion

Totals: 77(100.0\%)
D.O.

4 ( $5.2 \%$ )
30 ( $39.0 \%$ )
39 ( $50.6 \%$ )
4 (5.2\%)
C.G.

13 ( $2.9 \%$ )
305 (68.0\%)
116 (25.8\%)
15 ( $3.3 \%$ )

449(100.0\%)

Item 2. Do teachers in your school treat their pupils fairly? (check one)

| Responses: |  | D.O. |  | C.G. |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| (1) Always |  | 11 | (14.3\%) | 58 | (13.4\%) |
| (2) Usually |  | 48 | (62.3\%) | 332 | (77.1\%) |
| (3) Seldom |  | 15 | (19.5\%) | 27 | ( 6.3\%) |
| (4) No Opinion |  | 3 | ( $3.9 \%$ ) | 14 | ( 3.2\%) |
|  | Totals: |  | (100.0\%) | 431 | 100.0\%) |

Item 6. Do teachers take a personal interest in the problems of the pupils in your school? (check one)

| Responses: | D.O. | C.G. |  |
| :--- | ---: | ---: | ---: |
| (1) All of them do | $3(3.9 \%)$ | 24 | $(5.3 \%)$ |
| (2) Most of them do | $23(30.3 \%)$ | 225 | $(50.2 \%)$ |
| (3) Few of them do | $43(56.6 \%)$ | 187 | $(41.6 \%)$ |
| (4) No opinion | $\frac{7}{}(9.2 \%)$ | $13(2.9 \%)$ |  |
|  | Totals: | $76(100.0 \%)$ | $449(100.0 \%)$ |

Item 13. How many teachers in your school do you know well enough to talk to? (check one)

Responses:
D.O.

17 (22.1\%)
39 (50.6\%)
13 (16.9\%)
$8(10.4 \%)$
77 (100.0\%)
C.G.

106 (23.6\%)
265 (59.2\%)
35 (7.8\%)
$42(9.4 \%)$
448 ( $100.0 \%$ )

Item 14. Do the teachers in your school grade fairly? (check one)

Responses:
(1) Most do
(2) Some do; some do not
(3) Few do
(4) No opinion
D.O.

29 (37.7\%)
41 (53.2\%)
7 (9.1\%)
$0(0.0 \%)$

77 (100.0\%)
C.G.

212 (47.5\%)
211 (47.1\%)
19 (4.3\%)
5 (1.1\%)

447 (100.0\%)

Item 16. How do you feel about the qualifications of your
teachers? (check one)

| Responses: | D.0. |  | C.G. |  |
| :---: | :---: | :---: | :---: | :---: |
| (1) All are well qualified | 16 | (20.8\%) | 99 | (22.2\%) |
| (2) Most are well qualified | 49 | (63.6\%) | 297 | (66.4\%) |
| (3) Only a few are well qualified | 9 | (11.7\%) | 42 | ( $9.4 \%$ ) |
| (4) No opinion | 3 | ( $3.9 \%$ ) | 9 | ( $2.0 \%$ ) |
| Totals: |  | 100.0\%) | 447 | 100.0\%) |

Item 5. What do you think about the discipline in your school? (check all that apply)

Responses:
(1) Too strict
(2) About right
(3) Not strict enough
(4) Too much teacher contro
--Pupils don't learn self discipline
(5) No opinion
Totals: $\frac{4(5.0 \%)}{80(100.0 \%)}$
D. 0.

6 ( $7.5 \%$ )
41 (51.3\%)
18 (22.5\%)
11 ( $13.7 \%$ )

80 (100.0\%)
C.G.

60 (12.2\%)
305 (62.0\%)
51 (10.4\%)
65 (13.2\%)

11 (2.2\%)
492 (100.0\%)

The Chi Square test was applied to all the foregoing items except the last one, Item 5, and the results are listed below in Table 34. Significant differences were found in responses to the first four items.

Upon inspection of responses to the various items and of the data in Table 34, differences between the drop-out and control groups relative to opinions regarding teachers are quite obvious. However, a few observations seem worth noting. Many of the drop-outs expressed opinions similar to those recorded by members of the control group; but in contrast, opinions of negative character were consistently more in evidence among the responses of the drop-outs. Also, responses indicating uncertainty--
i.e., those in the "no opinion" category-wwere slightly more prevalent in the drop-out group.

TABLE 34
COMPARISON OF DROP-OUTS WITH CONTROL GROUF ON OPINIONS REGARDING TEACHERS

| Item | df | $x^{2}$ | P |
| :---: | :---: | :---: | :---: |
| 7. (Are counselors helpful?) | 3 | 29.388 | . 01 |
| 3. (Do teachers know and understand pupils?) | 3 | 24.183 | .01 |
| 2. (Do teachers treat pupils fairly?) | 3 | 15.783 | . 01 |
| 6. (Do teachers take personal interest in pupils?) | 3 | 15.736 | .01 |
| 13. (Do you know teachers well?) | 3 | 6.883 | . 10 |
| 14. (Do teachers grade fairly?) | 2 | 4.605 | .10 |
| 16. (Qualifications of teachers?) | 3 | 1.519 | . 70 |

As evidence of the greater incidence of negative opinions expressed by drop-outs, the responses to several specific items are worth noting. For example, over 30 per cent of the drop-outs expressed the opinion that counselors were "of little help" to pupils (Item 7); only 10 per cent of the control group agreed with this opinion. About half of the drop-outs felt that few teachers know and understand their pupils well (Item 3);
only one-fourth of the control group responded similarly. Approximately 20 per cent of the drop-outs were of the opinion that teachers seldom treated their pupils fairly (Item 2); in contrast, only about 6 per cent of the control group felt this way. Almost 57 per cent of the drop-outs felt that teachers did not take a personal interest in the problems of pupils; about 42 per cent of the control group responded likewise. As Table 34 reveals, differences in the responses to all of these items were significant beyond the 1 per cent level of confidence.

Since the question regarding discipline, Item 5, allowed for more than one response, the Chi Square test was not applied to the findings obtained. Upon inspection of the percentage distributions, however, some differences were noted. About 62 per cent of the control group expressed the opinion that discipline was "about right"; slightly over half of the drop-outs were in agreement with this opinion. Most interesting, however, were opinions regarding strictness. Over 22 per cent of the drop-outs felt that discipline was not strict enough; in contrast, only 10 per cent of the control group held this opinion.

Differences in the responses to the other items included in this group were not indicated to be very significant. These included Item 13 relative to the question of knowing teachers well enough to talk to, Item 14 pertaining to faimess in grading, and Item 16 which concerned teacher qualifications.

The main emphasis in the present investigation has to do with differences in the opinions of the two groups. However, the agreement among the respondents seems to have some important implications. Responses to several of the items suggest that attention might well be given to an
over-all improvement of teacher-pupil relationships. For example, the fact that 40 per cent of the control group and 50 per cent of the dropouts felt that few of their teachers take an interest in the personal problems of pupils would seem to be cause for concern and attention. The findings suggest that an important guidance responsibility is not being adequately fulfilled by teachers in Oklahoma City's secondary schools. It is quite possible that class size and other considerations may well be involved in this problem. However, whatever the circumstances, the problem would seem to warrant attention.

## Opinions Regarding School Attended

Several items in Part II of the opinionnaire are questions in which respondents are asked to indicate how well they were satisfied with their school and with certain conditions therein. Following are these items together with the responses obtained.

Item.1. How well satisfied are you with your school? (check one)

| Responses: | D.O. | C.G. |  |  |
| :--- | ---: | ---: | ---: | ---: |
| (1) Satisfied | 23 | $(34.8 \%)$ | 250 | $(55.7 \%)$ |
| (2) More satisfied than dissatisfied | 14 | $(21.3 \%)$ | 153 | $(34.1 \%)$ |
| (3) More dissatisfied than satisfied | 15 | $(22.7 \%)$ | 28 | $(6.2 \%)$ |
| (4) Dissatisfied | 5 | $(7.6 \%)$ | 10 | $(2.2 \%)$ |
| (5) No opinion |  | $9(13.6 \%)$ | $\frac{8}{(1.8 \%)}$ |  |
|  |  |  | $66(100.0 \%)$ | $449(100.0 \%)$ |

Item 17. How do you feel about your school in comparison with others of its kind (level) in Oklahoma City? (check one)

## Responses:

(1) It is better than most
(2) It is about average
(3) It is not as good as most
(4) No opinion

Totals:

| D.O. |  |  | C.G. |
| ---: | ---: | ---: | ---: |
| 21 | $(27.3 \%)$ | 314 | $(70.1 \%)$ |
| 43 | $(55.8 \%)$ | 108 | $(24.1 \%)$ |
| 8 | $(10.4 \%)$ | 17 | $(3.8 \%)$ |
| 5 | $(6.5 \%)$ | 9 | $(2.0 \%)$ |
| $77(100.0 \%)$ |  | $448(100.0 \%)$ |  |

Item 18. Do you feel that fees and other costs for taking certain courses keep some pupils from taking such courses? (check one)

Responses:
(1) Many pupils fail to take such courses because of the cost
(2) A few pupils fail to take such courses because of the cost
(3) No pupils fail to take such courses because of the cost
(4) No opinion

## Totals:

D.O.
C.G.

$$
23(28.0 \%) \quad 54 \quad(12.1 \%)
$$

$$
32(42.7 \%) \quad 279 \quad(62.2 \%)
$$

$$
6(8.0 \%) \quad 67 \quad(15.0 \%)
$$

$$
\frac{16(21.3 \%)}{75(100.0 \%)} \quad \frac{48(10.7 \%)}{448(100.0 \%)}
$$

Item 19. How high are the scholastic standards in your school? (check one)

Responses:
(1) Standards are too high
(2) Standards are about right
(3) Standards are too low
(4) No opinion

Totals:
Item 11. What do you think about the amount of homework assigned to pupils in your school? (check one)

Responses:
(1) Too much
(2) About right
(3) Not enough
(4) No opinion
D.O.

| 20 | $(26.0 \%)$ | 128 | $(28.5 \%)$ |
| ---: | ---: | ---: | ---: |
| 46 | $(59.7 \%)$ | 288 | $(64.1 \%)$ |
| 6 | $(7.8 \%)$ | 17 | $(3.8 \%)$ |
| 5 | $(6.5 \%)$ | 16 | $(3.6 \%)$ |
| $77(100.0 \%)$ |  | $449(100.0 \%)$ |  |

In this group of items, as in the last, differences may be noted in the responses of the two groups studied. The Chi Square test revealed differences significant beyond the 1 per cent level for each item in this group except the one pertaining to the amount of homework assigned. The results of this test are shown in Table 35.

COMPARISON OF DROP-OUT AND CONTROL GROUPS' OPINIONS REGARDING SCHOOL ATTENDED

| Item | df | $\underline{x}^{2}$ | $P$ |
| :--- | :---: | :---: | :---: |
| 1. (Satisfaction with |  |  |  |
| school) |  |  |  |

As would be expected, proportionately more drop-outs were dissatisfied with their school than were members of the control group. Still, over one-third of the drop-outs were "satisfied" and about one-fifth of the group indicated that they were "more satisfied than dissatisfied." Thus, over half of the drop-outs indicated a positive attitude regarding their school.

On Item 17, in which respondents were asked to compare their school with others in the system, there was considerably more evidence of school pride, identification, and good morale among members of the control group. Seventy per cent of the members of the control group rated their school "better than most" in the city. Only about 27 per cent of the drop-outs responded in a like manner. Lack of participation in extraclass activities on the part of the drop-outs may partially explain the
indicated differences in attitudes. By having fewer ties with the school, it seems only logical that the drop-outs would be lacking in school pride.

The responses to the question pertaining to educational costs, Item 18, are not particularly surprising. The data previously cited on occupation of father indicated that drop-outs come from homes of lower economic status. Thus, it would be expected that they would consider educational costs more excessive and a greater limitation than would members of the control group.

Responses to the Item 11, relative to home work, were surprisingly similar. A majority of both groups considered the amount of home work "about right." Likewise, on Item 19, a majority of both groups considered scholastic standards "about right." The main difference in the responses on this item was in the "no opinion" category. About 21 per cent of the drop-outs indicated "no opinion" in response to this question; in contrast, only about 6 per cent of the control group gave this response.

Opinions Regarding Pupil-Pupil and Pupil-School Relationships
Six items included in Part II of the opinionnaire might be considered to pertain to pupil-pupil and pupil-school relationships. The following presentation includes these items and the responses obtained for each.

Item 12. How much time each day is spent at home by pupils in preparing their lessons? (check one)

Responses:
(1) Two hours or more
(2) One to two hours
(3) Less than one hour
D.O.

8 (10.4\%)
21 (27.3\%)
21 (27.3\%) 150 (33.5\%)
(4) None

| 11 | (14.2\%) | 15 | 3.3\%) |
| :---: | :---: | :---: | :---: |
| 16 | (20.8\%) | 43 | ( 9.6\%) |
|  | 00.0\%) | 44 | 00 |

Item 15. Should a pupil's grade (mark) be lowered because he does not behave in class? (check one)

Responses:
(1) Yes

| 35 | $(45.5 \%)$ | 269 | $(60.2 \%)$ |
| ---: | ---: | ---: | ---: |
| 36 | $(46.7 \%)$ | 120 | $(26.8 \%)$ |
| 6 | $(7.8 \%)$ |  |  |
| 77 | $(100.0 \%)$ |  | 58 |

Totals:
D.O.
C.G.
(2) No
(3) No opinion

Totals:

Item 4. Do the pupils in your school treat one another fairly and kindly? (check one)

| Responses: |  | D.O. |  | C.G. |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| (1) Always |  | 2 | ( 2.6\%) | 18 | ( $4.0 \%$ ) |
| (2) Usually |  | 65 | (84.4\%) | 397 | (88.4\%) |
| (3) Seldom |  | 8 | (10.4\%) | 28 | ( 6.3\%) |
| (4) No opinion |  | 2 | ( $2.6 \%$ ) | 6 | ( $1.3 \%)$ |
|  | Tota | 77 | 100.0\%) |  | 00.0\% |

Item 8. Do you think pupils take part in as many activities as they should? (check one)

| Responses: |  | D.O. | C.G. |
| :--- | :--- | :--- | :--- | :--- |
| (1) Yes |  | $18(51.4 \%)$ | $217 \quad(50.5 \%)$ |
| (2) No |  | $\frac{17(48.6 \%)}{}$ | $\frac{213}{}(49.5 \%)$ |
|  | Totals: | $35(100.0 \%)$ | $430(100.0 \%)$ |

Item 9. If you think some pupils do not take part in as many activities as they should, what is the reason? (check all that apply)

Responses:
(1) Not enough activities
(2) Not interested
(3) Competition too stiff
(4) Favoritism
(5) Cost--can't afford to take part
(6) Social and family standing
D.O.

12 ( $6.7 \%$ )
44 (4.3\%)
41 (22.8\%) 309 (30.3\%)
11 ( 6.1\%) 41 ( 4.0\%)
20 (11.1\%) 81 ( $7.9 \%$ )
23 (12.8\%) 105 (10.4\%)
11 ( $6.1 \%$ ) 45 ( $4.4 \%$ )
(7) Poor school marks
(8) Jobs conflict with activity
(9) Too much school work
(10) Other reasons

| 15 | $(8.3 \%)$ | 57 | $(5.6 \%)$ |
| ---: | ---: | ---: | ---: |
| 29 | $(16.1 \%)$ | 231 | $(22.7 \%)$ |
| 9 | $(5.0 \%)$ | 82 | $(8.0 \%)$ |
| $9(5.0 \%)$ | 24 | $(2.4 \%)$ |  |
| $180(100.0 \%)$ | $1,019(100.0 \%)$ |  |  |

Item 10. What do you feel are the three most important reasons why some pupils get less out of school than they should? (check only three)

## Responses:

(1) Don!t study enough
(2) School work is too hard
(3) School work is too easy
(4) Work too much out of school
(5) Too many school activities
(6) School work doesn't interest them
(7) Classes too large
(8) Do not get enough individual help from the teacher
(9) Other reasons
Totals:

| D.O. |  | C.G. |  |
| ---: | :--- | ---: | :--- |
| 42 | $(22.1 \%)$ | 155 | $(27.4 \%)$ |
| 6 | $(3.2 \%)$ | 6 | $(1.1 \%)$ |
| 0 | $(0.0 \%)$ | 5 | $(r .9 \%)$ |
| 22 | $(11.6 \%)$ | 66 | $(11.7 \%)$ |
| 7 | $(3.7 \%)$ | 24 | $(4.2 \%)$ |
| 51 | $(26.8 \%)$ | 141 | $(25.0 \%)$ |
| 24 | $(12.6 \%)$ | 60 | $(10.6 \%)$ |
| 30 | $(15.8 \%)$ | 82 | $(14.5 \%)$ |
| 8 | $(4.2 \%)$ | $26(4.6 \%)$ |  |
| $190(100.0 \%)$ |  | $565(100.0 \%)$ |  |

Differences are not indicated to be significant for the last four of the six items just presented. Both the drop-outs and members of the control group expressed the opinion that pupils "usually" treat one another fairly and kindly (Item 4). Also, the responses of two groups coincided almost perfectly with reference to the question of whether students participate in as many activities as they should (Item 8); in each group, about half replied negatively and half positively. Both groups indicated that disinterest, outside employment and cost, respectively, were the primary reasons that some pupils do not take part in as many activities as they should (Item 9). Likewise, both groups were in substantial agreement that some pupils profit less from school than they should because they "don't study enough," "school work doesn't interest them"
and they "do not get enough individual help from teachers" (Item 10)。 On this item, a slightly larger proportion of the control group had responses in the "don't study enough" category than was the case for the drop-outs. Because of the nature of several items in this group, the Chi Square test was applied to only the first three items. Table 36 reveals the results obtained. Significant differences in the responses of the two groups are indicated for the first two items.

TABLE 36

> COMPARISON OF DROP-OUTS AND CONTROL GROUP
> IN OPINIONS HELD REGARDING PUPIL-PUPIL AND PUPIL-SCHOOL RELATIONSHIPS

| Item | df | (Time spent |
| :---: | :---: | :---: | :---: |
| preparing lessons) |  |  |

For the first one, (Item 12), 53 per cent of the control group were of the opinion that pupils spend over one hour each day preparing their lessons while at home; about 37 per cent of the drop-outs expressed similar opinions. If it can be assumed that these opinions represent views based on personal study habits of individual respondents, then it can be concluded that drop-outs spend less time at home preparing their lessons.

On the second, (Item 15), which pertained to the question of whether a pupil's grade should be lowered because of his misbehavior in class, drop-outs' responses in the "yes" and "no" categories were about equally divided; for the control group, "yes" responses exceeded "no" responses by over two to one. This finding suggests that idealism and moral awareness are significantly more prevalent among pupils who continue in school than among drop-outs.

Opinions regarding curricular offerings. The following data are from Part III of the opinionnaire. This part contained 39 items pertaining to various curricular offerings. Each item sets forth a particular offering and calls for the respondent to indicate whether the time and emphasis given the offering in his school is "too much," "about right," or "too little"; in addition, the response options include "school should not teach" and "no opinion."

Thirteen of the items in Part III pertained to specific school subjects or subject matter areas. The remainder pertained to miscellaneous curricular offerings, many of which cut across subject matter boundaries. For presentation purposes, the items have been grouped into two classes. Findings from the thirteen items pertaining specifically to school subjects are treated first.

Inasmuch as the response options were uniform in number and kind for all of the items in Part III of the opinionnaire, the response data are presented in table form instead of an item by item basis. Otherwise, the presentation is much the same as that employed for the Part II items just treated.

Upon examination of the tables containing response data--Tables 37 and 39--it will be noted that discrepancies seem apparent in some of the percentage totals. This requires a word of explanation. Upon examination of the tabulated responses for the two groups, it was found that practically none occurred in the "school should not teach" category. Therefore, rather than crowd the tables with a column containing little if any data, the "school should not teach" responses were not included. For this reason, the percentage totals do not always equal 100. In such instances, the difference indicates the per cent responding to the "school should not teach" category. A footnote reminder of this is with each table.

In each table, items are presented in the approximate order of the magnitude of differences in the responses of the two groups.

Opinions regarding school subjects. The tabulated opinions of the drop-out and the control group relative to time and emphasis given various school subjects are presented in Table 37. Included are frequency data revealing the actual number of each group which selected each of the options on the various items. Also, percentage ratios are provided to reveal the distribution of responses on a percentage basis. Inspection of the percentage ratios affords a reasonably meaningful comparison of likenesses and differences in the responses of the two groups. Following Table 37 statistical data are presented which afford further clarification of the differences which may be noted and differences which are indicated to be statistical are described.

TABLE 37

COMPARISON OF OPINIONS OF DROP-OUTS WITH THOSE OF CONTROL GROUP RELATIVE TO SCHOOL SUBJECTS

| School Subject | Grp. | Amount of Time and Emphas is |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Too Much | About <br> Right |  | Too <br> Little |  | No Opinion |  | Total* |  |
|  |  | No. \% | No. | \% | No. | $\%$ | No. | \% | No. | \% |
| 12. Foreign | D. 0. | 22.9 | 34 | 48.6 | 13 | 18.6 | 18 | 25.7 | 67 | 95.8 |
| Language | C.G. | $31 \quad 6.9$ | 277 | 62.1 | 90 | 20.2 | 43 | 9.6 | 441 | 98.8 |
| 2. Agriculture | D. O. | 11.5 | 22 | 32.8 | 13 | 19.4 | 31 | 46.3 | 75 | 100.0 |
|  | C.G. | 51.1 | 121 | 27.4 | 161 | 36.4 | 118 | 26.7 | 405 | 91.6 |
| 1. Mathematics (algebra, etc.) | D.O. | 68.0 | 50 | 66.7 | 14 | 18.7 | 5 | 6.7 | 75 | 100.0 |
|  | C.G. | 92.0 | 354 | 79.6 | 50 | 11.2 | 32 | 7.2 | 445 | 100.0 |
| 32. Social | D. 0. | 1014.9 | 44 | 65.7 | 9 | 13.4 | 4 | 6.0 | 67 | 100.0 |
| Studies | C.G. | 378.5 | 353 | 81.3 | 29 | 6.7 | 13 | 3.0 | 432 | 99.5 |
| 25. Physical | D. 0. | 79.6 | 47 | 64.4 | 13 | 11.8 | 6 | 8.2 | 73 | 100.0 |
| Education | C.G. | 43 9.8 | 318 | 72.6 | 63 | 14.4 | 10 | 2.3 | 434 | 99.1 |
| 33. Speech | D.0. | $0 \quad 0.0$ | 40 | 59.7 | 16 | 23.9 | 11 | 16.4 | 67 | 100.0 |
|  | C.G. | $13 \quad 3.0$ | 2.74 | 63.6 | 115 | 26.7 | 27 | 6.3 | 429 | 99.6 |
| 3. Arithmetic | D. 0. | $0 \quad 0.0$ | 60 | 88.2 | 6 | 8.9 | 2 | 2.9 | 68 | 100.0 |
|  | C.G. | $7 \quad 1.6$ | 339 | 77.2 | 46 | 10.8 | 41 | 9.3 | 433 | 98.9 |
| 6. Business Education | D.O. | 22.8 | 46 | 63.9 | 17 | 23.6 | 7 | 9.7 | 72 | 100.0 |
|  | C.G. | 102.3 | 327 | 74.0 | 70 | 15.8 | 35 | 7.9 | 442 | 100.0 |
| 11. English | D. O. | 811.1 | 49 | 68.1 | 10 | 13.9 | 4 | 5.6 | 71 | 98.6 |
|  | C.G. | 429.4 | 333 | 74.8 | 58 | 13.2 | 10 | 2.2 | 443 | 99.6 |
| 18. Industrial Arts | D. O. | 11.4 | 43 | 62.3 | 11 | 15.9 | 14 | 20.6 | 69 | 100.0 |
|  | C.G. | $7 \quad 1.7$ | 287 | 69.8 | 50 | 12.2 | 66 | 16.1 | 410 | 99.8 |
| 4. Art | D. O. | 34.3 | 41 | 58.6 | 10 | 14.3 | 16 | 22.8 | 70 | 100.0 |
|  | C.G. | 184.0 | 281 | 63.1 | 72 | 16.2 | 72 | 16.2 | 443 | 99.5 |
| 28. Science | D.0. | 57.8 | 37 | 57.8 | 11 | 17.2 | 10 | 15.6 | 63 | 98.4 |
|  | C.G. | $25 \quad 5.3$ | 272 | 62.7 | 93 | 21.4 | 44 | 10.1 | 432 | 99.5 |
| 35. Trade and Industrial Ed | D.O. | $0 \quad 0.0$ | 41 | 62.2 | 14 | 21.2 | 10 | 15.1 | 65 | 98.5 |
|  | C.G. | $10 \quad 2.3$ | 251 | 56.8 | 112 | 25.3 | 67 | 15.2 | 440 | 99.6 |

\%On items for which the total percent is less than 100 , the dif-
ference represents responses in the "School should not teach" category.

Probability data relative to the significance of differences in the responses. reported in Table 37 are presented in Table 38. These data reveal that the two groups' responses differed significantly for only the first six of the thirteen items. School subjects represented by these six items were foreign language, agriculture, advanced mathematics, social studies, physical education, and speech.

TABLE 38
COMPARISON OF DROP-OUT AND CONTROL GROUFS'
OPINIONS REGARDING SCHOOL SUBJECTS

| Item | d.f. | $\mathrm{x}^{2}$ | P |
| :---: | :---: | :---: | :---: |
| 12. (Foreign language) | 3 | 16.043 | . 01 |
| 2. (Agriculture) | 2 | 11.991 | . 01 |
| 1. (Advanced Mathematics) | 3 | 12.253 | . 01 |
| 32. (Social studies) | 3 | 9.313 | . 05 |
| 25. (Physical Education) | 3 | 8.034 | . 05 |
| 33. (Speech) | 3 | 7.871 | . 05 |
| 3. (Arithmetic) | 2 | 3.773 | . 20 |
| 6. (Business education) | 2 | 3.337 | . 20 |
| 11. (English) | 3 | 3.133 | . 30 |
| 18. (Industrial Arts) | 2 | 1.772 | . 50 |
| 4. (Art) | 3 | 1.991 | . 50 |
| 28. (Science) | 3 | 1.894 | . 50 |
| 35. (Trade and Industrial Educ.) | 2 | . 679 | . 70 |

Upon considering the time and emphasis given agriculture (Item 2)
a greater portion of the control group responded to the "too little" response option than did drop-outs. Differences in opinions held relative to foreign language (Item 12), are best accounted for by the relatively higher portion of responses in the "no opinion" category by drop-outs. This was also the main source of differences with respect to physical education (Item 25), speech (Item 33), and to some degree for social studies (Item 32). For advanced mathematics (Item l) and for social studies, small differences occurred in several response categories. Dropouts responded with relatively greater frequency in the "too much" and "too little" categories and less in the "about right" category than did members of the control group.

In comparing the general trend of each group's responses, those in the "about right" and "no opinion" categories are interesting and revealing. On eleven of the thirteen items, the percentage of "about right" responses was greater for the control group than for the drop-outs. In contrast, on all items except one, the portion of "no opinion" responses was greater for the drop-outs. Thus, even though responses to over half of the items were not found to be significantly different for the two groups, these trends rather definitely indicate that negative and uncertain feelings about subject offerings were generally more prevalent among drop-outs than among pupils who remained in school.

If responses in the "too little" category can be interpreted as indicative of educational needs, drop-outs seemingly desire that more time and emphasis be given such courses as speech, business education, trade and industrial education, agriculture, and advanced mathematics. Opinions regarding miscellaneous school offerings. Twenty-six
of the items in Part III of the opinionnaire pertain to a variety of learning experiences offered in varying degrees in secondary education programs. Educational objectives to which these items pertain do not tend to conform to specific subject matter boundaries. Some of the items pertain to guidance objectives, some to objectives concerned with the development of social competencies, some apply to fundamental skills which schools seek to produce. Many could be classed as general education objectives. Table 39 contains response data for these items. Again, items are presented in the approximate order of the magnitude of response differences. Items on which responses of the two groups differed most are presented first.

TABLE 39

## COMPARISON OF DROP-OUT AND CONTROL GROUPS' RESPONSES REGARDING MISCELLANEOUS SCHOOL OFFERINGS

| Learning Experiences | Gp. | Amount of time and emphasis |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Too Much | About Right |  | Too <br> Little |  | No Opinion |  | Total* |  |
|  |  | No. \% | No. | \% | No. | $\%$ | No. | \% | No. | \% |
| 14. Health and | D.O. | 11.4 | 45 | 65.3 | 12 | 17.4 | 11 | 16.9 | 69 | 100.0 |
| safety | C.G. | 71.6 | 206 | 46.4 | 191 | 43.0 | 35 | 7.9 | 439 | 98.9 |
| 23. Learning to | D. 0 | $4 \quad 5.7$ | 32 | 45.7 | 12 | 17.1 | 20 | 28.5 | 69 | 100.0 |
| sing and/or play an instrument | C.G. | 122.8 | 299 | 68.9 | 60 | 13.8 | 60 | 13.8 | 431 | 99.3 |
| 15. Hobbies and | D.O. | 913.1 | 39 | 56.5 | 7 | 10.1 | 14 | 20.3 | 69 | 100.0 |
| clubs | C.G. | 347.8 | 272 | 62.1 | 91 | 20.8 | 34 | 7.8 | 431 | 98.5 |
| 5. Athletics | D. 0. | 1013.9 | 43 | 59.8 | 13 | 18.0 | 6 | 8.3 | 77 | 100.0 |
|  | C. G. | $32 \quad 7.2$ | 347 | 78.3 | 51 | 11.6 | 13 | 2.9 | 443 | 100.0 |

*On items for which the percentage total is less than 100 , the difference represents responses in the "school should not teach" category.

TABLE 39--Continued

| Learning Experiences | Gp. | Amount of time and emphasis |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | About <br> Right |  | $\begin{aligned} & \text { Too } \\ & \text { Little } \end{aligned}$ |  | No Opinion |  | Total |  |
| 13. Getting | D.O. | $1 \begin{array}{ll}1 & 1.4\end{array}$ | 38 | 55.9 | 22 | 32.4 | 7 | 10.3 | 68 | 100.0 |
| along with others | C.G. | 2.4 |  | 37.9 | 245 | 54.9 | 28 | 6.3 | 444 | 99.5 |
| 6. Cooperating | D.O. | $0 \quad 0.0$ | 25 | 36.2 | 28 | 40.6 | 16 | 23.2 | 69 | 100.0 |
| with others in working on school \& community problems | C.G. | 51.1 |  | 35.2 | 234 | 53.2 | 44 | 10.0 | 438 | 99.5 |
| 21. Learning to | D.O. | $0 \quad 0.0$ |  | 37.7 | 30 | 43.5 | 13 | 18.8 | 69 | 100.0 |
| save, invest and spend wisely | C.G. | $3 \quad .7$ |  | 24.1 | 270 | 62.1 | 50 | 11.9 | 428 | 98.4 |
| 20. Learning to | D.O. | $0 \quad 0.0$ | 30 | 42.8 | 27 | 38.6 | 13 | 18.6 | 70 | 100.0 |
| make intelligent decisions | C.G. | $6 \quad 1.4$ | 152 | 34.5 | 231 | 53.8 | 36 | 8.5 | 425 | 99.1 |
| 24. Moral and | D. 0. | $0 \quad 0.0$ |  | 51.6 | 23 | 33.8 | 9 | 13.2 | 67 | 98.6 |
| spiritual education | C.G. | 2.5 |  | 35.8 | 228 | 51.9 | 38 | 8.6 | 425 | 96.8 |
| 26. Planning | D.0. | $0 \quad 0.0$ |  | 50.8 | 26 | 38.8 | 6 | 9.0 | 66 | 98.6 |
| school courses to take | C.G. | 3.7 |  | 62.2 | 148 | 33.9 | 11 | 2.5 | 433 | 99.3 |
| 31. Sex educ. | D.0. | 23.0 |  | 41.8 | 27 | 40.3 | 7 | 10.4 | 64 | 95.5 |
|  | C.G. | $10 \quad 2.3$ | 104 | 24.0 | 257 | 59.4 | 39 | 9.0 | 394 | 94.7 |

TABLE 39--Continued

| Learning Experiences | Gp. | Amount of time and emphasis |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | $\begin{array}{\|l} \text { Too } \\ \text { Much } \end{array}$ | About <br> Right <br> No, \% |  | Too <br> Little <br> No. $\%$ |  | $\begin{gathered} \text { No } \\ \text { Opinion } \end{gathered}$ |  | Total* |  |
| 27. School spon- | D.O. | 46.0 | 47 | 70.1 | 6 | 9.0 | 10 | 14.9 | 68 | 100.0 |
| sored social activities | C.G. | 194.3 | 295 | 66.2 | 97 | 21.7 | 33 | 7.4 | 444 | 99.6 |
| 17. Improving | D.O. | $0 \quad 0.0$ | 34 | 48.6 | 27 | 38.6 | 9 | 12.8 | 70 | 100.0 |
| $\begin{aligned} & \text { reading } \\ & \text { ability } \end{aligned}$ | C.G. | $3 \quad .7$ |  | 35.6 | 237 | 55.9 | 33 | 7.8 |  | 100.0 |
| 36. Understand- | D. 0. | 34.6 | 40 | 60.6 | 16 | 24.2 | 6 | 9.1 | 65 | 98.5 |
| ing and devotion to democracy | C.G. | $7 \quad 1.6$ |  | 49.1 | 174 | 39.5 | 43 | 9.8 | 440 | 100.0 |
| 29. Selecting | D. 0. | 23.0 | 26 | 39.4 | 13 | 19.7 | 17 | 25.8 | 58 | 87.9 |
| movies, radio and TV prog. | C.G. | $12 \quad 2.8$ | 113 | 26.5 | 154 | 36.2 | 81 | 19.0 | 360 | 84.5 |
| 37. Work and | D.O. | 11.6 | 33 | 50.8 | 22 | 33.8 | 9 | 13.8 | 65 | 100.0 |
| study habits | C.G. | 112.6 | 172 | 39.4 | 212 | 48.6 | 38 | 8.7 | 433 | 99.3 |
| 9. Dramatics | D.O. | $6 \quad 9.5$ | 34 | 54.0 | 6 | 9.5 | 17 | 27.0 | 63 | 100.0 |
|  | C.G. | $31 \quad 7.0$ | 287 | 64.6 | 53 | 11.9 | 70 | 15.8 | 441 | 99.3 |
| 30. Recreation | D.O. | 00.0 | 36 | 54.6 | 13 | 19.7 | 14 | 21.2 | 63 | 95.5 |
| guidance | C.G. | $5 \quad 1.2$ |  | 46.8 | 140 | 32.9 | 66 | 15.5 | 410 | 96.4 |
| 19. Learning to | D.O. | $5 \quad 6.9$ | 36 | 50.0 | 18 | 25.0 | 12 | 16.7 | 71 | 98.6 |
| enjoy music | C.G. | 102.5 | 191 | 47.8 | 127 | 31.7 | 66 | 16.5 | 394 | 98.5 |
| 39. World Citi- | D. 0. | 46.1 | 36 | 54.5 | 19 | 28.8 | 7 | 10.6 |  | 100.0 |
| zenship; United Nations | C.G. | 112.6 |  | 50.2 | 151 | 34.8 | 52 | 12.0 | 432 | 99.6 |
| 38. Work exper- | D.O. | $1 \quad 1.6$ | 33 | 50.8 | 22 | 33.8 | 9 | 13.8 | 65 | 100.0 |
| ience; learning one's occupation | C.G. | $8 \quad 1.9$ |  | 46.4 |  | 42.7 | 38 | 8.8 | 430 | 99.8 |

TABLE 39--Continued

| Learning Experiences | Gp• | Amount of time and emphasis |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Too <br> Much <br> ivo. \% | About Right ivo. $\%$ |  | $\begin{array}{\|c} \text { Too } \\ \text { Little } \\ \text { No. } \% \end{array}$ |  | $\left\lvert\, \begin{gathered} \text { No } \\ \text { Opinion } \\ \text { No. } \end{gathered}\right.$ |  | Total* <br> No. <br> \% |  |
| 34. Spelling | D.O. | $0 \quad 0.0$ | 39 | 55.0 | 27 | 38.0 | 5 | 7.0 |  | 100.0 |
|  | C.G. | $8 \quad 1.9$ | 194 | 45.4 | 203 | 47.5 | 22 | 5.2 | 427 | 100.0 |
| 22. Learning to | D.O. | 23.1 | 40 | 62.5 | 14 | 21.8 | 7 | 11.0 | 63 | 98.6 |
| select and enjoy books | C.G. | $28 \quad 6.3$ | 252 | 56.8 | 127 | 28.6 | 33 | 7.4 | 440 | 99.1 |
| 7. Choosing a | D.O. | $0 \quad 0.0$ | 32 | 45.1 | 32 | 45.1 | 7 | 9.8 |  | 100.0 |
| vocation | C.G. | 4.9 |  | 35.6 | 223 | 52.4 | 44 | 10.4 |  | 99.3 |
| 16. Homemaking-- | D.O. | $0 \quad 0.0$ | 29 | 45.3 | 20 | 31.3 | 15 | 23.4 |  | 100.0 |
| preparation to become head of family | C.G. | 1.2 |  | 54.3 | 123 | 28.1 | 73 | 16.7 | 435 | 99.3 |
| 10. Driving a | D.O. | 11.4 | 47 | 67.1 | 17 | 24.4 | 5 | 7.1 |  | 100.0 |
| car | C.G. | $7 \quad 1.6$ |  | 63.7 |  | 29.3 | 20 | 4.5 | 440 | 99.1 |

In terins of the criterion, i.e., P's at or beyond .05, the responses of the two groups to the first fifteen items in Table 39 differed significantly. Responses for the remaining items, those after Item 29, do not. Table 40 contains probability data obtained upon applying the Chi Square test to the tabulated responses for the various items.

For this group of items differences in the responses of the two groups were slightly more in evidence than was true for the previous class of items which pertained to school subjects.

TABLE 40

## COMPARISON OF DROP-OUT AND CONTROL GROUPS' OPINIONS REGARDING MISCELLANEOUS CURRICULAR OFFERINGS

| Item | d.f. | $\mathrm{x}^{2}$ | P |
| :---: | :---: | :---: | :---: |
| 14. (Health and safety) | 2 | 18.391 | .01 |
| 23. (Learning to sing, etc.) | 3 | 15.531 | .01 |
| 15. (Hobbies and Clubs) | 3 | 15.411 | . 01 |
| 5. (Athletics) | 3 | 13.216 | . 01 |
| 12. (Getting along with others) | 2 | 11.969 | . 01 |
| 8. (Cooperating with others...) | 2 | 10.510 | . 01 |
| 21. (Learning to save, invest....) | 2 | 10.024 | . 01 |
| 20. (Learning to make decisions) | 2 | 9.761 | . 01 |
| 24. (Moral and spiritual educ.) | 2 | 8.893 | . 01 |
| 26. (Planning school courses) | 2 | 8.777 | . 01 |
| 31. (Sex education) | 4 | 10.967 | . 02 |
| 27. (School sponsored social act.) | 3 | 9.160 | . 02 |
| 17. (Improving reading ability) | 2 | 7.848 | . 02 |
| 36. (Understanding democracy) | 3 | 7.702 | . 02 |
| 29. (Selecting movies...) | 4 | 9.631 | . 05 |
| 37. (Work and study habits) | 3 | 6.194 | . 20 |
| 7. (Dramatics) | 3 | 5.786 | . 20 |
| 30. (Recreation guidance) | 3 | 5.142 | . 20 |
| 19. (Learning to enjoy music) | 3 | 4.760 | . 20 |
| 39. (World citizenship) | 3 | 3.265 | . 30 |
| 38. (Work experience) | 2 | 2.788 | . 30 |
| 34. (Spelling) | 2 | 2.711 | . 30 |
| 22. (Learning to enjoy books) | 3 | 3.075 | . 50 |
| 7. (Choosing a vocation) | 2 | 2.122 | . 50 |
| 16. (Homemaking) | 2 | 1.433 | . 50 |
| 10. (Driving a car) | 2 | 1.477 | . 50 |

Table 40 indicates the fifteen items in which responses of the two groups differed significantly. Following is a brief description of how the responses differed.

Item 14, the first included in Table 40 , pertained to opinions regarding the amount of cime and emphasis given health and safety. The difference in the responses of the two groups on this item may largely
be accounted for by the greater portion of responses in the "too little" category by members of the control group. Forty-tbree per cent of the control group felt that health and safety received too little attention; in contrast, only 17 per cent of the drop-out group held similar opinions.

Differences in the responses to the question of learning to sing and/or play a musical instrument (Item 23) were due primarily to the relatively large number of "no opinion" responses by members of the drop-out group. Also, relatively fewer of this group gave "about right" responses than did members of the control group and a slightly larger per cent gave responses in the "too much" or "too little" categories than did those of the control group. On Item 15, pertaining to hobbies and clubs, the differences were essentially of the same character as those just discussed. Again, drop-outs gave proportionately more "no opinion" responses. Opinions of the two groups regarding athletics (Item 5) varied considerably. Proportionately larger numbers of the drop-out group responded to the "too much," "too little," and "no opinion" options than was the case for the control group. Seventy-eight per cent of the control group gave responses of "about right" to this item; only about 60 per cent of the drop-out group had similar opinions.

Differences in the responses to Item 13, "learning to get along with others," were due primarily to the manner in which the two groups responded to the "about right" and "too little" options. About 56 per cent of the drop-outs considered the time and emphasis given the objective of getting along with others mabout right"; 32 per cent responded "too little". In contrast, only 38 per cent of the control group gave "about
right" responses and about 60 per cent of the group felt that "too little" emphasis was given such learning experiences. Thus, it would appear that members of the control group were more aware of needs for getting along with others. Also, it seems plausible to infer that members of this group were more concerned with doing so. These assumptions also seem to be substantiated by the responses of the two groups to the question of learning to cooperate with others in working on school and community problems (Item 8). The response trend on this item was much the same as for the one just discussed. However, "no opinion" responses were relatively great for the drop-out group on this item.

For Item 21, "learning to save, invest, and spend money wisely," drop-outs and the control group gave responses of "too little". However, this trend was significantly more pronounced for the control group. About 24 per cent of the control group's responses fell in the "about right" category and about 62 per cent in the "too little" category. In comparison, 38 per cent of the drop-outs gave "about right" as their response and only about 43 per cent were of the opinion that "too little" attention was given this educational objective.

Responses in the "no opinion" category were relatively great in number for the drop-outs on the question relative to their schools' attention to the objective of helping students learn to make intelligent decisions for themselves (Item 20). Their responses to the "about right" and "too little" options were about equationally proportionate in number. For the control group, opinions that "too little" attention was given this objective were more in evidence. Also, in comparison with the drop-outs, relatively few gave "no opinion" as a response to this item.

Opinions expressed by the two groups concerning "moral and spiritual education" (Item 24) were almost directly opposite with respect to trend. Whereas, about 52 per cent of the drop-outs felt that the attention given moral and spiritual education was "about right" and approximately 34 per cent thought it "too little," only 36 per cent of the control group gave "about right" responses and nearly 60 per cent felt that "too little" attention was given this objective. Again, as was suggested in a previous discussion of the item pertaining to lowering of grades as a class discipline measure (p. 123), idealism is apparently more prevalent among members of the control group than among the dropouts.

For Item 26, "planning school courses to take," the pattern of responses for the two groups did not differ greatly. Relatively fewer of the drop-outs gave "about right" responses and relatively more gave "no opinion" in answering this item. However, similar percentages of each group indicated that "too little" attention was given this guidance function.

Differences in the opinions of the two groups regarding "sex education" (Item 31) were rather easy to identify. For the drop-outs, opinions of "about right" and "too little" were about equal in number and together accounted for about 80 per cent of the group's responses. In contrast, relatively more of the control group felt that too little attention was given sex education.

On the question regarding "school sponsored social activities" (Item 27), the difference in the two groups' responses would be attributed to the fact that responses to the "too little" option were proportionately
greater for the control group than for the drop-outs. On this item, about 70 per cent of the drop-outs were of the opinion that the time and emphasis given school sponsored social activities was "about right"; 9 per cent gave "too little" as a response。 In contrast, 66 per cent of the control group gave "about right" as a response, but nearly 22 per cent thought "too little" attention was given such activities.

Responses to Item 17, "improving reading ability," indicated that relatively more of the control group favored greater emphasis on this objective than was true for the drop-outs. On this item, 49 per cent of the drop-outs responded "about right"; 39 per cent responded "too little." For the control group, 36 per cent gave "about right" as a response and 56 per cent were of the opinion that "too little" attention was given the improvement of reading ability.

The trend of responses to Item 36, "understanding and devotion to democracy," was very similar to that for Item 17 discussed in the preceding paragraph. Sixty per cent of the drop-outs responded "about right" to this item and 24 per cent, "too little." For the control group, 49 per cent responded "about right" and nearly 40 per cent responded "too little."

The response patterns for the two groups differed on the question of "selecting movies, radio and television programs" (Item 27) in much the same fashion as on many of the other items just discussed. Drop-outs gave proportionately more "about right" responses and less "too little" responses than did members of the control group.

Turning now from discussion of differences in the responses of the two groups on individual test items, some rather definite differences
in the general trend of the responses to this set of items deserve mentioning.

For the previous group of items, i.e., those pertaining to specific school subjects; it was noted that proportionately greater numbers of the control group responded that the time and emphasis given various subjects was "about right." On this latter group of items pertaining to various less traditional learning experiences, the trend was reversed. On twenty of the twenty-six items in this group, the per cent responding "about right" was higher for the drop-outs than for the control groups. In contrast, on twenty-two of the twenty-six items, the per cent responding "too little" was higher for the control group. Thus, members of the control group were generally more critical concerning the offerings in question than were the drop-outs. What is the reason for this? This question is a difficult one to answer with certainty. First, part of the answer may be that the in-school pupils are more immediately concerned with offerings in their individual schools than pupils who have dropped, and thus expect more. Second, intellectual and family background differences may be factors involved. The level of intellect is higher for the control group, thus their analytical ability may be greater and their perspective broader than is the case with respect to drop-outs. Also, coming from homes of higher socio-economic level, the attitudes concerning the role of secondary schools may be less traditional among members of the control group than for drop-outs. Third, and possibly a factor related to the ones just discussed, part of the reason for the differences may be accounted for by the fact that relatively more of the drop-out group gave responses in the "no opinion" category. This was true in


#### Abstract

twenty-three of the twenty-six items under consideration. Despite the above mentioned differences in the trend of responses in each group, it is interesting and seems significant that there was also substantial agreement between the two groups concerning offerings which were considered as receiving "too little" attention. In other words, items which the control group indicated with greatest frequency as receiving "too little" time and emphasis were essentially the same ones that the drop-outs indicated. Table 41 includes these items, with per cents responding "too little" for each group.


table 41

## LEARNING EXPERIENCES CONSIDERED BY THE DROP-OUT AND CONTROL GROUPS AS RECEIVING <br> "TOO LITTLE" ATTENTION

| Educational <br> Experiences | Per Cent of Group Responding <br> "Too Little" |  |
| :--- | :--- | :--- |
| Learning to save, spend and invest wisely | 43.5 | 62.1 |
| Sex education | 40.3 | 59.4 |
| Improving reading ability | 38.6 | 55.9 |
| Getting along with others | 32.4 | 54.9 |
| Learning to make decisions | 38.6 | 53.8 |
| Cooperating with others in |  |  |
| school and community affairs | 40.6 | 53.2 |
| Choosing a vocation | 45.1 | 52.4 |
| Moral and spiritual education | 33.8 | 51.9 |

For curriculum planners who are seeking to identify the educational needs of high school youth, the data in Table 41 would seem a useful source of information. The implications seem quite clear that high school students desire to know more about the management of money, wish to have more information about sex, are interested in becoming more competent in their relationship with others, and that they desire guidance as they seek to attain self-direction in making decisions, choosing a vocation, and living a moral life. Learning experiences in all of these areas are essential as preparation for adult roles which these students soon must assume. If education is conceived as preparation for effective living, then these needs are critical.

## Summary

The multiplicity of findings concerning the opinion differences makes summarization, beyond noting general trends, extremely difficult. Following are some of the major trends which seem significant.

One of the most consistent trends noted upon examining differences in the response data for the two groups was the greater relative frequency of responses in the "no opinion" category for drop-outs. Fifty-six of the items in the opinionnaire contained "no opinion" response options. On forty-eight of these, the per cent choosing this option was greater for the drop-out group than for the control group. This seemingly indicates that opinions held by drop-outs regarding school are less well established, positively or negatively, than is the case among pupils who remain in school; that mixed feelings and uncertainty are more characteristic of drop-outs' attitudes toward school.

A second trend was noted in the relative incidence of negative and positive responses. Drop-outs, generally speaking, gave more negative responses. For example, when items on opinions regarding teachers were grouped, negative attitudes were consistently and significantly more in evidence among the drop-outs' responses. Relatively fewer of them felt that counselors were helpful; that teachers know and understand their pupils; that teachers treat pupils fairly, and that teachers take a personal interest in pupils.

This negativism was also reflected in opinions regarding the school attended. Significantly fewer of the drop-outs were satisfied with school generally; fewer compared their school as favorably with other schools of the system, and more of them considered school costs a handicap. The same trend as described above was also in evidence, to some degree, in opinions of the drop-outs regarding school subjects. For most subjects, however, differences in the two groups' responses were not too pronounced.

On the group of items pertaining to miscellaneous curricular offerings, other than school subjects, negativism was not so much in evidence. In fact, on these particular items, the control group consistently was more critical in their responses.

## CHAPTER VI

SUMMARY AND CONCLUSIONS

The problem considered in this study was determined by the essential character of pupil retention difficulties faced by the Oklahoma City secondary schools and to fdentify the major factors associated with the conditions in question. In seeking answers to this problem the ob. jectives were to ascertain the nature and extent of the drop-out problem during the 1954-1955 school year and to determine the characteristics of the individuals involved and how they differed from pupils retained in school. The study represents an attempt to meet the needs for a systemwide study broad enough in scope to afford bases for a unified attack on the problem.

The drop-out population considered for general study included all withdrawals from grades seven through twelve classed as drop-outs by the participating schools. For the controlled phase of the study, the population included drop-outs from grades nine and eleven and a 20 per cent sample of retained pupils from these same grades.

Data for the study were gathered by the school system. The devices employed were school records and reports, and an opinionnaire.

## The Findings

In the introductory chapter of this report, the objectives for
the study were set forth in the form of questions to be answered. For a summary, it seems quite fitting to again state these questions and for each to list significant answers gleaned from the findings. Such a summary presentation follows.

What was the magnitude and general character of the drop-out problem in Oklahoma City during the 1954-1955 school year?

Findings:

1. Holding power data for the period 1939 to 1955 reveal that approximately 37 per cent of all ninth grade entrants failed to remain in school to graduate from grade twelve with their respective classes. For more current years, the loss between grades nine and twelve has been near 30 per cent. This is probably the best index of current holding power of the system.
2. During the 1954-1955 school year 1,339 , or about 8 per cent, of the 17,252 pupils enrolled in Oklahoma City's "white" secondary schools withdrew. Taft Junior High School had the best retention with a loss of only 3.2 per cent. Franklin Junior High School had the poorest with a loss of 16.4 per cent. About half of the withdrawals--648--were classed by the school system as drop-outs. The other half of those withdrawing left the state and were not classed as drop-outs. Among these there was likely a considerable number who did not re-enter school elsewhere. Thus, the number of withdrawals classed as drop-outs is probably a very conservative estimate.
3. Junior and senior high schools were about equally represented in the above and below average retention categories. Size of enrollment did not appear to be a relative factor.
4. Sex differences were quite in evidence among the reasons for withdrawal. For boys, the most common reason for withdrawals, in order of frequency, were: (1) to leave the state (2) nonattendance, (3) entrance into the armed forces, and (4) because of hardship. The most common reason given by girls, in order of frequency, wer: (1) leaving the state, (2) marriage, (3) illness and (4) hardship.
5. Withdrawals were greatest in number at grade ten; grade eleven was a close second. Forty-seven per cent of all withdrawals occurred at these two grades.
6. The greatest number of withdrawals occurred in January. The frequencies were least during September and May.

What were the family-personal-school characteristics of persons comprising the drop-out group?

Findings:

1. A substantial portion of the drop-outs, 44 per cent, were not living with both parents. Thus, a broken home would seem a likely possibility in almost half of the drop-out cases.
2. Fathers of drop-outs tend to be employed in skilled, semiskilled and unskilled occupations in about two out of three cases. Thus, drop-outs tend to come from families of lower socio-economic status.
3. Few drop-outs indicated that their families received public welfare assistance.
4. Drop-outs were from families having an average of 3.5 children. Thirty-seven per cent of the families had two or less children; seventy-five per cent had four or less.
5. The average for the number of children at home in drop-out families was 2.7; three-fourths of the families had three or less children at home.
6. For 70 per cent of the cases on which data were available, drop-outs' parents had come to school for a conference.
7. Fifty-nine per cent of the drop-outs were boys.
8. Mean I.Q.'s for the drop-outs were 93.1 for the boys, 96.9 for girls, and 94.2 for the total group. Over 62 per cent of the group had I.Q.'s below 100 and over 25 per cent below 85. The standard deviation of scores was 15 , which is approximately normal for the particular test employed.
9. School marks of the drop-outs were mostly satisfactory in the elementary school. Beginning in junior high school, their scholarship declined progressively. At the senior high school level, over half of the group had yearly grade averages in the "D" and "F" categories. Boys made significantly poorer grades than girls.
10. For 132 cases on which data were available, almost four out of every ten drop-outs were found to have failed one or more grades prior to withdrawal from school.
11. Limited achievement cest data reveal that slightly over half of the drop-outs performed below grade level on reading and approximately 70 per cent performed below grade level on language arts and arithmetic.
12. The mean number of schools attended by drop-outs was 3.7 .
13. School attendance was poor among the drop-outs, especially in senior high school.
14. Almost 82 per cent of the drop-outs were non-participants in extra-class activities.

How are drop-outs different from their peers who continue in school-A. In family-school-personal characteristics?

Findings:

1. Drop-outs had significantly lower I. Q.'s than their peers who remained in school. I. Q. means were 89 for drop-outs versus 103 for the control group at grade nine. Comparable differences were found to exist at grade eleven. At grade nine, 78 per cent of the drop-outs had I. Q.'s below 100; only 39 per cent of the control group ranked this low. Again, the same trend was in evidence at grade eleven.
2. Drop-outs made significantly poorer school marks than retained pupils. The average mark of drop-outs was about "C-"; for the control groups, "B-."
3. Great differences existed in the frequencies of participation in extra-class activities. Drop-outs participated little in activities. The trend for the control groups was just the reverse.
4. The attendance record of drop-outs was significantly poorer for drop-outs. Their attendance declined progressively in high school. This decline was not in evidence for pupils who remained in school.
5. Fathers of drop-outs rank significantly lower in occupational status than was true for retained pupils.
6. Significantly more drop-outs were indicated to be from broken hones than was true for retained pupils. Whereas approximately 40 to 45 per cent of the drop-outs did not live with both parents, only about 20 to 25 per cent of retained pupils did not.
B. In opinions regarding school?

Findings:

1. Generally speaking, drop-outs tend to reflect more feeling of uncertainty and negativism regarding various aspects of the school environment than did pupils who continued in school.
2. Drop-outs expressed more dissatisfaction concerning their relationships with teachers and counselors. They were more critical of discipline. Relatively fewer of them felt that counselors were helpful; that teachers were interested in them personally and treated them fairly.
3. Drop-outs had significantly less pride in their schools and seemed less idealistic about pupil conduct in school.
4. Drop-outs were more critical of subject matter offerings and less critical of miscellaneous curricular offerings of types
not purely academic than was the case for in-school pupils.

What factors are most related to pupils' early withdrawal from school in Oklahoma City?

This question must be answered in terms of an interpretation of the relative significance attached to the various findings. On the basis of such an evaluation, the following factors seem most significantly and consistently related to early withdrawal from school:

1. Non-participation in extra-class activities.
2. Intelligence test scores ranking a student in the lower onethird or possibly one-half of his class.
3. Poor school achievement as indicated by school marks and achievement test data.
4. An attendance record which has become progressively poorer.
5. Low socio-economic status as reflected by father's occupation.
6. Membership in a broken home.
7. Attitudes of uncertainty or negativism toward teachers, counselors, subject offerings and school, generally.
8. Lack of identification with and pride in school attended.

On the basis of the findings of this study, the above-listed factors are indicated as those which likely would prove most valuable in identifying the potential drop-out before he leaves school. Singly, none of them necessarily spells out "potential drop-out"; admittedly, many pupils having one or more of these characteristics continue in school. However, students who possess several of these characteristics should be viewed as vulnerable to premature withdrawal from school.

The present study has been concerned primarily with ascertaining the nature and extent of the drop-out problem in Oklahoma City and with the characteristics of the pupils involved. It has not included an appraisal of educational policies, programs, or practices prevalent in the various schools of the system, nor has it been concerned with a study of specific practices and procedures employed to maintain and improve holding power. In light of these facts, conclusions based on the findings have certain limitations and at best must be considered tentative. On the basis of the findings reported, the following conclusions seem warranted.

First, findings of this study suggest that attention should be given to the educational provision made for pupils of below-average intellectual ability. A substantial segment of the drop-out group, about two out of three, were in the lower half of their class in intellectual ability. This fact would suggest that the high schools of Oklahoma City may be overly selective; that they tend to weed out pupils who might be classed as slow learners. The implications of these inferences should be investigated and corrective measures should be taken as needs warrant.

Second, there is substantial evidence that the programs of extraclass activities should be carefully evaluated. If extra-class activities are viewed as an integral and important part of the total educational program in the various schools of the system, and if activity programs by purpose are conceived as offering worthy educational experiences which all pupils should have, then it follows that efforts should be made to determine that such programs function in such a manner that they serve
the needs of all pupils, not merely a segment of the pupil population. Drop-outs as a group do not participate in activities. Likely they are the very ones who need to develop social competencies and other personal qualities which activity programs seek to foster.

Third, the quality of pupil-teacher relationships should be carefully appraised. For example, the fact that over half of the drop-outs and a substantial portion of the in-school pupils were of the opinion that few teachers take a personal interest in pupils' problems has rather serious implications. Class size, the organization of instructional programs, and other factors may be associated with this problem. Whatever the causes, efforts should be made to identify them and corrective measures should be taken.

Fourth, attention should be given to why the school achievement of drop-outs is low. If pupils are to maintain favorable attitudes toward school and learn with reasonable effectiveness, they must enjoy a modicum of success. The achievement of drop-outs in Oklahoma City is not as poor as in many cities where drop-out studies have been conducted. However, the situation does warrant study. Educational counseling; in-school placement, curricular content, instructional methods, grading and other such factors should be examined as they relate to this problem.

Fifth, the time and emphasis devoted to the teaching of basic skills in the secondary school level should be appraised. A very substantial portion of both the drop-outs and in-school groups indicated a need for more instruction in such skills as spelling and readinge Achievement test data also reveal weaknesses in this respect, especially among the drop-outs.

Sixth, an appraisal should be made of curricular provisions for such practical things as the management of money, sex education, how to get along with others, how to make intelligent decisions for one's self, choosing a vocation, and moral and spiritual education. Both drop-outs and in-school pupils rate these high in the category of curricular objectives needing more attention.

Seventh, it would appear that positive and preventive features of guidance programs in the various schools should be strengthened; that systematic efforts be made to identify potential drop-outs early enough to institute effective preventive action. The incompleteness of many of the drop-out reports used in this study suggest that in too many cases inadequate information is gathered concerning pupils who are potential drop-outs. Unless such information is accumulated and used, the guidance function cannot be adequately fulfilled.

## Recommendations

The foregoing conclusions afford inferences for certain courses of action which would appear appropriate in light of the findings of this study. In conclusion, two general recommendations seem in order.

First, it is recommended that the present study be considered as representing only an initial effort in terms of the research and evaluation needed as a basis for action to resolve the drop-out problem in Oklahoma City. The present study represents an appraisal of the problem as one of the whole school system. Even though it affords the basis for certain kinds of action at the system level, in the final analysis, a satisfactory resolution of the problem must entail programs of study and
action initiated and maintained in various individual schools of the system. It is hoped that the findings of this study will serve as a point of departure for such efforts.

Last, it is recommended that efforts be made to cultivate among professional staff members an educational philosophy that essentially all youth should have the benefits of a secondary school education suited to their individual needs; that retention of all students is a worthy goal. This point of view is basic to any constructive program to increase holding power. Without this conviction among teachers, counselors and administrative officials, any such program has slight possibilities For success.

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## APPENDICES

APPENDIX A. DROP-OUT REPORT FORM
APPENDIX B. REPORT FORM USED FOR CONTROL GROUP
APPENDIX C. OPINIONNAIRE--HOW GOOD IS YOUR SCHOOL?

## APPENDIX A

DROP-OUT REPORT FORM

1. Name of Pupil

$$
\text { (Iast) } \quad(\text { First }) \quad \text { Middle) }
$$

2. Address Telephone
3. School attended when dropped $\qquad$ Grade $\qquad$ Sex $\qquad$ Date dropped $\qquad$
4. Check reason for dropping as an La7: Illness (), Death (), Left state (), Non-public school (), Suspended (), Married (), Armed forces (), Over 18 yrs. of age (), Police custody (), Non-attendance ( ), Hardship ( ), Other reason: (state)
5. If suspended, state reason:
6. Date of birth (Mo.) (Day) (Year) 7. Present age $\qquad$ 8. Name of parent 9. Pupil lives with father? or guardian $\qquad$ ( ), mother? (), both parents? (), If not, with whom? $\qquad$
7. Occupation of father $\qquad$ Bus. Tel. $\qquad$
8. Occupation of mother $\qquad$ Bus. Tel.

1\% No. children in family No. at home $\qquad$ 13. Does family receive A.D.C. grant? Yes ( ) No ( ) .
14. Give total days absent and present for each grade this pupil has been in Oklahoma City schools. Days absent: 1. _ 2. 3. $4 . \quad$. 5 . 6. 2. 7. 8. . 9. 10. _11. _12. _ Infomation not avail-


15. Give letter grade average (academic) for each grade pupil has been in Oklahoma City schools. Grade: 1. _ 2. $3 . \quad$. $4 . \quad 5 . \quad$. 6.

16. List grades in which pupil was retained $\qquad$ - Information not available ().
17. No, of schools attended since first grade, Okla. City and elsewhere $\qquad$
1.8. List information obtained from intelligence testing- Eleme, Jr. and Sr. High School.

| Grade | Age | Name of Test | I. Qe |
| :--- | :--- | :--- | :--- |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |

19. List information from achievement testing--elementary, junior and senior high schools.


Information not available from our records ()
20. If your school uses ability groupings, indicate group in which this pupil was placed. above average (), average (), below average ()
21. On the whole, what level of school work was this pupil doing at the time he left school? A (), B (), C ( ), D () , F ( ) .
22. List co-curricular activities of this pupil or check "No Participation" ( $\lambda$
23. Check personnel who have attempted to assist this pupil in school adjustment: Homeroom Teacher (), Counselor (), Assistant Principal (), Principal ( ), Visiting Teacher ( ), Attendence Worker ( ), School Psychologist ( ), Other (state) $\qquad$ -
24. Has either parent been invited to come to the school for a conference? Yes ( ) No ( )
25. Has the problem been discussed with either parent by telephone? Yes () No ( )
26. Hes either parent come to school for a conference? Yes () No () Which? $\qquad$
27. If the answer to item 26 is "Yes", who did the interviewing? Principal ( ), Assistant Principal (), Counselor (), Homeroom Teacher (), Ocher (state) $\qquad$ -
23. If the parent or parents were interviewed, give a summary of the results of the interview. (Use back of page if necessary)
29. Use the back of this sheet or an additional page to give additional information that has bearing on why this pupil left school.

Send the above report to: Deportment $\propto$ Pupil Services, Attendance Division or give to Visiting Counselor.

## APPENDIX B

1. Your name Last_Min_ Middle ${ }^{\text {2. Address }}$
2. Name of your school $\qquad$ 4. Grade $\qquad$
3. Sex: Male ( ) Female ( ) 6. Date of birth $\qquad$
4. Present age $\qquad$ 8. Name of parent or guardian $\qquad$
5. Do you live with both of your parents? Yes () No ()
6. If your parents are separated or divorced, with which parent do you live?
7. If you do not live with either parent, with whom do you live? (Give relationship, if any) $\qquad$
8. What is your father's occupation? $\qquad$
9. If your mother works out of the home, what does she do? $\qquad$
10. How many children are there in your family? $\qquad$
11. How many of the children are still at home? $\qquad$
12. Does your family receive any aid from the Welfare Department (A.D.C.)? Yes () No ()
13. If you have ever been retained in school, list the grade or grades $\qquad$
14. List the schools you have attended since the first grade in Oklahoma City and elsewhere.
15. If you belong to any clubs or take part in school activities, please list by name
16. If you have had a conference with any of the following persons concerning school or personal problems, please check: Homeroom teacher (); Counselor (); Assistant Principal (); Principal (); Other teachers (); Visiting Counselor (); School Psychologist (); Attendance worker ().
17. Since you have been in either junior or senior high school, has either of your parents ever come to school for a conference with any of the above persons? Yes () No ()
18. Do you feel the need for having the opportunity to discuss your school or personal problems with any of the school personnel listed in Question 20? Yes () No ()

## (COUSELOR WLL ELLL in the REMSNing information)

23. Give total days absent from each grade this pupil has been in the oklahoma City schools: 1._ 2. _ 3. _ 4._ 5.__ 6. 7. $\qquad$ 8. ${ }^{9}$. $\qquad$ 10. 11. (Include present school year)
24. Give letter grade average for each grade where record is available

$\qquad$
$\qquad$
$\qquad$
25. Group placement: A.A. (); A. ( ); B.A. ()
26. Results of C.T.M.M. or other such tests $\qquad$
27. List information from Achievement Tests, Elementary, Junior, or Senior High School.

| GRADE | AGE | NAME OF TEST |  | SUBJECT | GRADE EQUIV. |
| :--- | :--- | :--- | :--- | :--- | :--- |
|  |  |  |  |  |  |
|  |  |  |  |  |  |
|  |  |  |  |  |  |

## APPENDIX C

## Explanation

We are trying to find out what you think your school is doing well, and to see if you think there are some parts of the school's program which might be improved. Your opinion combined with the opinions of other pupils will be most helpful in planning improvements for your school. Therefore, you can be sure that the few minutes it will take you to give your opinions will be well spent. We thank you for working with us.

## Directions

1. It is easy to answer these questions. On most items, you simply check the answer which tells what you think about the question.
2. Do not sign your name. Nobody wants to know who said what.
3. Please answer every question. Each question is important.

## PART I - PERSONAL INFORMATION

1. What is your sex? (check one)
$\qquad$ 1) Male
-_2) Female
2. What school grade are you in? (circle one) Grade: $7 \quad 8 \quad 9 \quad 10 \quad 11 \quad 12$
3. I am $\qquad$ years of age.

## part il - general information

1. How well satisfied are you with your school? (check one)
1) Satisfied
2) More satisfied than dissatisfied
3) More dissatisfied than satisfied
4) Dissatisfied
5) No opinion
2. How many teachers of your school treat their pupils fairly? (check one)
1) All of them do
2) Most of them do
3) Few of them do
4) No opinion
3. How many teachers in your school know and understand their pupils? (check one)
1) All of them do
-2) Most of them do
2) Few of them do
3) No opinion
4. Do the pupils in your school treat one another fairly and kindly? (check one)
1) Always
-2) Usually
2) Sel dom
3) No opinion
5. What do you think about the discipline in your school? (check all that apply)
1) Too strict
2) About right
3) Not strict enough
4) Too much teacher controlled; pupils don't learn self-discipline
5) No opinion
6. Do teachers take a personal interest in the problems of the pupils in your school? (check one)
1) All of them do
2) Most of them do
3) Few of them do
4) No opinion
7. How helpful to pupils are the counselors in your school? (check one)
1) Very helpful
2) Helpful
3) Of little help
4) No opinion
8. Do the pupils take part in as many school activities (parties, athletics, clubs, etc.) as they should? (check one)
1) Yes
2) No
9. If you think some pupils do nnt take part in as many activities as they should, what are the reasons? (check all that apply)
1) Not enough activities
2) Not interested
3) Competition too stiff
4) Favoritism
5) Cost--can't afford to take part
6) Social and family standing
7) Poor school marks
8) Pupils have jobs which conflict with activity
9) Too much school work
-10) Others (1ist here)
10. What do you feel are the three most important reasons why some pupils get less out of school than they should? (check only three)
1) Don't study enough
2) School work is too hard
3) School work doesn't
4) School work is too easy interest them
5) Have to work too much out of school
6) Have to work too much out
7) Too many school activities
8) Classes are too large
$-8$ 8) Do not get enough individual help from teacher 9) Other reasons (list)
11. What do you think about the amount of homework assigned to pupils in your school? (check one)
-1) Too much

- ?) About right

3) Not enough
4) No opinion
12. How much time each day is spent at home by pupils in getting their school work? (check one)
1) Two hours or more
2) One to two hours
3) Less than one hour
4) None
5) No opinion
13. How many teachers in your school do you know well enough to talk to?
(check one)
1) Most of them
2) Some of them
3) None of them
4) Uncertain
14. Do the teachers in your school grade fairly? (check one)
1) Most do
2) Some do--some do not
3) Few do
4) No opinion
15. Should a pupil's grade (mark) be lowered because he does not behave in class? (check one)
1) Yes
2) No
3) No opinion
16. How do you feel about the qualifications of your teachers? (check one)
1) All well qualified
2) Most are well qualified
3) Only a few are well qualified
4) No opinion
17. How do you feel about your school in comparison with other schools of its kind (level) In Oklahoma City? (check one)
1) It is better than most
_-2) It is about average
-_3) It is not as good as most
2) No opinion
18. Do you feel that fees and other costs for taking certain courses keep some pupils from taking such couxses? (check one)
1) Many pupils fail to take such courses because of the cost
2) A few pupils fail to take such courses because of the cost
3) No pupils fail to take such courses because of the cost
4) No oninion
19. How high are che scholastic standards of your school? (check one)
1) Standards are too high
2) Standards are about right
3) Standards are too low
4) No opinion

## RART III - THE CURRICULLM

Do you think the following things to learn are being given time and emphasis in your school?

After each item, place a check ( $x$ ) under the answer (about right, too much, too little, no opinion) with which you agree.

| Things to Learn | Amount of time and emphasis |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | too much | about right | $\begin{gathered} \text { too } \\ \text { little } \end{gathered}$ | ```school should not tea:h``` | no opinion |
| 1. Advanced mathematics |  |  |  |  |  |
| 2. Agriculture |  |  |  |  |  |
| 3. Arithmetic |  |  |  |  |  |
| 4. Art |  |  |  |  |  |
| 5. Athletics (football, etc.) |  |  |  |  |  |
| 6. Business education (typing, shorthand, etc.) |  |  |  |  |  |
| 7. Choosing a vocation for which one is suited |  |  |  |  |  |
| 8. Cooperating with other pupils and adults in working on problems in the school and community |  |  |  |  |  |
| 9. Dramatics |  |  |  |  |  |
| 10. Driving a car skillfully and safely |  |  |  |  |  |

```
PSRT IMT - (continued)
```

| Things to Learn | Amount of time and emphasis |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | too much | about <br> right | $\begin{aligned} & \text { too } \\ & \text { little } \end{aligned}$ | school <br> should <br> not teach | no opinion |
| 11. English: writter language |  |  |  |  |  |
| 12. Foreign language |  |  |  |  |  |
| 13. Getting along with others |  |  |  |  |  |
| 14. Health and safety |  |  |  |  |  |
| 15. Hobbies and clubs |  |  |  |  |  |
| 16. Home Making: Preparation for being the head of the family |  |  |  |  |  |
| 17. Improving reading ability |  |  |  |  |  |
| 18. Industrial arts (shop) |  |  |  |  |  |
| 19. Learning to enjoy music |  |  |  |  |  |
| decisions for one's self |  |  |  |  |  |
| 21. Learning how to save, invest, and spend money wisely |  |  |  |  |  |
| 22. Literature: learning to select and enjoy books |  |  |  |  |  |
| 23. Learning to sing and/or play a musical instrument: |  |  |  |  |  |
| 24. Moral and spiritual education |  |  |  |  |  |
| 25. Physical education for all pupils |  |  |  |  |  |
| 26. Planning what courses to take in school |  |  |  |  |  |
| 27. School-sponsored social activities |  |  |  |  |  |
| 28. Sciences |  |  |  |  |  |
| 29. Selecting and enjoying movies, television, and radio programs |  |  |  |  |  |
| 30. Selecting and participating in satisfying kinds of recreation |  |  |  |  |  |
| 31. Sex education |  |  |  |  |  |
| 32. Social studies (history, government, civics, etc.) |  |  |  |  |  |
| 33. Speech |  |  |  |  |  |
| 34. Spelling |  |  |  |  |  |
| 35. Trade and industrial educ-. ation (auto mechanics, etc.) |  |  |  |  |  |
| 36. Understanding and devotion to democracy |  |  |  |  |  |
| 37. Work and study habits |  |  |  |  |  |

PART III - (continued)



[^0]:    Fig. 3.--Percentage of drop-outs and in-school control group at grades nine and eleven with I.Q. scores of less than 100.

[^1]:    Absenteeism. The data on absenteeism treated in the previous chapter indicated that the attendance records of drop-outs tend to be poor, especially in the secondary school grade. Upon comparing drop-outs with control groups, this finding was again in evidence.

    Attendance data for this comparison were very limited for the drop-out groups both at grade nine and grade eleven. However, trends

