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# ACADEMIC CAREERS OF STUDENTS RELATED TO ABILITY, CHOICE OF PROGRAM AND SIZE OF HIGH SCHOOL 

A Thesis<br>Submitted to<br>the Faculty of Graduate Studies University of Alberta

Department of Secondary Education

In Partial Fulfillment of the Requirements for the Degree of Master of Education

by
Kay Gavinchuk





## UNIVERSITY OF ALBERTA FACULTY OF GRADUATE STUDIES

The undersigned certify that they have read, and recommend to the Faculty of Graduate Studies for acceptance, a thesis entitled "Academic Careers of Students Related to Ability, Choice of Program and Size of High School", submitted by Kay Gavinchuk, B. Ed., in partial fulfillment of the requirements for the degree of Master of Education.

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Finally, gratitude is expressed to the pupils, both drop-outs and non-drop-outs, who supplied the material from which part of this thesis was written.
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#### Abstract

This thesis is concerned with the academic careers of the 1961 Grade $X$ students in the County of Lacombe. The main purpose of the study is to try to determine to what extent the careers of students are related to ability, choice of program and size of school. This is a longitudinal study. A few specific areas are examined rather than many aspects of the student's school life.

Information for this thesis was obtained from the individual record cards in the Department of Education and a questionnaire. A copy of the questionnaire was sent to each drop-out. The data obtained from each of these sources was analyzed and organized to produce this report.

The study shows that higher proportions of the students in the $(9,8,7)$ and the $(6,5,4)$ ability categories enrolled in the matriculation than the general program. About one-third of the $(3,2,1)$ ability group also enrolled in the matriculation program. Greater proportions of the students in all school categories showed a preference for the matriculation program. Twenty-three per cent of the students graduated with a Senior Matriculation Diploma and seventeen per cent graduated with a High School Diploma at the end of three years.


The students in the matriculation program were more successful in obtaining higher grade point averages and a


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higher number of credits than the students in the general program. There was a relationship between achievement and ability.

The largest school was more consistent in the number of credits earned and the grade point averages obtained in Grades X, XI and XII than the smaller schools which tended to over-rate their students in Grades $X$ and XI.

The study also indicated that the drop-out problem is a serious one. Slightly more than 36 per cent of the 1961 class dropped out of school during the three-year period under study. Thirty-two per cent of the drop-outs left school in Grade $X, 22$ per cent in Grade $X I$ and 46 per cent in Grade XII. The greatest proportion of the pupils who dropped out in Grade $X$ was in the (100-200) category and the greatest proportion of the Grade XII drop-outs was in the (300-399) category.

The study also indicated that the reasons for leaving school may be varied and complex; that there are numerous factors which may be related in one way or another to the child's decision to drop-out. A close relationship between ability and drop-out was revealed by the study. Almost equal proportions of the drop-outs were enrolled in the matriculation and the general program. According to the drop-outs, the responsibility for their dropping out lay chiefly with the school。

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\section*{CHAPTER I}

\section*{INTRODUCTION}

\section*{I. BACKGROUND OF THE PROBLEM}

In recent years there has been a growing appreciation of the need for a greater supply of well-educated people not only in the scientific and technological fields but also in the political, social and cultural areas. This need may be reflected in the unprecedented growth of the senior high schools in the province of Alberta.

Evidence obtained from the annual reports of the Department of Education \({ }^{1}\) disclosed that Alberta's high school population, Grades X, XI, and XII, has almost tripled since 1934. Further, the percentage of students in attendance at high school in 1934 was 11.47 per cent of the total school population; in 1964 this proportion was 17.8 per cent. Thus, though the increase in the population of the province may have contributed to much of the increase in actual numbers attending high school, it is clear that proportionately, more than one and a half times as many students attended Alberta's high schools in 1964 as did in 1934.
\({ }^{1}\) Province of Alberta, Department of Education, Annual Reports 1934 and 1964, (Edmonton Queen's Printer), pp. 81 and 182 respectively.


Traditionally, the high school has been regarded as an institution preparing students to enter University. In recent years, however, the concept of the function of the high school has been broadened. It is now generally accepted that the secondary school should provide educational programs to meet the needs of all youth and to challenge them to remain in school until graduation. Various studies \({ }^{2}\) have shown that most atudents leave school because of a lack of interest, and a curriculum unsuited to their needs. This broadening of the curriculum is an attempt to curb the alarming drop-out rate. The traditional curriculum of the school has not been discarded because the high school must still perform its function of preparing students to enter university. However, as noted in the preceding paragraph, the curriculum has been expanded. This expansion led not only to a great increase in the number of courses and credits offered by the high school, but also to the development of carefully patterned programs. Increasingly the trend is for various programs to include, not only the usual general education requirements, but also a specified core of particular education requirements. This change has made it possible for an entirely different type of student to attend high school. Those students who have the capacity,

\footnotetext{
\({ }^{2}\) Albert E. Hohol, "Factors Associated with School Drop-outs", Alberta Journal of Educational Research, I: 7-17, March, 1955.
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but are not interested in attending university, and also those who cannot attend university because of an inability to meet matriculation requirements are encouraged to stay at school as long as they can profit thereby.

\section*{II. THE PROBLEM}

This study attempts to find answers to a number of questions, among the most important of which are: Main Problem

To what extent are the high schools in the County of Lacombe providing for the students who are judged to have varying academic abilities?

Sub-Problems
1. What proportion of the students were in each program and in each grade in the various-sized high schools?
2. When the students were categorized according to ability, what types of programs were they pursuing in small high schools as compared with the pupils in the larger high schools?
3. Was there a relationship between ability and the choice of program?
4. What proportion of the students remained until graduation in the program they enrolled in, in Grade \(X\) ?
5. What proportion of the students matriculated and what proportion obtained a high school diploma in each ability and school-size category as compared with the


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total population?
6. What proportion of the students in each ability, school-size and program category returned to high school for the fourth year as compared with the number of fourthyear students in the total population?
7. What proportion of the students in the varioussized schools attended a larger high school than the local school in the first three years as compared with the number attending a larger high school in the fourth year?
8. What was the total number of credits obtained by the students in the matriculation program as compared with the students in the general program in each grade, and in each ability and school-size category?
9. What were the grade point averages obtained by the students in the matriculation program as compared with the students in the general program in each grade, and in each ability and school-size category?
10. What proportion of the students in the varioussized schools dropped out of school as compared with the drop-outs in the total population?
11. In what types of programs were the drop-outs enrolled in the various-sized high schools as compared with the programs of the drop-outs in the total population?
12. How did the drop-outs compare with the non-dropouts in scholastic ability in the total population and in the various-sized schools?










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13. What was the academic record of the drop-outs as compared with the non-drop-outs on the Grade IX departmental examinations in the total population and in the various-sized schools?
14. What were the grade point averages of the dropouts as compared with the non-drop-outs in the total population and in the various-sized schools?
15. What reasons did the students give for dropping out of school in the various ability and school-sized categories as compared with the total population?
16. What, according to the drop-outs, are some of the things the school could have done to encourage them to stay at school?

\section*{III. JUSTIFICATION OF THE STUDY}

Recently it has been recognized that the program in which a student is enrolled has a direct bearing on the student's attitude toward school work and the effort put forth. Conant points out that:

If a student thinks that what he or she is studying in school is likely to have significance in later life, the study in question takes on a new importance. There is less tendency for such "committed" students to waste their time or have a negative attitude toward their school work. 3
\(3^{3}\) James B. Conant, The American High School Today, (McGraw-Hill Book Company, Inc., New York, 1959), p.127.
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Livingstone reached the same conclusion in his study, "High School Graduates and Drop-Outs". He concluded that:

The critical point seems to be the relevance of the program to the student's goals. Emphasis on "diplomagetting" rather than on meaningf'ul experiences may boomerang with the result that the student is still lost to the school. 4

Several studies have been done showing the relationship between scholastic ability and achievement but to the writer's knowledge no comprehensive study has ever been done in Alberta of these factors as they are related to the programs of study actually pursued by the students in various-sized schools.

This longitudinal study of the September 1961 Grade X students in the County of Lacombe might help school leaders answer some of the questions most frequently asked of them regarding the programs being conducted by our high schools.

This study may also encourage others to make similar surveys of the programs being carried on in our schools. The information may help administrators and teachers in the evaluation and improvement of school programs in an attempt to meet the educational needs of all rural and urban youth.

The need for the study became apparent in 1965 , when the Alberta School Trustees' Association, out of concern for the education of the rural high school students, requested Lawrence \(W\). Downey, then Head of the Department

\footnotetext{
\({ }^{4}\) A. Hugh Livingstone, "High School Graduates and Drop-Outs", The School Review, LXVI (June, 1958), p. 200.
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of Secondary Education at the University of Alberta, to conduct a study of the small high school in Alberta.

\section*{IV. DELIMITATIONS OF THE STUDY}

The study has certain limitations, among the chief of which are:
1. It is restricted to the County of Lacombe because the County is comprised of four categories of schools according to size. Being a predominantly farming district, statistics show that the population is reasonably stable. There is a wide representation of religious and ethnic groups.
2. Only the September 1961 Grade X students are followed through their high school careers.
3. The 1961 class was chosen because the students will have had an opportunity to complete high school in three or four years and the most recent post-school records of the drop-outs would be available.
4. The study in no way tries to evaluate the quality of the various subjects or program patterns.
5. The study of the drop-outs is limited to factors pertaining to the academic career, reasons for dropping out, and what the school could have done to encourage them to stay at school.
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\section*{V. SOURCES OF DATA}

Most of the information was obtained from the student record cards and the Form A cards at the Department of Education. Some of the information on the dropouts was obtained from the drop-outs themselves by means of a questionnaire。

\section*{VI。 ANALYSIS OF DATA}

Since the study is of a descriptive nature, as much of the derived information as possible is recorded in tables and figures, with observations made on each table and figure to clarify the data presented.

\section*{VII. DEFINITION OF TERMS}

\section*{Drop-Out}

A drop-out is defined in this study as any pupil who has left school before obtaining a high school diploma. High School Diploma Program \({ }^{5}\)

The basic requirements are: English: at least 15 credits (including 5 in English 10 and 5 in English 30 or 33). Social Studies: at least 10 credits (including 5 in Social Studies 10). Physical Education: at least 2 credits. Mathematics: credit in at least one mathematics course.

\footnotetext{
\({ }^{5}\) Department of Education, Senior High School Handbook, (1963-64), p. 21.
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Science: credit in at least one science course. Grade XII Subjects: credit in two Grade XII subjects in addition to English 30. The total number of credits required is 100 . In this study the High School Diploma Program will be referred to as the General Program. Senior Matriculation Program \({ }^{6}\)

The following are minimum requirements for matriculation into University of Alberta:
(a) 37-40 credits in:

English: 20 credits (including English 30).
Social Studies: 15 credits (including Social Studies 30 ).
Physical Education 10: 2 credits.
(b) Other courses to make a total of 100 credits including:
(i) credit in at least one mathematics course.
(ii) credit in at least one science course.
(iii) credit in four Grade XII subjects in addition to English 30 and Social Studies 30.

The matriculation requirements vary from one university faculty to another. Subjects are chosen according to the requirements in the particular faculty the students choose。 High School

A high school is defined in this study as a school which provides instruction in Grades X, XI and XII. School
\(6^{\text {Ibid., }}\) p. 22 。

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enrollment and not the number of high school teachers per grade was the criterion for categorizing schools.

\section*{Secondary School}

In this study the term is used synonymously with the term high school。

Senior Matriculation Diploma
A Senior Matriculation Diploma is defined as a High School Diploma which is accompanied by a statement indicating that the student has the required number of credits in the prescribed senior matriculation program.
VIII. ORGANIZATION OF THE REMAINDER OF THE THESIS

Brief accounts of the findings of two studies in the field of programs and size of schools and also of several studies on high school drop-outs will be given in Chapter II。 Chapter III deals with the method used to secure the locations and names of schools, the drop-outs and the non-drop-outs involved in the study, the high school record for each student and the course offerings for each school. The questionnaire is also discussed in this chapter, as well as an explanation of how the information obtained is to be treated.

Chapter IV is devoted to an analysis of the information on programs, scholastic aptitude, credits, grade point averages and sizes of schools.

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Chapter V is concerned with an analysis of the data on drop-outs.

Chapter VI is a summary of the major findings of the thesis, with recommendations arising out of the study.

\section*{CHAPTER II}

\section*{REVIEW OF RELATED LITERATURE}

\section*{I. LITERATURE ON PROGRAMS OF STUDY AND PUPIL ABILITY}

Many progressive thinkers have maintained that if the high school is to meet the needs of a diversified school population, it should not be merely a college preparatory institution. This thesis was supported by the Canadian Research Committee。 It stated that:

There is a widespread feeling that our secondary school curriculum is not entirely adequate for present day needs and that it should have a wider and more practical content。 1

Conant also expressed his concern for the narrow curriculum offerings in the high school. He stated that "it will be a rare district where more than 25 per cent of a high school class can study with profit twelfth-grade mathematics, physics and a foreign language . . " \({ }^{2}\)

It is generally accepted that in order to succeed in the matriculation program as it stands today, the student should have average or above average ability. This fact

1 "Your Child Leaves School", Second Report of the Research Committee on Practical Education, Canadian Education (Canadian Education Association), Toronto: Februray, \(\overline{1950}\), p. 5.
\({ }^{2}\) conant, op. cit., p. 37 .

was borne out in an Alberta study. Black, MacArthur and Paterson found that "of the matriculants of the Grade I class of June 1945 , 68 per cent had intelligence quotients of 115 or above but only 2 per cent had intelligence quotients of 96 or below."3

Other studies have corroborated these findings. Greer's nation-wide study in the United States reported that the highest proportion of able pupils was enrolled in the college preparatory curriculum and, as pupil academic abilities decreased, enrollments in this curriculum also decreased. Therefore, in the middle fifty per cent ability group approximately the same proportions were enrolled in the general curriculum as in the college preparatory curriculum and of the lower twenty-five per cent ability group almost four times as many were enrolled in the general curriculum as in the college preparatory curriculum. According to the 1958 enrollment, the college preparatory curriculum was most popular. They also found that in the large enrollment schools there seemed to have been a greater attempt to adjust the program load to the ability of the pupil, at least in number of credits earned and in the number of academic subjects carried, than was true in the

3D. B. Black, R. S. MacArthur, and J. G. Paterson, Pupil Personnel in Alberta Secondary Schools, (The Alberta Advisory Committee on Educational Research, University of Alberta), 1961, p. 9.
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smaller schools. \({ }^{4}\) The Canadian Research Committee found that:

The academic courses attract large percentages of those who are above average in learning capacity and, in comparison with the norm, smaller percentages of those below average in learning capacity. 5
II. LITERATURE ON SIZE OF SCHOOL, PROGRAMS, ACHIEVEMENT AND DROP-OUTS

Recent research has attempted to determine the effects of the size of school on the programs actually pursued and pupil retention. The following generalizations seem warranted from the survey of the investigation done by Black, MacArthur and Paterson: \({ }^{6}\)
1. Small high schools have the greatest drop-out rate。
2. There is generally a low drop-out rate for the matriculation program for all schools.
3. The largest percentage of matriculating students in matriculation programs came from the larger schools while the small schools were able to matriculate only a smaller percentage of their students.
4. The percentage of students matriculating seems related generally to the size of school with one exception,
\({ }^{4}\) Edith S. Greer, What High School Pupils Study, Washington: U. S. Government Printing Office, 1962), pp. 120-122.
\({ }^{5}\) Your Child Leaves School, op. cit., p. 75.
\({ }^{6}\) Black, MacArthur and Paterson, op. cit., pp. 32-40.




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i.e., the Large High School (these high schools have more than eight teachers and are not identified as Composite High Schools). In these schools the student body is generally split between matriculation and general program students. The general program students are less successful as a group in achieving a diploma。
5. Low achievement is one of the factors positively associated with drop-out.
6. Among boys, those who elect academic courses tend to remain at least until Grade XI, whereas, among girls, the drop-outs from academic courses do not differ by grade. Not all research had conclusive evidence on the extent of relationship between retention of pupils and the size of school. The Canadian Research Committee reported that "from the data it is not clear that the size of school has a marked influence in retaining pupils in schoo1". 7

\section*{III. LITERATURE ON DROP-OUTS}

\section*{i. Concern for the Drop-Out Problem}

One of the major concerns of educational leaders today is the persistent problem of students who drop out of high school before graduation. The problem has grown to such magnitude that national leaders in Canada and the
\({ }^{7}\) Your Child Leaves School, op. cit., p. 66.




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United States have found it necessary to focus the public attention on it. In June, 1960, the Honourable Michael Starr, then Minister of Labour in the Federal Government at Ottawa, issued a statement expressing this concern, part of which read:

If the present rate of drop-outs from Canadian schools continues, with the adverse effects on the economy, it cannot help but affect every individual, industry and business establishment, in factevery organization in this and future generations. 8

On January 12, 1965, President Lyndon B. Johnson sent his message on education to Congress. The President is quoted as saying:

Almost a million young people each year will continue to quit school if our schools fail to stimulate their desire to learn . . . .

The cost of this neglect runs high . . . both for the youth and the nation. 9

The President is further quoted as saying:
Every child must be encouraged to get as much education as he has the ability to take. We want this not only for his sake . . but for the Nation's sake. Nothing matters more to the future of our country: not our military preparedness . . . for armed might is worthless if we lack the brain power to build a world peace; not our productive economy . . . for we cannot sustain growth without trained manpower; not our democratic system of government . \(\dot{0}\). for freedom is fragile if citizens are ignorant. 10

There have always been students who left school before they had completed high school. Indeed, many of
\({ }^{8}\) St. Christopher House, School Drop-Outs -- Our Disinherited Youth (Toronto: 1962), p. 1.
\({ }^{9}\) National Education Association, Drop-Out Studies, (U. S. Office of Education: 1965), p. 7.
\({ }^{10}\) Ibid, p. 56.
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our business men were the drop-outs of their day. Why then is it that today's drop-outs are causing us so much concern? The answer is, of course, that we are in the throes of a second industrial revolution. Today, due to advancing technology a high school diploma is necessary for many occupations, and a college education is required for an increasing number of fields.

What awaits the person who drops out of school without enough education? As stated by Honourable Michael Starr:

About 70 per cent of the jobs available in this country today are the professional, semi-professional, technical or skilled nature, and only 30 per cent of employment consists of semi-skilled or unskilled occupation. It is in this last category of employment that most of those with less than junior matriculation will find themselves competing, and if present trends continue, the problem will become worse as the proportion of unskilled and semi-skilled jobs in the country decrease in the future. \({ }^{11}\)

Another source puts it this way:
A critical problem which will face Canada during the next decade or more is the inadequacy or obsolescence of a large part of her labour force in the face of a rapidly advancing technology . . . 12

\section*{ii. Reasons for Students Withdrawing from School}

The reasons for students dropping out of high school before they graduate are many and complex. In his drop-out study, A. Hugh Livingstone reported that:

The result of a multiple correlation analysis tends to strengthen the belief that dropping out of school
\({ }^{11}\) St. Christopher House, op. cit., p. 3. 12"A Report on School Drop-Outs", Social Planning Council of Metropolitan Toronto, 1961, pp. 2-3. 2
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is the result of a complex sequence of events that is likely to be different for each individual. 13

Also, in a study done in Detroit in 1954, Richard H. Dresher stated that:

Dropping out of school is a very complex problem. There are many factors that contribute to the course of drop-outs, and several factors may operate together to contribute to the cause. Because of the complexity of the problem . . . that the same factors may influence different pupils in different ways and with the possibility that a factor may affect the same pupil in different ways at different times . . . it is questionable if a program attempting to solve the drop-out problems of a large group of potential dropouts will have much effect unless it is approached from the individual basis of the drop-out. 14

Studies of drop-outs have revealed a number of characteristics that many students who withdraw from school have in common. Some of these are as follows:
1. Low scholastic ability。
2. A preference or need for work.
3. A lack of interest in school.
4. Not getting the courses desired.
5. Found school work too difficult.

In his drop-out study, A. Hugh Livingstone indicated that mental ability was the most important single factor. The drop-out was revealed as a student who has met with only limited success in the academic program. of the school,
\({ }^{13}\) Livingstone, op. cit., p. 201.
\(14^{1}\) Richard H. Dresher, "Factors in Voluntary DropOuts", Personnel and Guidance Journal, XXXII (January, 1954), pp. 287-89。

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". . . his mental ability and academic skills were limited." \({ }^{15}\) In the same study, however, the author goes on to say that even though mental ability was the most important single factor in the dropping out of the students he studied, it was not the only factor -- that "dropping out of school is the result of a complex sequence of events that is likely to be different for each individual." 16

Other studies have corroborated these findings. In the study done by the Canadian Research Committee on Practical Education in 1950 , it was reported that the drop-outs are inferior to most graduates in learning capacity. \({ }^{17}\) The Committee also concluded that above average learning capacity is strongly associated with graduation and below average learning capacity is strongly associated with dropping out. The Saint Paul Public School Study reported that:

In examing the data . . ., it becomes quite evident that, as a group, boys and girls dropping out of school have much lower mental ability . . . less potential for academic success. . . than do boys and girls as a group, going on to graduate from high school. 18

Further evidence that learning capacity is an important
factor in the drop-out problem was provided by the United
\({ }^{15}\) Livingstone, op. cit., p. 200 .
16 Ibid, p. 201.
17 "Your Child Leaves School", op。cit., pp. 22 and 35.
18 "Second Drop-Out Study", Office of Secondary and Vocational Education, Saint Paul Public Schools, Saint Paul, Minnesota, 1961, p。 56.

 
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States Office of Education in 1963. The data indicated that eighty-nine per cent of the drop-outs in the study did not have the scholastic potential, Intelligence Quotient of 110 , to complete Collegiate programs. \({ }^{19} \mathrm{~A}\) study done by the Social Planning Council of Metropolitan Toronto in 1961, also supported the evidence. The Council reported that:

There seems to be a relationship between the incidence of drop-outs and limited ability. Reports indicate there is a high frequency of drop-outs in the group with an IQ below 90 , but few in the group above 110.20

Although many of the drop-outs have lower mental ability than the graduates, Kuhlen pointed out, most are educable. They have sufficient scholastic ability to profit from a high school educational program. \({ }^{21}\) The Gushaty study done in Alberta in 1952 reported that "a large majority of the Grade XI and Grade XII drop-outs have the ability to graduate from our school system。" 22

It appears that there is an agreement amongst the researchers that while low scholastic ability is a rather

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19"Selected Reports and Statistics on School DropOuts", U. S. Office of Education, 1963, p. 13.
\({ }^{20}\) A Report on School Drop-Outs, Social Planning Council of Metropolitan Toronto, 1961, p. 5.
\({ }^{21}\) Raymond G. Kuhlen, The Psychology of Adolescent Development, New York: Harpers and Brothers, 1952, p. 464.
\({ }^{22}\) Metro Gushaty, "An Analysis of the Causes of High School Drop-Outs in Southern Alberta from 1947 to 1951 " (unpublished Masters Thesis, University of Alberta, 1952) p. 17 .
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obvious reason for school maladjustment, it does not necessarily follow that this is the only reason, nor even the most important one in some cases, why pupils withdraw from high school. Mental ability in itself, then, is not a satisfactory explanation for the school's failing to hold the child during his educable years.
"Disinterested in school" seems to be another major characteristic of the drop-out. Kuhlen's study concluded that:

Of all the reasons given, 69 per cent related to the inadequacies of the school. . . such reasons as "preferred work to school", "was not interested in school work", "could not learn and was discouraged", "was failing and did not like to repeat a grade."23

These findings were borne out in a study by Johnson and Legg which stressed again that dissatisfaction with school is the principal reason why youngsters leave school. Failure of the school to meet practical needs of the youngsters was reflected in such replies as "I wanted a commercial course but the school didn't give it", "the required courses had nothing to do with what I was interested in."24 In an analysis of drop-outs in Canada, the Canadian Research Committee on Practical Education found the most important single reason given for drop-outs was "lack of interest" and this reason the Report added, was
\({ }^{23}\) Kuhlen, op. cit., p. 465 .
\({ }^{24}\) E. S. Johnson and C. E. Legg, "Why Young People Leave School", Bulletin of the National Association of Secondary School Principals, \(1948,32, \mathrm{pp}\). 14-24.

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"common to all grades." 25 A lack of interest in school and school work was also found to be a significant cause of pupils leaving school before graduation by S. J. Caravello in his study "The Drop-Out Problem", in which he is quoted as saying:

Disinterest in school because of no apparent relationship of the high school programme to their own needs and characteristics is an important factor for the drop-out. 26

Another reason commonly given by the drop-outs is the preference to go to work rather than to stay in school. This reason is almost synonymous with the previous one since a lack of interest in school is implied if a student ways he would rather go to work than continue his education. Byrne stated that:

On the basis of the writer's counselling experience, it is claimed that . . . most of the statistics listed in the "to take a job" reason for withdrawing really belong in a "school is uninteresting" category. 27

Byrne further wrote:
Number one reason for dropping out seems to be preference to go to work rather than to stay in school. Lack of interest in school and the belief that it is not much help to go to school seems to be the second reason indicated. 28
\({ }^{25}\) Your Child Leaves School, op. cit., p. 18.
\({ }^{26}\) Saint Paul Public School Study, op. cit., p. 12.
\({ }^{27}\) Richard H. Byrne, "Beware the Stay-In-School Bandwagon", Personnel and Guidance Journal, XXXVI (March, 1958) , p. 494.

28 Ibid, p. 493.
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On the basis of the findings, the Saint Paul Study concluded that:

Examination of the data would seem to indicate that boys and girls are generally quitting because of a lack of interest in school. As the survey of literature indicated, this is one of the major problems the school must try to solve in order to increase their holding power. 29

Some pupils gave "found school work too difficult" as a reason for dropping out of school. This reason is almost synonymous with failure to progress normally from one grade to the next. This often leaves the student with the feeling that it is too late to overcome his difficulties and so leads to the final decision to drop-out. In a study of drop-outs from Syracuse schools in 1959, \(" 90\) per cent of the boys and 70 per cent of the girls were retarded at least one year in their grade placement." 30

Failure and retardation accounted for 34.9 per cent of the drop-outs in Cook's study. \({ }^{31}\) (It should be noted here, however, that this figure represented the clinical judgement of the school counsellor; as stated by the withdrawing students themselves, only 9.4 per cent left school because of failure).

Not all failure can be attributed to a lack of ability although this may be the determining factor in 29 Saint Paul Public School Study, op. cit., p. 12.
30 "Drop-Out Study in Syracuse Schools", Phi Delta Kappan, XLV:2 (November, 1963), p. 81.

31 E. S. Cook, "An Analysis of Factors Related to Withdrawal from High School Prior to Graduation", Journal of Educational Research, (November, 1956), p. 193.


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many cases. It would seem that the school might not be suited to the pupil's needs and that this results in the pupils losing interest in school and consequently failing grades.
iii. School's Responsibility For Increasing Its Holding Power

Byrne in his drop-out study stated that "Lack of Interest in School" was given as one of the primary reasons for students withdrawing from school. Drop-outs felt their school experiences were not of much help to them. \({ }^{32}\) This would indicate that if the school is going to increase its "holding power", it must provide a more satisfactory curriculum for its students; and the school must try to identify its potential drop-outs as early as possible and work with them while they are still in school.

According to Erickson, two of the major objectives of the guidance program are to gather sufficient information so that the students will be able to make wise educational and vocational decisions, and to provide a counselling service for pupils with emotional and personal problems which might interfere with their success in school. Often a student needs no more than the friendship and the encouragement which the guidance counsellor may give. 33

32 Byrne, op. cit., p. 493.
\({ }^{33}\) Clifford E. Erickson, A Basic Text for Guidance Workers, (New York: Prentice Halı, Inc., 1952), pp. 127-131.


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On the basis of the findings in the five-year study of potential high school drop-outs conducted by the New York City Board of Education, the report states that the provision of intensive guidance services definitely does reduce early school leaving in high school. \({ }^{34}\)

34 Boston Guidance News, "Intensive Guidance Given Potential High School Drop-Outs", Personnel and Guidance Journal, Vol. XXXV, (May, 1957), p. 564.









\section*{CHAPTER III}

\section*{COLLECTION AND ANALYSIS OF DATA}

Sources of the data. The data for the study were made available by the Provincial Department of Education. This was supplemented with information obtained from the drop-outs by means of a questionnaire. From the summary records of the Department of Education, the names of all the students who had written the Grade IX examinations in June 1961 in the County of Lacombe were secured. In all, 288 students were listed, and the individual record cards of 285 were on file in the Department of Education. A search of the records failed to turn up the missing cards. There were two possible reasons to account for cards not being available. The first, a change of name through marriage (all the missing cards were those of girls); and the second, the actual loss of a card somewhere in the system. An examination of the individual record cards revealed that 22 students whose names appeared on the Grade IX summaries did not register in Grade \(X\) in any Alberta high school. Thus the total population in this study was 263.

The names of the high schools attended by the 263 pupils were obtained from the individual record cards in the Department of Education. All, except eleven students,

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attended the high schools in the County of Lacombe.
The high schools were categorized according to the enrollment. The categories used were the same as those found in A Report of an Investigation: The Small High School in Alberta. \({ }^{35}\) The categories and the high schools in each were as follows:
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& (1-39)-\text { Satinwood } \\
& (40-99)-\text { Alix, Clive, Eckville and Mirror } \\
& (100-200) \text { - Bentley } \\
& (300-399) \text { - Lacombe }
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The eleven pupils who attended high schools which were not in the County of Lacombe were tabulated under Transferees. The questionnaire. To supplement the information on the students who left school before graduating from high school, a questionnaire was sent to each of the 96 drop-outs in the study. Of this number, eight questionnaires were not received by the addressees because they had moved and the new addresses were unknown to the postal authorities. Thus, 88 is the possible maximum number of questionnaires that could have been returned.

The questionnaire inquired about the three most important reasons for leaving school, further training taken since leaving school, and present employment. The

35 Lawrence W. Downey, A Report Of An Investigation: The Small High School in Alberta, (The Alberta School Trustees' Association, Edmonton, Alberta, 1965), p. 37.

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questionnaire also attempted to determine: any change in attitude toward high school education, the two things the school could have done to encourage the drop-outs to stay in school, and the size of school the drop-outs would prefer if they were beginning high school now. Collection of the data. On June 15, a questionnaire. together with a letter of explanation was sent directly to each one of the 96 drop-outs. A self-addressed stamped envelope was enclosed for the questionnaire to be returned. Forty-one drop-outs had answered and returned their questionnaires by June 30. A reminder was sent on that date to those who had not returned the questionnaire. By July 12, the total number of questionnaires returned had risen to fifty-four. On that date, a second follow-up letter was sent to each of the drop-outs who had still not answered the questionnaire. Sixty-five of the 88, or 73.8 per cent of the drop-outs had returned their questionnaires by August 10. No questionnaires were returned after that date. During this time the questionnaires of eight dropouts who could not be traced by the postal authorities were returned to the sender. Copies of the above-mentioned letters and questionnaires are included in the Appendix. Analysis of the data. The information obtained from the students' records and the questionnaire is presented and discussed in Chapters IV and V and wherever possible, implications and suggestions noted. Reference is

 
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made to the related literature wherever the findings are applicable.

Much of the data which are considered most significant are presented in tabular form when that method of presentation is appropriate.

In the final chapter an attempt is made to summarize some of the important conclusions drawn from the study. Suggestions and recommendations arising from these conclusions are made in regard to such things as the curriculum, choice of program, the guidance program and size of school.
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\section*{CHAPTER IV}

\section*{ANALYSIS AND SIGNIFICANCE OF THE DATA}

Pupil programs were analyzed by specific types of information: academic abilities, achievement, school size and sex in order to determine what relationships exist among them.
I. PUPIL ABILITY AND ACHIEVEMENT ON GRADE IX FINAL EXAMINATIONS

To deal effectively with this particular area of the study, the stanine scores on the scholastic ability tests and the achievement tests, at the Grade IX level, were obtained from the Department of Education. The averages of the verbal and the quantitative stanine scores on the ability tests and the averages of the stanine scores on the achievement tests were used as indicators of ability and achievement. To facilitate the analysis the average stanine scores were grouped into three categories: \((9,8,7),(6,5,4)\) and \((3,2,1)\).

Figure 1 reveals that approximately 22 per cent of all the pupils were ranked in stanines \((9,8,7)\), 59 per cent in stanines \((6,5,4)\) and almost 19 per cent in stanines (3,2,1) on the scholastic ability tests. This breakdown into stanine groups shows slight deviation from the normal

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distribution of 23 per cent in stanines \((9,8,7), 54\) per cent in \((6,5,4)\) and 23 per cent in \((3,2,1)\). This information is shown in Figure 2. As indicated by the figures, the population in the study appears to be slightly superior in scholastic ability in the middle and lowest groups.

Figure 1 also reveals that in the distribution of the pupils amongst the various school categories, category (40-99) had the greatest proportions of its pupils in the \((9,8,7)\) and \((6,5,4)\) ability groups and the smallest proportion in the \((3,2,1)\) ability group. The Transferee category was second highest in the proportions of its pupils who were in the two higher ability groups. Categories (300-399) and (100-200) were in the third and fourth place respectively. In the discussion of data, category (1-39) was not considered in most instances because the small numbers greatly inflated the percentages.

Figure 3 revealed rather an even ratio between the sexes, approximately 48 per cent boys and 52 per cent girls. This ratio did not continue in the various ability categories in the total population. Deviations from this ratio existed in the middle and the lowest ability categories. The ratio was reversed in the middle category where it was 51 per cent boys to 49 per cent girls. The lowest category showed a much wider deviation. Forty-one per cent of this group was boys and 59 per cent girls.

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NORMAL DISTRIBUTION IN STANINES
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\hline Ability & Boys & Girls & Boys & Girls & Boys & Girls & \multicolumn{2}{|l|}{Boys Girls} \\
\hline All pupils & 48 & 52 & 47 & 53 & 51 & 49 & 41 & 59 \\
\hline
\end{tabular}
\((9,8,7)\)\begin{tabular}{|l|l|}
\hline 47 & 53 \\
\hline
\end{tabular}


Achievement on Grade IX Final Examinations

FIGURE 3
PERCENTAGE OF HIGH SCHOOL PUPILS WHO ARE BOYS AND GIRLS IN EACH ABILITY LEVEL BY ACHIEVEMENT

were more girls than boys in the \((9,8,7)\) and \((3,2,1)\) categories and more boys than girls in the middle ability category. The largest school was the only one which had more boys than girls in the \((9,8,7)\) ability group. In the \((6,5,4)\) group the proportions of boys and of girls in the various schools paralleled one another. There was a predoninance of girls in the \((3,2,1)\) group in all the school categories. The (100-200) category, however, showed the greatest difference between the sex proportions in this group. The ratio was 31 per cent girls to 11 per cent boys as compared to 21.2 per cent girls to 15.9 per cent boys in the total population.

According to the data given in Figure \(4,19.4\) per cent of all the pupils were ranked in the top category, 66.3 per cent in the middle category and 14.4 per cent in the lowest category on the Grade IX achievement scale. Table \(I\) and Figure 4 show that 76 per cent of the \((9,8,7)\) ability group were in the \((9,8,7)\) achievement group and that 61.2 per cent of the lowest ability group were in a corresponding achievement group. The middle ability group showed a very high correlation with achievement. Approximately 90 per cent of the \((6,5,4)\) ability group ranked in the \((6,5,4)\) achievement group.

Table \(I\) indicates that in most instances the ability and achievement ranking of pupils in the various-sized schools corresponded rather closely to the ranking of the









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\section*{FTGURE 4}


\section*{TABLE I}

NUMBER OF ALL HIGH SCHOOL PUPILS IN EACH ABILITY LEVEL, BY ACHIEVEMENT ON GRADE IX FINAL EXAMINATIONS, BY SCHOOL SIZE, IN GRADE X
\begin{tabular}{ll} 
& \\
Ability in Stanines & \((9,8,7)(6,5,4)(3,2,1) \quad\) Total
\end{tabular}

\section*{All Schools}

All pupils
\begin{tabular}{rrrrr}
\(9,8,7\) & 45 & 13 & - & 58 \\
\(6,5,4\) & 6 & 142 & 8 & 156 \\
\(3,2,1\) & - & 19 & 30 & 49
\end{tabular}

School Size: (1-39)
\begin{tabular}{lllll}
\(9,8,7\) & - & 1 & - & 1 \\
\(6,5,4\) & - & - & - & - \\
\(3,2,1\) & - & - & 3 & 3
\end{tabular}

School Size: (40-99)
\begin{tabular}{rrrrr}
\(9,8,7\) & 18 & 6 & - & 24 \\
\(6,5,4\) & 2 & 53 & 4 & 59 \\
\(3,2,1\) & - & 6 & 9 & 15
\end{tabular}

School Size: (100-200)
\begin{tabular}{rrrrr}
\(9,8,7\) & 7 & - & - & 7 \\
\(6,5,4\) & 3 & 21 & - & 24 \\
\(3,2,1\) & - & 4 & 5 & 9
\end{tabular}

School Size: (300-399)
\begin{tabular}{rrrrr}
\(9,8,7\) & 17 & 6 & - & 23 \\
\(6,5,4\) & 1 & 62 & 4 & 67 \\
\(3,2,1\) & - & 9 & 11 & 20
\end{tabular}

Transferees:
\begin{tabular}{lllll}
\(9,8,7\) & 3 & - & - & 3 \\
\(6,5,4\) & - & 6 & - & 6 \\
\(3,2,1\) & - & - & 2 & 2
\end{tabular}



\(\cdots(\cdots)\)
total population in the study.
Figure 4 and Tables II and III reveal that greater percentages of boys than girls were found to be ranked low in achievement, in comparison to their abilities, in all but the \((3,2,1)\) ability group. In this group 60 per cent of the boys and 62 per cent of the girls were in the \((3,2,1)\) achievement group. This implies that, boys on the whole, had to have higher ability to rank as high in their classes as the girls.

\section*{II. ENROLLMENT IN PROGRAMS}

It is the purpose of this section to report the information concerning the types of programs the pupils in this study pursued in each of the high school grades in the various-sized schools, and any relationship found between pupil ability and the program pursued.

Figure 5 and Tables \(I V, V\) and \(V I\) reveal that many more pupils were enrolled in the matriculation program than the general program in Grade \(X\). Approximately 72 per cent of all the pupils were enrolled in the matriculation program and 28 per cent in the general program. A higher proportion of boys than of girls were enrolled in the matriculation program. The ratio was 78 per cent boys to 66 per cent girls.

Tables VII, VIII and IX show that the matriculation program was also pursued by a very large proportion of the



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TABLE II
NUMBER OF BOYS IN EACH ABILITY LEVEL, BY ACHIEVEMENT ON THE GRADE IX FINAL EXAMINATIONS, BY SCHOOL SIZE, IN GRADE X

Achievement in Stanines
Ability in Stanines
\((9,8,7)(6,5,4) \quad(3,2,1) \quad\) Total

All Schools
All boys
\begin{tabular}{rrrrr}
\(9,8,7\) & 17 & 10 & - & 27 \\
\(6,5,4\) & 1 & 73 & 5 & 79 \\
\(3,2,1\) & - & 8 & 12 & 20
\end{tabular}

School Size: (1-39)
\begin{tabular}{lllll}
\(9,8,7\) & - & - & - & - \\
\(6,5,4\) & - & - & - & - \\
\(3,2,1\) & - & - & 2 & 2
\end{tabular}

School Size: (40-99)
\begin{tabular}{rrrrr}
\(9,8,7\) & 6 & 5 & - & 11 \\
\(6,5,4\) & - & 30 & 2 & 32 \\
\(3,2,1\) & - & 3 & 5 & 8
\end{tabular}

School Size: (100-200)
\begin{tabular}{rrrrr}
\(9,8,7\) & 2 & - & - & 2 \\
\(6,5,4\) & 1 & 13 & - & 14 \\
\(3,2,1\) & - & 1 & 1 & 2
\end{tabular}

School Size: (300-399)
\begin{tabular}{rrrrr}
\(9,8,7\) & 7 & 5 & - & 12 \\
\(6,5,4\) & - & 28 & 3 & 31 \\
\(3,2,1\) & - & 4 & 4 & 8
\end{tabular}

Transferees:
\begin{tabular}{lllll}
\(9,8,7\) & 2 & - & - & 2 \\
\(6,5,4\) & - & 2 & - & 2 \\
\(3,2,1\) & - & - & - & -
\end{tabular}

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TABLE III
NUMBER OF GIRLS IN EACH ABILITY LEVEL, BY ACHIEVEMENT ON GRADE IX FINAL EXAMINATIONS AND SCHOOL SIZE, IN GRADE X

Achievement in Stanines
Ability in Stanines
\((9,8,7)(6,5,4) \quad(3,2,1) \quad\) Total

All Schools
All girls
\begin{tabular}{rrrrr}
\(9,8,7\) & 28 & 3 & - & 31 \\
\(6,5,4\) & 5 & 69 & 3 & 77 \\
\(3,2,1\) & - & 11 & 18 & 29
\end{tabular}

School Size: (1-39)
\begin{tabular}{lllll}
\(9,8,7\) & - & 1 & - & 1 \\
\(6,5,4\) & - & - & - & - \\
\(3,2,1\) & - & - & 1 & 1
\end{tabular}

School Size: (40-99)
\[
\begin{aligned}
& 9,8,7 \\
& 6,5,4 \\
& 3,2,1
\end{aligned}
\]
\[
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\]
\begin{tabular}{rrr}
1 & - & 13 \\
23 & 2 & 27 \\
3 & 4 & 7
\end{tabular}

School Size: (100-200)
\begin{tabular}{rrrrr}
\(9,8,7\) & 5 & - & - & 5 \\
\(6,5,4\) & 2 & 8 & - & 10 \\
\(3,2,1\) & - & 3 & 4 & 7
\end{tabular}

School Size: (300-399)
\begin{tabular}{rrrrr}
\(9,8,7\) & 10 & 1 & - & 11 \\
\(6,5,4\) & 1 & 34 & 1 & 36 \\
\(3,2,1\) & - & 5 & 7 & 12
\end{tabular}

Transferees:
\begin{tabular}{lllll}
\(9,8,7\) & 1 & - & - & 1 \\
\(6,5,4\) & - & 4 & - & 4 \\
\(3,2,1\) & - & - & 2 & 2
\end{tabular}

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\begin{tabular}{|c|c|c|c|c|c|}
\hline \multirow[t]{2}{*}{Programs} & \multicolumn{3}{|l|}{Ability in Stanines} & \multicolumn{2}{|l|}{Total} \\
\hline & Stanines
\[
(9,8,7)
\] & \[
\begin{aligned}
& \text { Stanines } \\
& (6,5,4)
\end{aligned}
\] & Stanines
\[
(3,2,1)
\] & Number & Per Cent \\
\hline \multicolumn{6}{|l|}{All Schools} \\
\hline \multicolumn{6}{|l|}{All pupils} \\
\hline Matriculation & 57 & 113 & 18 & 188 & 71 \\
\hline General & 1 & 43 & 31 & 75 & 29 \\
\hline \multicolumn{6}{|l|}{School Size: (1-39)} \\
\hline Matriculation & 1 & - & 3 & 4 & 100 \\
\hline General & - & - & - & - & - \\
\hline \multicolumn{6}{|l|}{School Size: (40-99)} \\
\hline Matriculation & 23 & 41 & 5 & 69 & 70 \\
\hline General & 1 & 18 & 10 & 29 & 30 \\
\hline \multicolumn{6}{|l|}{School Size: (100-200)} \\
\hline Matriculation & 7 & 20 & 1 & 28 & 70 \\
\hline General & - & 4 & 8 & 12 & 30 \\
\hline \multicolumn{6}{|l|}{School Size: (300-399)} \\
\hline Matriculation & 23 & 47 & 8 & 78 & 70 \\
\hline General & - & 20 & 12 & 32 & 30 \\
\hline \multicolumn{6}{|l|}{Transferees} \\
\hline Matriculation & 3 & 5 & 1 & 9 & 82 \\
\hline General & - & 1 & 1 & 2 & 18 \\
\hline
\end{tabular}
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TABLE V
NUMBER OF BOYS IN EACH PROGRAM, BY SCHOOL SIZE,
\begin{tabular}{|c|c|c|c|c|c|}
\hline \multirow[t]{2}{*}{Programs} & \multicolumn{3}{|l|}{Ability in Stanines} & \multicolumn{2}{|l|}{Total} \\
\hline & Stanines \((9,8,7)\) & Stanines \((6,5,4)\) & Stanines
\[
(3,2,1)
\] & Number & Per Cent \\
\hline \multicolumn{6}{|l|}{All Schools} \\
\hline \multicolumn{6}{|l|}{All boys} \\
\hline Matriculation & 27 & 60 & 11 & 98 & 78 \\
\hline General & - & 19 & 9 & 28 & 22 \\
\hline \multicolumn{6}{|l|}{School Size: (1-39)} \\
\hline Matriculation & - & - & 2 & 2 & 100 \\
\hline General & - & - & - & - & - \\
\hline \multicolumn{6}{|l|}{School Size: (40-99)} \\
\hline Matriculation & 11 & 21 & 3 & 35 & 70 \\
\hline General & - & 11 & 5 & 16 & 30 \\
\hline \multicolumn{6}{|l|}{School Size: (100-200)} \\
\hline Matriculation & 2 & 12 & 1 & 15 & 83 \\
\hline General & - & 2 & 1 & 3 & 17 \\
\hline \multicolumn{6}{|l|}{School Size: (300-399)} \\
\hline Matriculation & 12 & 25 & 5 & 42 & 82 \\
\hline General & - & 6 & 3 & 9 & 18 \\
\hline \multicolumn{6}{|l|}{Transferees} \\
\hline Matriculation & 2 & 2 & - & 4 & 100 \\
\hline General & - & - & - & - & - \\
\hline
\end{tabular}


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TABLE VI
NUMBER OF GIRLS IN EACH PROGRAM BY SCHOOL SIZE,
\begin{tabular}{|c|c|c|c|c|c|}
\hline \multirow[t]{2}{*}{Programs} & \multicolumn{3}{|l|}{Ability in Stanines} & \multicolumn{2}{|l|}{Total} \\
\hline & Stanines (9, 8, 7) & Stanines
\[
(6,5,4)
\] & Stanines
\[
(3,2,1)
\] & Number & Per Cent \\
\hline \multicolumn{6}{|l|}{All Schools} \\
\hline \multicolumn{6}{|l|}{All girls} \\
\hline Matriculation & 30 & 53 & 7 & 90 & 66 \\
\hline General & 1 & 24 & 22 & 47 & 34 \\
\hline \multicolumn{6}{|l|}{School Size: \((1-39)\)} \\
\hline Matriculation & 1 & - & 1 & 2 & 100 \\
\hline General & - & - & - & - & - \\
\hline \multicolumn{6}{|l|}{School Size: (40-99)} \\
\hline Matriculation & 12 & 20 & 2 & 34 & 72 \\
\hline General & 1 & 7 & 5 & 13 & 28 \\
\hline \multicolumn{6}{|l|}{School Size: (100-200)} \\
\hline Matriculation & 5 & 8 & - & 13 & 59 \\
\hline General & - & 2 & 7 & 9 & 41 \\
\hline \multicolumn{6}{|l|}{School Size: (300-399)} \\
\hline Matriculation & 11 & 22 & 3 & 36 & 61 \\
\hline General & - & 14 & 9 & 23 & 39 \\
\hline \multicolumn{6}{|l|}{Transferees} \\
\hline Matriculation & 1 & 3 & 1 & 5 & 71 \\
\hline General & - & 1 & 1 & 2 & 29 \\
\hline
\end{tabular}
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TABLE VII
NUMBER OF ALL HIGH SCHOOL PUPILS IN EACH PROGRAM, BY SCHOOL SIZE, AND ABILITY LEVEL, IN GRADE XI
\begin{tabular}{|c|c|c|c|c|c|}
\hline \multirow[t]{2}{*}{Programs} & \multicolumn{3}{|l|}{Ability in Stanines} & \multicolumn{2}{|l|}{Total} \\
\hline & \[
\begin{aligned}
& \text { Stanines } \\
& (9,8,7)
\end{aligned}
\] & \[
\begin{aligned}
& \text { Stanines } \\
& (6,5,4)
\end{aligned}
\] & Stanines
\[
(3,2,1)
\] & Number & Per Cent \\
\hline \multicolumn{6}{|l|}{All Schools} \\
\hline \multicolumn{6}{|l|}{All pupils} \\
\hline Matriculation & 55 & 94 & 11 & 160 & 69 \\
\hline General & 2 & 43 & 27 & 72 & 31 \\
\hline \multicolumn{6}{|l|}{School Size: (1-39)} \\
\hline Matriculation & - & - & - & - & - \\
\hline General & - & - & - & - & - \\
\hline \multicolumn{6}{|l|}{School Size: (40-99)} \\
\hline Matriculation & 21 & 35 & 3 & 59 & 66 \\
\hline General & 2 & 18 & 10 & 30 & 34 \\
\hline \multicolumn{6}{|l|}{School Size: (100-200)} \\
\hline Matriculation & 7 & 15 & - & 22 & 67 \\
\hline General & - & 5 & 6 & 11 & 33 \\
\hline \multicolumn{6}{|l|}{School Size: (300-399)} \\
\hline Matriculation & 23 & 39 & 6 & 68 & 71 \\
\hline General & - & 19 & 9 & 28 & 29 \\
\hline \multicolumn{6}{|l|}{Transferees} \\
\hline Matriculation & 4 & 5 & 2 & 11 & 79 \\
\hline General & - & 1 & 2 & 3 & 21 \\
\hline
\end{tabular}


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TABLE VIII
NUMBER OF BOYS IN EACH PROGRAM BY SCHOOL SIZE,
AND ABILTTY LEVEL, TN GRADE XI
\begin{tabular}{|c|c|c|c|c|c|}
\hline \multirow[t]{2}{*}{Programs} & \multicolumn{3}{|l|}{Ability in Stanines} & \multicolumn{2}{|l|}{Total} \\
\hline & Stanines (9, 8, 7) & Stanines
\[
(6,5,4)
\] & Stanines
\[
(3,2,1)
\] & Number & Per Cent \\
\hline \multicolumn{6}{|l|}{All Schools} \\
\hline \multicolumn{6}{|l|}{A11 boys} \\
\hline Matriculation & 26 & 46 & 8 & 80 & 72 \\
\hline General & 1 & 22 & 8 & 31 & 28 \\
\hline \multicolumn{6}{|l|}{School Size: \((1-39)\)} \\
\hline Matriculation & - & - & - & - & - \\
\hline General & - & - & - & - & - \\
\hline \multicolumn{6}{|l|}{School Size: (40-99)} \\
\hline Matriculation & 10 & 18 & 3 & 31 & 64 \\
\hline General & 1 & 11 & 5 & 17 & 36 \\
\hline \multicolumn{6}{|l|}{School Size: (100-200)} \\
\hline Matriculation & 2 & 9 & - & 11 & 73 \\
\hline General & - & 3 & 1 & 4 & 27 \\
\hline \multicolumn{6}{|l|}{School Size: (300-399)} \\
\hline Matriculation & 12 & 17 & 4 & 33 & 77 \\
\hline General & - & 8 & 2 & 10 & 23 \\
\hline \multicolumn{6}{|l|}{Transferees} \\
\hline Matriculation & 2 & 2 & 1 & 5 & 100 \\
\hline General & - & - & - & - & - \\
\hline
\end{tabular}
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TABLE IX
NUMBER OF GIRLS IN EACH PROGRAM BY SCHOOL SIZE AND
ABILITY LEVEL, IN GRADE XI
\begin{tabular}{|c|c|c|c|c|c|}
\hline \multirow[t]{2}{*}{Programs} & \multicolumn{3}{|l|}{Ability in Stanines} & \multicolumn{2}{|l|}{Total} \\
\hline & Stanines
\[
(9,8,7)
\] & Stanines \((6,5,4)\) & Stanines
\[
(3,2,1)
\] & Number & Per Cent \\
\hline \multicolumn{6}{|l|}{A11 Schools} \\
\hline \multicolumn{6}{|l|}{All girls} \\
\hline Matriculation & 29 & 48 & 3 & 80 & 66 \\
\hline General & 1 & 21 & 19 & 41 & 34 \\
\hline \multicolumn{6}{|l|}{School Size: (1-39)} \\
\hline Matriculation & - & - & - & - & - \\
\hline General & - & - & - & - & - \\
\hline \multicolumn{6}{|l|}{School Size: (40-99)} \\
\hline Matriculation & 11 & 17 & - & 28 & 68 \\
\hline General & 1 & 7 & 5 & 13 & 32 \\
\hline \multicolumn{6}{|l|}{School Size: (100-200)} \\
\hline Matriculation & 5 & 6 & - & 11 & 61 \\
\hline General & - & 2 & 5 & 7 & 39 \\
\hline \multicolumn{6}{|l|}{School Size: \((300-399)\)} \\
\hline Matriculation & 11 & 22 & 2 & 35 & 66 \\
\hline General & - & 11 & 7 & 18 & 34 \\
\hline \multicolumn{6}{|l|}{Transferees} \\
\hline Matriculation & 2 & 3 & 1 & 6 & 67 \\
\hline General & - & 1 & 2 & 3 & 33 \\
\hline
\end{tabular}


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Grade XI pupils. The ratio was 69 per cent matriculation to 31 per cent general program. The boys and girls maintained their relative positions established in Grade X where a greater proportion of the boys than of the girls enrolled in the matriculation program. The corresponding ratios were 72 per cent matriculation to 28 per cent general program for the boys and 66:34 per cent respectively for the girls.

As found in Tables X, XI and XII, the Grade XII students continued to show a preference for the matriculation program. Almost twice the proportion of students in Grade XII enrolled in the matriculation program as in the general program. The matriculation program was selected by 65 per cent and the general program by 35 per cent of the Grade XII pupils.

As shown in the tables, the percentage of boys enrolled in the matriculation program in Grade XII continued to exceed that of girls. The proportions were 67 per cent for the boys and 63 per cent for the girls.

The girls showed a preference for the general program in Grades X, XI and XII.

In Grade X the three largest school categories paralleled each other closely in the proportions of students enrolled in the matriculation and general programs, as is shown in Tables IV, V and VI. Since the pupils had no choice of program in the (1-39) category,






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\begin{tabular}{|c|c|c|c|c|c|}
\hline \multicolumn{6}{|l|}{H SCHOOL PUPILS IN EACH PROGRAM BY SCHOO AND ABILITY LEVEL, IN GRADE XII} \\
\hline & \multicolumn{3}{|l|}{Ability in Stanines} & \multicolumn{2}{|l|}{Total} \\
\hline Programs & Stanines
\[
(9,8,7)
\] & Stanines
\[
(6,5,4)
\] & Stanines
\[
(3,2,1)
\] & Number & Per Cent \\
\hline \multicolumn{6}{|l|}{All Schools} \\
\hline \multicolumn{6}{|l|}{All pupils} \\
\hline Matriculation & 53 & 71 & 6 & 130 & 65 \\
\hline General & 3 & 48 & 19 & 70 & 35 \\
\hline \multicolumn{6}{|l|}{School Size: (1-39)} \\
\hline Matriculation & - & - & - & - & - \\
\hline General & - & - & - & - & - \\
\hline \multicolumn{6}{|l|}{School Size: (40-99)} \\
\hline Matriculation & 21 & 22 & 2 & 45 & 60 \\
\hline General & 2 & 22 & 6 & 30 & 40 \\
\hline \multicolumn{6}{|l|}{School Size: (100-200)} \\
\hline Matriculation & 7 & 14 & - & 21 & 72 \\
\hline General & - & 3 & 5 & 8 & 28 \\
\hline \multicolumn{6}{|l|}{School Size: (300-399)} \\
\hline Matriculation & 22 & 33 & 4 & 59 & 69 \\
\hline General & - & 21 & 6 & 27 & 31 \\
\hline \multicolumn{6}{|l|}{Transferees} \\
\hline Matriculation & 3 & 2 & - & 5 & 50 \\
\hline General & 1 & 2 & 2 & 5 & 50 \\
\hline
\end{tabular}

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TABLE XI
NUMBER OF BOYS IN EACH PROGRAM BY SCHOOL SIZE AND ABILITY LEVEL, IN GRADE XII
\begin{tabular}{|c|c|c|c|c|c|}
\hline \multirow[t]{2}{*}{Programs} & \multicolumn{3}{|l|}{Ability in Stanines} & \multicolumn{2}{|l|}{Total} \\
\hline & Stanines
\[
(9,8,7)
\] & Stanines
\[
(6,5,4)
\] & Stanines
\[
(3,2,1)
\] & Number & Per Cent \\
\hline \multicolumn{6}{|l|}{A11 Schools} \\
\hline \multicolumn{6}{|l|}{A11 boys} \\
\hline Matriculation & 25 & 34 & 4 & 63 & 67 \\
\hline General & 1 & 24 & 6 & 31 & 33 \\
\hline \multicolumn{6}{|l|}{School Size: \((1-39)\)} \\
\hline Matriculation & - & - & - & - & - \\
\hline General & - & - & - & - & - \\
\hline \multicolumn{6}{|l|}{School Size: (40-99)} \\
\hline Matriculation & 10 & 11 & 2 & 23 & 61 \\
\hline General & 1 & 12 & 2 & 15 & 39 \\
\hline \multicolumn{6}{|l|}{School Size: (100-200)} \\
\hline Matriculation & 2 & 9 & - & 11 & 85 \\
\hline General & - & 1 & 1 & 2 & 15 \\
\hline \multicolumn{6}{|l|}{School Size: (300-399)} \\
\hline Matriculation & 11 & 14 & 2 & 27 & 71 \\
\hline General & - & 9 & 2 & 11 & 29 \\
\hline \multicolumn{6}{|l|}{Transferees} \\
\hline Matriculation & 2 & - & - & 2 & 40 \\
\hline General & - & 2 & 1 & 3 & 60 \\
\hline
\end{tabular}

TABLE XII
\begin{tabular}{|c|c|c|c|c|c|}
\hline \multirow[t]{2}{*}{Programs} & \multicolumn{3}{|l|}{Ability in Stanines} & \multicolumn{2}{|l|}{Total} \\
\hline & Stanines
\[
(9,8,7)
\] & Stanines \((6,5,4)\) & Stanines
\[
(3,2,1)
\] & Number & Per Cent \\
\hline \multicolumn{6}{|l|}{All Schools} \\
\hline \multicolumn{6}{|l|}{All girls} \\
\hline Matriculation & 28 & 37 & 2 & 67 & 63 \\
\hline General & 2 & 24 & 13 & 39 & 37 \\
\hline \multicolumn{6}{|l|}{School Size: \((1-39)\)} \\
\hline Matriculation & - & - & - & - & - \\
\hline General & - & - & - & - & - \\
\hline \multicolumn{6}{|l|}{School Size: (40-99)} \\
\hline Matriculation & 11 & 11 & - & 22 & 60 \\
\hline General & 1 & 10 & 4 & 15 & 40 \\
\hline \multicolumn{6}{|l|}{School Size: \((100-200)\)} \\
\hline Matriculation & 5 & 5 & - & 10 & 63 \\
\hline General & - & 2 & 4 & 6 & 37 \\
\hline \multicolumn{6}{|l|}{School Size: (300-399)} \\
\hline Matriculation & 11 & 19 & 2 & 32 & 67 \\
\hline General & - & 12 & 4 & 16 & 33 \\
\hline \multicolumn{6}{|l|}{Transferees} \\
\hline Matriculation & 1 & 2 & - & 3 & 60 \\
\hline General & 1 & - & 1 & 2 & 40 \\
\hline
\end{tabular}
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they all enrolled in the matriculation program.
In the (40-99) category there was little difference between the boys and girls in their preference for the matriculation or general program. A very pronounced preference for the matriculation program was shown by the boys in the (100-200) and the (300-399) categories. Over 80 per cent of the boys as compared to approximately 60 per cent of the girls enrolled in the matriculation program in both school categories. This appeared to be in keeping with the distribution of boys and of girls according to ability in the various school categories. As mentioned earlier, the \((100-200)\) and the \((300-399)\) school categories had a much smaller proportion of boys than of girls in the \((3,2,1)\) ability category. It was also indicated that proportionately more boys and girls were in the \((9,8,7)\) ability category in the largest school. Tables VII, VIII and IX show that in Grade XI, as in Grade \(X\), the three largest school categories paralleled each other closely in the proportion of their pupils enrolled in the general and the matriculation programs. Unlike Grade \(X\), however, there was very little difference between the proportions of boys and of girls in the matriculation program in the \((100-200)\) and the \((300-399)\) categories at the Grade XI level. There were two possible reasons to account for the lack of difference. The first, boys in the matriculation program in these school categories

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may have dropped out in greater numbers than girls; and second, more boys than girls may have transferred from the matriculation to the general program.

In Grade XII, there was more variation amongst the various school categories in the proportions of pupils who enrolled in the matriculation and the general programs. The (40-99) school category had the lowest proportion of pupils in the matriculation program and the highest proportion in the general program. The highest proportion of pupils in the matriculation program was in the largest school.

It should be noted that the (100-200) category, where almost six times as many boys enrolled in the matriculation program as in the general program, also had the greatest difference in the proportions of boys and of girls in the matriculation program. The ratio of boys to girls was approximately \(4: 3\).

Since the (100-200) and the (300-399) school categories had broader course offerings in the general program than the (40-99) category, and a larger proportion of lower ability pupils, this seems to imply that the general program did not meet the needs of a large proportion of the pupils, especially the boys, or that factors other than ability of pupils and availability of courses play an important part in the pupils choice of program. This information is given in Table XIII.







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\section*{TABLE XIII}

NUMBER OF CREDITS OFFERED BY EACH OF THE VARIOUS-SIZED SCHOOLS IN GRADE X IN 1961-62, GRADE XI IN 1962-63, AND GRADE XII IN 1963-64
\begin{tabular}{cccc}
\hline \hline & \begin{tabular}{c}
\(1961-62\) \\
Grade X
\end{tabular} & \begin{tabular}{c}
\(1962-63\) \\
Grade XI
\end{tabular} & \begin{tabular}{c}
\(1963-64\) \\
Grade XII
\end{tabular} \\
\hline Size: (1-39) & & & \\
Satinwood & 39 & - & - \\
Size: (40-99) & 61 & 44 & 40 \\
Alix & 40 & 38 & 30 \\
Clive & 61 & 60 & 40 \\
Eckville & 58 & 48 & 50 \\
Mirror & 62 & 51 & 64 \\
Size: (100-200) & & & 45 \\
Bentley & 78 & & \\
Size: (300-399) & & & \\
Lacombe & & & \\
\hline
\end{tabular}


\section*{Relationship Between Ability and Program}

The percentage of all pupils in each ability level, as well as the proportion of pupils in each program within the different ability groups, are given in Figure 5. As is shown, almost all the pupils (98.2 per cent) in the \((9,8,7)\) ability group were enrolled in the college preparatory program. As pupil ability decreased the percentages of pupils enrolled in the college preparatory program also decreased. Almost three-quarters of the pupils in the middle ability group and slightly more than one-third of the lowest ability pupils also enrolled in the college preparatory program.

Tables \(V\) and \(V I\) show that in each ability level the proportion of boys in the matriculation program is greater than the proportion of girls. Since this is not commensurate with the distribution according to ability, as mentioned earlier, this may reinforce the assumption that the general programs offered may be more suitable for the girls.

When the pupils are categorized according to ability, there is very little difference between the (40-99) and the (300-399) school categories as to the proportions of the various ability category students each one enrolled in the matriculation and the general programs. The (100-200) school category differed in that a greater percentage of its middle ability and a much lower percentage of its
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Total Bays Girls



Total Boys Girls \((9,8,7)\) \(\qquad\)


Total Boys Girls \((6,5,4)\)


Total Boys Girls
\((3,2,1)\)

FIGURE 5
PERCENTAGE OF HIGH SCHOOL PUPILS IN EACH ABILITY LEVEL AND IN EACH PROGRAM

lowest ability pupils than in the (40-99) and the (300-399) categories enrolled in the matriculation program.

\section*{Retention in Original Program}

Table XIV is a composite table showing the numbers and percentages of pupils who remained for three years in the program they enrolled in, in Grade \(X\). Drop-outs and transfers from the matriculation program to the general program were the contributing factors which resulted in a decrease in numbers.

Of the 188 matriculation students in Grade \(\mathrm{X}, 70\) per cent were still in the program in Grade XII. This was slightly more than one and one-half times the proportion of pupils who remained in the general program for three years. The proportion in the general program was 44 per cent. All the schools were more successful in retaining the matriculation program than the general program pupils.

The largest school, with proportions of 75 and 56 per cent in the matriculation and the general programs respectively, had the best holding power in both programs. The second largest school equalled the largest school in the matriculation proportion but it dropped to about threefifths of the proportion for the general program. Category (40-99) had the poorest holding power in the matriculation program. The numbers in the Transferee category were too small to make comparisons.

All the schools were successful in retaining almost



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TABLE XIV
\begin{tabular}{|c|c|c|c|c|c|}
\hline \multirow[t]{2}{*}{Programs} & \multicolumn{3}{|l|}{Ability in Stanines} & \multicolumn{2}{|l|}{Total} \\
\hline & Stanines
\[
(9,8,7)
\] & Stanines \((6,5,4)\) & Stanines
\[
(3,2,1)
\] & Number & Per Cent \\
\hline \multicolumn{6}{|l|}{All Schools} \\
\hline A11 pupils & & & & - & \\
\hline Matriculation & 53 & 71 & 6 & 130 & 69 \\
\hline General & 1 & 21 & 11 & 33 & 44 \\
\hline \multicolumn{6}{|l|}{School Size: (40-99)} \\
\hline Matriculation & 21 & 22 & 2 & 45 & 64 \\
\hline General & 1 & 8 & 4 & 13 & 46 \\
\hline \multicolumn{6}{|l|}{School Size: (100-200)} \\
\hline Matriculation & 7 & 14 & - & 21 & 75 \\
\hline General & - & - & 4 & 4 & 33 \\
\hline \multicolumn{6}{|l|}{School Size: (300-399)} \\
\hline Matriculation & 22 & 33 & 4 & 59 & 75 \\
\hline General & - & 13 & 5 & 18 & 56 \\
\hline \multicolumn{6}{|l|}{Transferees} \\
\hline Matriculation & 3 & 2 & - & 5 & 56 \\
\hline General & - & 2 & - & 2 & 22 \\
\hline
\end{tabular}

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all their \((9,8,7)\) ability pupils in the original matriculation program. Approximately 70 per cent of the \((6,5,4)\) ability category pupils in the (300-399) and the (100-200) school categories and about 50 per cent in the (40-99) category also followed the original matriculation program. All the school categories lost the highest proportion of their general program students in the \((3,2,1)\) ability group. It should be noted that the (100-200) school category failed to retain any of its original general program students.

Tables \(X V\) and \(X V I\) show that in all the school categories and in both programs, a greater proportion of girls than of boys pursued the original program for three years. Programs and Diplomas

At the end of three years of high school education, 23 per cent of the pupils graduated with a Senior Matriculation Diploma and 17 per cent graduated with a High School Diploma. This information is shown in Tables XVII, XVIII and XIX. The tables also show that more girls than boys graduated with both the Senior Matriculation and the High School Diplomas. The ratios were 29 per cent girls to 17 per cent boys in the Senior Matriculation category and 22 per cent girls to 12 per cent boys in the High School Diploma category.

The (40-99) category schools which had enrolled a smaller proportion of their students in the matriculation










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NUMBER OF BOYS WHO REMAINED FOR THREE YEARS IN THE PROGRAM
Ability in Stanines
\[
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\]
\[
\begin{aligned}
& \text { Schools } \\
& \text { All boys } \\
& \text { Matricula }
\end{aligned}
\]
\[
\begin{array}{lll}
\text { Stanines } & \text { Stanines Stanines } \\
(9,8,7) & (6,5,4) & (3,2,1)
\end{array} \quad \text { Number Per Cent }
\]
\[
34
\]
\begin{tabular}{|c|c|c|c|c|c|}
\hline \multirow[t]{2}{*}{Programs} & \multicolumn{3}{|l|}{Ability in Stanines} & \multicolumn{2}{|l|}{Total} \\
\hline & Stanines
\[
(9,8,7)
\] & \[
\begin{aligned}
& \text { Stanines } \\
& (6,5,4)
\end{aligned}
\] & \[
\begin{aligned}
& \text { Stanines } \\
& (3,2,1)
\end{aligned}
\] & Number & Per Cent \\
\hline \multicolumn{6}{|l|}{All Schools} \\
\hline \multicolumn{6}{|l|}{All boys} \\
\hline Matriculation & 25 & 34 & 4 & 63 & 64 \\
\hline General & - & 9 & 3 & 12 & 43 \\
\hline \multicolumn{6}{|l|}{School Size: (40-99)} \\
\hline Matriculation & 10 & 11 & 2 & 23 & 64 \\
\hline General & - & 5 & 2 & 7 & 47 \\
\hline \multicolumn{6}{|l|}{School Size: (100-200)} \\
\hline Matriculation & 2 & 9 & - & 11 & 73 \\
\hline General & - & - & - & - & - \\
\hline \multicolumn{6}{|l|}{School Size: (300-399)} \\
\hline Matriculation & 11 & 14 & 2 & 27 & 64 \\
\hline General & - & 4 & 1 & 5 & 56 \\
\hline \multicolumn{6}{|l|}{Transferees} \\
\hline Matriculation & 2 & - & - & 2 & 50 \\
\hline General & - & - & - & - & - \\
\hline
\end{tabular}
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TABLE XVI
\begin{tabular}{|c|c|c|c|c|c|}
\hline \multicolumn{6}{|l|}{NUMBER OF GIRLS WHO REMAINED FOR THREE YEARS IN THE PROGRAM THEY ENROLLED IN, IN GRADE X} \\
\hline & Abili & ty in Stan & ines & To & \\
\hline Programs & Stanines
\[
(9,8,7)
\] & Stanines \((6,5,4)\) & Stanines
\[
(3,2,1)
\] & Number & Per Cent \\
\hline \multicolumn{6}{|l|}{A11 Schools} \\
\hline \multicolumn{6}{|l|}{All girls} \\
\hline Matriculation & 28 & 37 & 2 & 67 & 75 \\
\hline General & 1 & 12 & 8 & 23 & 49 \\
\hline \multicolumn{6}{|l|}{School Size: (40-99)} \\
\hline Matriculation & 11 & 11 & - & 22 & 65 \\
\hline General & 1 & 3 & 2 & 6 & 46 \\
\hline \multicolumn{6}{|l|}{School Size: (100-200)} \\
\hline Matriculation & 5 & 5 & - & 10 & 77 \\
\hline General & - & - & 4 & 4 & 45 \\
\hline \multicolumn{6}{|l|}{School Size: \((300-399)\)} \\
\hline Matriculation & 11 & 19 & 2 & 32 & 89 \\
\hline General & - & 9 & 4 & 13 & 57 \\
\hline \multicolumn{6}{|l|}{Transferees} \\
\hline Matriculation & 1 & 2 & - & 3 & 60 \\
\hline General & - & - & - & - & - \\
\hline
\end{tabular}

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\section*{TABLE XVII}
NUMBER OF HIGH SCHOOL PUPILS WHO GRADUATED AT THE END OF THREE YEARS BY TYPE OF DIPLOMA, SCHOOL SIZE, AND ABILITY LEVEL
NUMBER
\begin{tabular}{lll}
\multicolumn{2}{c}{ Ability in Stanines } & Total \\
Stanines Stanines Stanines & Number Per Cent \\
\((9,8,7)\) & \((6,5,4)\) & \((3,2,1)\)
\end{tabular}
\begin{tabular}{|c|c|c|c|c|c|}
\hline \multicolumn{6}{|l|}{All Schools} \\
\hline \multicolumn{6}{|l|}{All pupils} \\
\hline Sr. Matriculation & 44 & 17 & - & 61 & 23 \\
\hline High School Diploma & 5 & 32 & 7 & 44 & 17 \\
\hline \multicolumn{6}{|l|}{School Size: (1-39)} \\
\hline Sr. Matriculation & - & - & - & - & - \\
\hline High School Diploma & - & - & - & _ & - \\
\hline \multicolumn{6}{|l|}{School Size: (40-99)} \\
\hline Sr. Matriculation & 16 & 3 & - & 19 & 19 \\
\hline High School Diploma & 5 & 15 & 2 & 22 & 22 \\
\hline \multicolumn{6}{|l|}{School Size: (100-200)} \\
\hline Sr. Matriculation & 7 & 4 & - & 11 & 28 \\
\hline High School Diploma & - & 3 & 4 & 7 & 18 \\
\hline \multicolumn{6}{|l|}{School Size: (300-399)} \\
\hline Sr. Matriculation & 18 & 9 & - & 27 & 25 \\
\hline High School Diploma & - & 14 & - & 14 & 13 \\
\hline \multicolumn{6}{|l|}{Transferees} \\
\hline Sr. Matriculation & 3 & 1 & - & 4 & 36 \\
\hline High School Diploma & - & 1 & 1 & 2 & 18 \\
\hline
\end{tabular}

TABLE XVIII
NUMBER OF BOYS WHO GRADUATED AT THE END OF THREE YEARS BY TYPE OF DIPLOMA, SCHOOL SIZE, AND ABILITY LEVEL
\begin{tabular}{|c|c|c|c|c|c|}
\hline \multirow[t]{2}{*}{Type of Diploma} & \multicolumn{3}{|l|}{Ability in Stanines} & \multicolumn{2}{|l|}{Total} \\
\hline & \[
\begin{aligned}
& \text { Stanines } \\
& (9,8,7)
\end{aligned}
\] & \[
\begin{aligned}
& \text { Stanines } \\
& (6,5,4)
\end{aligned}
\] & Stanines
\[
(3,2,1)
\] & Number & Per Cent \\
\hline \multicolumn{6}{|l|}{All Schools} \\
\hline \multicolumn{6}{|l|}{All boys} \\
\hline Sr. Matriculation & 18 & 3 & - & 21 & 17 \\
\hline High School Diploma & 4 & 10 & 1 & 15 & 12 \\
\hline \multicolumn{6}{|l|}{School Size: (1-39)} \\
\hline Sr. Matriculation & - & - & - & - & - \\
\hline High School Diploma & - & - & - & - & - \\
\hline \multicolumn{6}{|l|}{School Size: (40-99)} \\
\hline Sr. Matriculation & 6 & 1 & - & 7 & 14 \\
\hline High School Diploma & 4 & 7 & - & 11 & 22 \\
\hline \multicolumn{6}{|l|}{School Size: (100-200)} \\
\hline Sr. Matriculation & 2 & - & - & 2 & 11 \\
\hline High School Diploma & - & 1 & 1 & 2 & 11 \\
\hline \multicolumn{6}{|l|}{School Size: (300-399)} \\
\hline Sr. Matriculation & 8 & 2 & - & 10 & 10 \\
\hline High School Diploma & - & 2 & - & 2 & 4 \\
\hline \multicolumn{6}{|l|}{Transferees} \\
\hline Sr. Matriculation & 2 & - & - & 2 & 33 \\
\hline High School Diploma & - & - & - & - & - \\
\hline
\end{tabular}
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\end{aligned}
\]
TABLE XIX


program also graduated a smaller proportion of their students with a Senior Matriculation Diploma. The proportions were 19,28 and 25 per cent for the (40-99), (100-200) and (300-399) categories respectively.

In the High School Diploma group, the proportion of the graduates decreased as the size of the school increased.

Of the students who qualified for the Senior Matriculation Diploma, 72 per cent were in the \((9,8,7)\) ability group, 28 per cent in the \((6,5,4)\) ability group and none in the \((3,2,1)\) group.

In the High School Diploma group, 11 per cent of the pupils were in the highest ability category, 73 per cent in the middle ability category and 16 per cent in the lowest category. It should be noted that some of the pupils who graduated with a High School Diploma were not enrolled in the general program. They were enrolled in the matriculation program but failed to meet the requirements for the Senior Matriculation Diploma.

In comparing the number of pupils who had enrolled in the different programs in Grade XII with the number qualifying for the respective diploma, Tables \(X\) and XVII show that the (100-200) school category had the highest graduation rate in both, the matriculation and the general programs. The proportions in the matriculation program in the \((300-399)\) and (40-99) categories were 46 and 40

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per cent respectively. The largest school had the lowest graduation rate in the general program. The proportions in the general program were 52 per cent for the (300-399) and 73 per cent for the (40-99) category. The failure rates increased as the ability level decreased. This was true for all the schools.

In the \((9,8,7)\) ability level, 9 pupils or 17 per cent of the 53 who were enrolled in the matriculation program in Grade XII did not graduate with a Senior Matriculation Diploma. Five of the pupils were in the (40-99) category and four were in the (300-399) category. Fiftyfour pupils or 76 per cent of the \((6,5,4)\) ability pupils who were in the matriculation program in Grade XII also failed to matriculate. The proportions were 27:24:29 per cent for the \((40-99),(100-200)\) and \((300-399)\) school categories respectively. As mentioned earlier, no one in the \((3,2,1)\) category matriculated.

Programs and Return to High School for the Fourth Year
Many pupils who had not graduated after three years of high school education returned to school for the fourth year.

Tables \(X, X V I I\) and \(X X\) indicate that of the 69 pupils who were pursuing the matriculation program in Grade XII but did not obtain a Senior Matriculation Diploma, 41 or approximately 60 per cent had returned to school for the fourth year. Twenty-five of these pupils were boys and








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TABLE XX
NUMBER OF PUPILS WHO RETURNED TO HIGH SCHOOL FOR THE FOURTH YEAR
\begin{tabular}{|c|c|c|c|c|c|}
\hline \multirow[t]{2}{*}{Programs} & \multicolumn{3}{|l|}{Ability in Stanines} & \multicolumn{2}{|l|}{Total} \\
\hline & Stanines
\[
(9,8,7)
\] & Stanines
\[
(6,5,4)
\] & Stanines
\[
(3,2,1)
\] & Number & Per Cent \\
\hline \multicolumn{6}{|l|}{A11 Schools} \\
\hline All pupils & & & & & \\
\hline Matriculation & 6 & 30 & 5 & 41 & 60 \\
\hline General & - & 18 & 9 & 27 & 40 \\
\hline \multicolumn{6}{|l|}{School Size: (40-99)} \\
\hline Matriculation & 2 & 12 & 12 & 16 & 57 \\
\hline General & - & 9 & 3 & 12 & 43 \\
\hline \multicolumn{6}{|l|}{School Size: (100-200)} \\
\hline Matriculation & - & 6 & - & 6 & 86 \\
\hline General & - & - & 1 & 1 & 14 \\
\hline \multicolumn{6}{|l|}{School Size: (300-399)} \\
\hline Matriculation & 4 & 10 & 3 & 17 & 63 \\
\hline General & - & 7 & 3 & 10 & 37 \\
\hline \multicolumn{6}{|l|}{Transferees} \\
\hline Matriculation & - & 2 & - & 2 & 33 \\
\hline General & - & 2 & 2 & 4 & 67 \\
\hline
\end{tabular}


16 were girls. All the schools had more boys than girls return to school for the fourth year in both the matriculation and the general programs.

In the \((9,8,7)\) ability category, 6 out of 9 pupils who had not matriculated returned to school for the fourth year. Thirty out of 54 in the \((6,5,4)\) category and 5 out of 6 in the \((3,2,1)\) category did likewise.

Tables XX, XXI and XII do not present an accurate picture of the general program since some unsuccessful matriculation students changed programs and returned to school for the fourth year.

Fourth-Year Students and the Size of School
Sixty per cent of the pupils who had returned to school for the fourth year chose to go to a larger school than the one they had attended previously, whereas, only a very small portion of the students attended a larger school during their Grade XI or XII year. This information is given in Table XXIII.

It should be noted that the proximity of the schools, in the study, to the Lindsay Thurber Composite High School in Red Deer may have had some effect on the figures. In their fourth year many students had enrolled at the Lindsay Thurber Composite High School in the semester system.








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TABLE XXI

\begin{tabular}{|c|c|c|c|c|c|}
\hline \multirow[t]{2}{*}{Programs} & \multicolumn{3}{|l|}{Ability in Stanines} & \multicolumn{2}{|l|}{Total} \\
\hline & Stanines
\[
(9,8,7)
\] & Stanines \((6,5,4)\) & Stanines
\[
(3,2,1)
\] & Number & Per Cent \\
\hline \multicolumn{6}{|l|}{A11 Schools} \\
\hline \multicolumn{6}{|l|}{All boys} \\
\hline Matriculation & 6 & 16 & 3 & 25 & 59 \\
\hline General & - & 14 & 3 & 17 & 41 \\
\hline \multicolumn{6}{|l|}{School Size: (40-99)} \\
\hline Matriculation & 2 & 7 & 2 & 11 & 58 \\
\hline General & - & 7 & 1 & 8 & 42 \\
\hline \multicolumn{6}{|l|}{School Size: (100-200)} \\
\hline Matriculation & - & 5 & - & 5 & 100 \\
\hline General & - & - & - & - & - \\
\hline \multicolumn{6}{|l|}{School Size: (300-399)} \\
\hline Matriculation & 4 & 4 & 1 & 9 & 60 \\
\hline General & - & 5 & 1 & 6 & 40 \\
\hline \multicolumn{6}{|l|}{Transferees} \\
\hline Matriculation & - & - & - & - & - \\
\hline General & - & 2 & 1 & 3 & 100 \\
\hline
\end{tabular}

TABLE XXII
NUMBER OF GIRLS WHO RETURNED TO HIGH SCHOOL FOR THE FOURTH YEAR BY SIZE OF SCHOOL, ABILITY AND PROGRAM
\begin{tabular}{|c|c|c|c|c|c|}
\hline \multirow[t]{2}{*}{Programs} & \multicolumn{3}{|l|}{Ability in Stanines} & \multicolumn{2}{|l|}{Total} \\
\hline & Stanines
\[
(9,8,7)
\] & Stanines
\[
(6,5,4)
\] & Stanines
\[
(3,2,1)
\] & Number & Per Cent \\
\hline \multicolumn{6}{|l|}{All Schools} \\
\hline \multicolumn{6}{|l|}{All girls} \\
\hline Matriculation & - & 14 & 2 & 16 & 62 \\
\hline General & - & 4 & 6 & 10 & 38 \\
\hline \multicolumn{6}{|l|}{School Size: (40-99)} \\
\hline Matriculation & - & 5 & - & 5 & 56 \\
\hline General & - & 2 & 2 & 4 & 44 \\
\hline \multicolumn{6}{|l|}{School Size: (100-200)} \\
\hline Matriculation & - & 1 & - & 1 & 50 \\
\hline General & - & - & 1 & 1 & 50 \\
\hline \multicolumn{6}{|l|}{School Size: (300-399)} \\
\hline Matriculation & - & 6 & 2 & 8 & 67 \\
\hline General & - & 2 & 2 & 4 & 33 \\
\hline \multicolumn{6}{|l|}{Transferees} \\
\hline Matriculation & - & 2 & - & 2 & 67 \\
\hline General & - & - & 1 & 1 & 33 \\
\hline
\end{tabular}

TABLE XXIII
NUMBER OF PUPILS WHO ATTENDED A LARGER SCHOOL IN GRADE XI AND XII AS COMPARED WITH THE NUMBER WHO ATTENDED A LARGER SCHOOL IN THE FOURTH YEAR ONLY, BY SCHOOL SIZE, PROGRAM AND SEX
\begin{tabular}{|c|c|c|c|c|c|c|}
\hline \[
\begin{gathered}
\text { School } \\
\text { Size }
\end{gathered}
\] & Grades XI an Matriculation & XII General & Total & \begin{tabular}{l}
Fourth \\
Matriculation
\end{tabular} & Year General & Total \\
\hline \multicolumn{7}{|l|}{(40-99)} \\
\hline Boys & - & 1 & 1 & 10 & 6 & 16 \\
\hline Girls & 2 & - & 2 & 2 & 3 & 5 \\
\hline \multicolumn{7}{|l|}{(100-200)} \\
\hline Boys & 1 & - & 1 & 3 & - & 3 \\
\hline Girls & - & - & - & - & - & - \\
\hline \multicolumn{7}{|l|}{(300-399)} \\
\hline Boys & 2 & - & 2 & 6 & 5 & 11 \\
\hline Girls & 2 & - & 2 & 3 & 2 & 5 \\
\hline \multicolumn{7}{|l|}{Transferees} \\
\hline Boys & - & 1 & 1 & - & - & - \\
\hline Girls & - & 1 & 1 & - & - & - \\
\hline Totals & 7 & 3 & 10 & 24 & 16 & 40 \\
\hline
\end{tabular}

III. ACHIEVEMENT

In this section an attempt is made to compare the achievement of the pupils by grade, program and ability level. The number of credits earned and the grade point averages are the criteria for the comparison. It is hoped that the comparison may allow us some insight in regard to the appropriateness and the popularity of the programs. Credits

Table XXIV is a complete record of the credits earned by all the students in the various grades. The table reveals that 72 per cent of all the students in Grade \(X\) earned (35-39) credits and another 14 per cent earned (30-34) credits. Approximately 14 per cent of students earned below 30 credits. The trend that the highest proportion of students earned (35-39) credits continued in Grade XI except to a lesser degree. Fiftyfive per cent of the pupils in Grade XI earned (35-39) credits and an additional 28 per cent of the pupils earned (30-34) credits. In Grade XII, a large decrease in the proportion of pupils who earned (35-39) credits is at once apparent. Only 12 per cent, or approximately onesixth of the proportion of the pupils in Grade \(X\) who earned (35-39) credits, earned the same number of credits in Grade XII. It should be noted that many pupils in Grade XII required only (30-34) credits to graduate with either

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TABLE XXIV
CREDITS EARNED BY GRADE
\begin{tabular}{lcrccccc}
\hline \hline & \multicolumn{2}{c}{ Grade X} & \multicolumn{2}{c}{ Grade XI } & \multicolumn{2}{c}{ Grade XII } \\
Credits & N & \(\%\) & N & \(\%\) & N & \(\%\) \\
\hline \(35-39\) & 190 & 72 & 127 & 55 & 23 & 12 \\
\(30-34\) & 36 & 14 & 66 & 28 & 73 & 37 \\
\(25-29\) & 20 & 8 & 18 & 8 & 44 & 22 \\
\(20-24\) & 9 & 3 & 10 & 4 & 29 & 14 \\
\(15-19\) & 5 & 1 & 4 & 2 & 13 & 6 \\
\(10-14\) & 2 & 1 & 6 & 3 & 13 & 6 \\
\(5-9\) & 1 & 1 & 1 & 1 & 6 & 3 \\
\hline Totals & 263 & 100 & 232 & 100 & 201 & 100 \\
\hline \hline
\end{tabular}

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the Senior Matriculation Diploma or the High School Diploma. More than one-half of the pupils in Grade XII earned fewer than 30 credits. This is the opposite to the Grade X and XI pattern.

It is interesting to note that although a large majority of the students enrolled in the matriculation program at all grade levels, a greater proportion of the pupils in the matriculation than the general program earned (35-39) credits. The proportions, as shown in Table XXV, were 78 per cent for the matriculation and 58 per cent for the general program at the Grade \(X\) level. The proportions became 91:73 per cent respectively when the two top credit intervals were compared.

A similar trend was apparent in the top category at the Grade XI level. However, when the (35-39) and the (30-34) categories were considered, the difference between the matriculation and the general program was greatly reduced. The general program had higher proportions of its pupils in the lower credit intervals than the matriculation program.

In Grade XII there was a sharp decline in the proportion of pupils who had earned (35-39) credits in both programs. The table also shows that in addition to the decline in the proportions of pupils in the top category in the matriculation and the general programs, there was an increase in the numbers in the five lowest categories







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TABLE XXV
CREDITS EARNED BY GRADE AND PROGRAM
\begin{tabular}{|c|c|c|c|c|}
\hline \multirow[b]{2}{*}{Credits} & \multicolumn{2}{|l|}{Matriculation} & \multicolumn{2}{|c|}{General} \\
\hline & N & \% & N & \% \\
\hline \multicolumn{5}{|l|}{Grade X} \\
\hline 35-39 & 147 & 78 & 43 & 58 \\
\hline 30-34 & 25 & 13 & 11 & 15 \\
\hline 25-29 & 10 & 5 & 10 & 13 \\
\hline 20-24 & 3 & 2 & 7 & 9 \\
\hline 15-19 & 2 & 1 & 2 & 3 \\
\hline 10-14 & 1 & 1 & 1 & 1 \\
\hline 5-9 & - & - & 1 & 1 \\
\hline Totals & 188 & 100 & 75 & 100 \\
\hline \multicolumn{5}{|l|}{Grade XI} \\
\hline \(35-39\) & 115 & 72 & 27 & 37 \\
\hline \(30-34\) & 27 & 17 & 29 & 40 \\
\hline 25-29 & 10 & 6 & 8 & 11 \\
\hline 20-24 & 4 & 2 & 4 & 6 \\
\hline 15-19 & 1 & 1 & 2 & 3 \\
\hline 10-14 & 2 & 1 & 2 & 3 \\
\hline 5-9 & 1 & 1 & - & - \\
\hline Totals & 160 & 100 & 72 & 100 \\
\hline \multicolumn{5}{|l|}{Grade XII} \\
\hline 35-39 & 17 & 13 & 6 & 8 \\
\hline \(30-34\) & 52 & 40 & 21 & 30 \\
\hline 25-29 & 26 & 20 & 18 & 26 \\
\hline 20-24 & 13 & 10 & 16 & 23 \\
\hline 15-19 & 9 & 7 & 5 & 7 \\
\hline 10-14 & 8 & 6 & 4 & 5 \\
\hline 5-9 & 5 & 4 & 1 & 1 \\
\hline Totals & 130 & 100 & 71 & 100 \\
\hline
\end{tabular}

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in both programs.
As shown in Table XXVI, there was some correlation between the ability of pupils and the number of credits earned. As the ability of the pupils decreased, the proportion of pupils who earned (35-39) credits also decreased. This correlation was further emphasized when the two highest credit intervals were considered.

As might be expected, 93 per cent of the pupils in the \((9,8,7)\) ability group earned (35-39) credits and all the pupils in this ability category qualified for the two top credits categories in Grade \(X\). Seventy-two per cent of the pupils in the \((6,5,4)\) ability group and 50 per cent of the \((3,2,1)\) group also earned (35-39) credits at the Grade X level.

In Grade XI, fewer pupils in all ability levels earned credits in the top category. The difference between the Grade X and Grade XI proportions was not as pronounced in the \((9,8,7)\) category as it was in the \((6,5,4)\) and (3,2,1) ability categories.

In Grade XII there was a sharp decrease in the proportions of students earning (35-39) credits. Since many students did not require that many credits to graduate, the totals in the two top categories provide a better comparison. On that basis, 84 per cent of the pupils in the \((9,8,7)\) group earned (30-39) credits as compared with 38 per cent in the \((6,5,4)\) and 16 per cent








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TABLE XXVI
CREDITS BY GRADE AND ABILITY
\begin{tabular}{|c|c|c|c|c|c|c|}
\hline \multirow[t]{2}{*}{Credits} & \multicolumn{2}{|l|}{Number and
\[
(9,8,7)
\]} & \multicolumn{2}{|l|}{Cent in Each
\[
(6,5,4)
\]} & \multicolumn{2}{|l|}{\[
\begin{aligned}
& \text { Catego } \\
& (3,2,1)
\end{aligned}
\]} \\
\hline & N & \% & N & \% & N & \% \\
\hline \multicolumn{7}{|l|}{Grade X} \\
\hline 35-39 & 54 & 93 & 112 & 72 & 24 & 50 \\
\hline 30-34 & 4 & 7 & 24 & 15 & 8 & 16 \\
\hline 25-29 & - & - & 13 & 8 & 7 & 14 \\
\hline 20-24 & - & - & 4 & 2 & 6 & 12 \\
\hline 15-19 & - & - & 1 & 1 & 3 & 6 \\
\hline 10-14 & - & - & 1 & 1 & 1 & 2 \\
\hline 5-9 & - & - & 1 & 1 & - & - \\
\hline Totals & 58 & 100 & 156 & 100 & 49 & 100 \\
\hline \multicolumn{7}{|l|}{Grade XI} \\
\hline 35-39 & 45 & 79 & 87 & 63 & 10 & 26 \\
\hline 30-34 & 10 & 17 & 31 & 23 & 15 & 39 \\
\hline 25-29 & 1 & 2 & 11 & 8 & 6 & 16 \\
\hline 20-24 & - & - & 7 & 5 & 1 & 3 \\
\hline 15-19 & - & - & - & - & 3 & 8 \\
\hline 10-14 & 1 & 2 & 1 & 1 & 2 & 5 \\
\hline 5-9 & - & - & - & - & 1 & 3 \\
\hline Totals & 57 & 100 & 137 & 100 & 38 & 100 \\
\hline \multicolumn{7}{|l|}{Grade XII} \\
\hline 35-39 & 15 & 27 & 7 & 6 & 1 & 4 \\
\hline 30-34 & 32 & 57 & 38 & 32 & 3 & 12 \\
\hline 25-29 & 5 & 9 & 33 & 28 & 6 & 24 \\
\hline 20-24 & 2 & 3 & 19 & 16 & 8 & 32 \\
\hline 15-19 & 1 & 2 & 10 & 8 & 4 & 16 \\
\hline 10-14 & 1 & 2 & 10 & 8 & 1 & 4 \\
\hline 5-9 & - & - & 3 & 2 & 2 & 8 \\
\hline Totals & 56 & 100 & 120 & 100 & 25 & 100 \\
\hline
\end{tabular}

\section*{(20) Man}

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in the \((3,2,1)\) categories.
It was apparent that as the grade level increased and the ability level of the pupils decreased, there was a decrease in the proportions of pupils earning credits in the (35-39) and (30-34) categories. The smallest difference in the proportions was in the \((9,8,7)\) ability group. The top two-category proportions in that group were 100,96 and 84 per cent for Grades X, XI and XII respectively. The \((6,5,4)\) and \((3,2,1)\) ability groups had proportions of \(87: 86: 38\) and 66:65:16 per cent respectively.

There were comparatively few deviations from the general trend among the schools of different sizes in the number of credits earned. Although the differences were not large, as a rule, some were worth noting.

Table XXVII shows that the ( \(40-99\) ) school category continued in the general pattern established by all the pupils in Grades \(X\) and XI where a high proportion of pupils who earned (30-39) credits were in the matriculation program. The reverse was true in Grade XII.

The (100-200) school category had a very similar pattern with one exception. In Grade XI no one earned below 30 credits.

In the (300-399) school category, the greatest deviation was in Grade X where approximately 44 per cent of the pupils in the general program and less than 3 per cent in the matriculation program earned fewer than 30 credits.
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TABLE XXVII
CREDITS EARNED BY GRADE, PROGRAM AND SCHOOL SIZE
\begin{tabular}{|c|c|c|c|c|c|c|c|c|c|c|c|c|}
\hline \multirow[t]{3}{*}{Credits} & \multicolumn{4}{|l|}{Grade X} & \multicolumn{4}{|l|}{Grade XI} & \multicolumn{4}{|l|}{Grade XII} \\
\hline & \multicolumn{2}{|l|}{Matric} & \multicolumn{2}{|l|}{Gen.} & \multicolumn{2}{|l|}{Matric} & \multicolumn{2}{|l|}{Gen.} & \multicolumn{2}{|l|}{Matric} & \multicolumn{2}{|l|}{Gen.} \\
\hline & & \[
\%
\] & N & \% & N & \% & N & \% & N & \% & N & \% \\
\hline \multicolumn{13}{|l|}{40-99} \\
\hline 35-39 & 50 & 72 & 20 & 69 & 43 & 73 & 9 & 30 & 3 & 7 & 5 & 17 \\
\hline 30-34 & 10 & 15 & 4 & 14 & 12 & 20 & 12 & 40 & 18 & 40 & 7 & 23 \\
\hline 25-29 & 6 & 9 & - & - & 2 & 3 & 4 & 13 & 9 & 20 & 8 & 27 \\
\hline Under 25 & 3 & 4 & 5 & 17 & 2 & 3 & 5 & 17 & 15 & 33 & 10 & 33 \\
\hline Total & 69 & 100 & 29 & 100 & 59 & 100 & 30 & 100 & 45 & 100 & 30 & 100 \\
\hline \multicolumn{13}{|l|}{100-200} \\
\hline 35-39 & 22 & 79 & 7 & 58 & 19 & 86 & 8 & 73 & 3 & 13 & - & - \\
\hline 30-34 & 3 & 11 & 3 & 25 & 3 & 14 & 3 & 27 & 9 & 41 & 4 & 50 \\
\hline 25-29 & 1 & 4 & 1 & 8 & - & - & - & & 5 & 23 & 3 & 37 \\
\hline Under 25 & 2 & 7 & 1 & 8 & - & - & - & - & 5 & 23 & 1 & 13 \\
\hline Total & 28 & 100 & 12 & 100 & 22 & 100 & 11 & 100 & 22 & 100 & 8 & 100 \\
\hline \multicolumn{13}{|l|}{300-399} \\
\hline 35-39 & 66 & 85 & 15 & 47 & 49 & 72 & 10 & 36 & 9 & 15 & - & - \\
\hline 30-34 & 10 & 13 & 3 & 9 & 8 & 12 & 13 & 46 & 23 & 39 & 8 & 27 \\
\hline 25-29 & 1 & 1 & 9 & 28 & 6 & 9 & 4 & 14 & 13 & 22 & 6 & 21 \\
\hline Under 25 & 1 & 1 & 5 & 16 & 5 & 7 & , & 4 & 14 & 24 & 15 & 52 \\
\hline Totą 1 & 78 & 100 & 32 & 100 & 68 & 100 & 28 & 100 & 59 & 100 & 29 & 100 \\
\hline N - Number; & Per & Cent & Mat & c - & ric & ati & Gen & - & al & & & \\
\hline
\end{tabular}

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\section*{Grade Point Averages}

To arrive at grade point averages, number values were assigned to the letter gradings in Grades X and XI and to equivalent number grades in Grade XII. A value of 5 was assigned to an \(H\) or an 80 or over grade, 4 to an \(A\) or a grade in the 65-79 range, 3 to \(a \operatorname{lor}\) a grade in the 50-64 range, 2 to a \(C\) or a grade in the \(40-49\) range and 1 to \(\mathrm{a} D\) or a below 40 grade. The average score of 5 was considered to be an \(H\) grade point average, 4.9-4.0 an \(A\), 3.9-3.0 a \(B, 2.9-2.0\) a \(C\) and 1.9-1.0 a \(D\) grade point average.

Table XXVIII shows that the largest proportion of students in Grades \(X\) and \(X I\) scored a \(B\) grade point average whereas the largest proportion of students in Grade XII scored a C grade point average. The proportions for the B category were 44:42:37 per cent in Grades X, XI and XII respectively. A C grade point average was obtained by the second largest proportions of pupils in Grades \(X\) and XI. The reverse was true in Grade XII where the second largest group scored a B grade point average. The \(H\) grade point category was unique in that all the students who had obtained this average in Grades \(X\) and XI failed to do so in Grade XII.

Larger proportions of pupils in the matriculation than in the general programs were in the top three grade point average categories in Grades \(X\) and \(X I\). In Grade XII

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TABLE XXVIII
GRADE POINT AVERAGES EARNED BY GRADE
\begin{tabular}{|c|c|c|c|c|c|c|}
\hline \multirow[t]{2}{*}{Grade Point Averages} & \multicolumn{2}{|l|}{Grade X} & \multicolumn{2}{|l|}{Grade XI} & \multicolumn{2}{|l|}{Grade XII} \\
\hline & N & \% & N & \% & N & \% \\
\hline (H) 5 & 6 & 2 & 6 & 2 & - & - \\
\hline (A) \(4.9-4.0\) & 50 & 19 & 33 & 14 & 27 & 14 \\
\hline (B) 3.9-3.0 & 12 & 44 & 96 & 42 & 74 & 37 \\
\hline (c) 1.9-1.0 & 114 & 4 & 5 & 2 & 13 & 6 \\
\hline (D) 2.9-2.0 & 81 & 31 & 92 & 40 & 86 & 43 \\
\hline Totals & 263 & 100 & 232 & 100 & 200 & 100 \\
\hline
\end{tabular}

no pupils were in the \(H\) category but the trend continued for the \(A\) and \(B\) grade point categories. In the grade point average categories, as in the credits categories mentioned earlier, the proportions in the higher categories decreased as the grade levels increased. The opposite was true for the two bottom categories. This information is given in Table XXIX.

Figures 6, 7 and 8 are graphical representations of data given in Table XXX. It is a representation of the per cent of pupils in each ability category who obtained the various grade point averages.

As might be expected, the performance of the \((9,8,7)\) ability group formed a curve skewed to the right in all grades. The curve of the \((6,5,4)\) ability pupils was skewed to the left in all grades and that of the \((3,2,1)\) ability group was also skewed to the left but to a greater degree. These data suggest that there may have been some underachievement in the \((6,5,4)\) ability group in all the grades since its curve did not approximate the normal distribution curve.

The proportions of pupils who earned the various grade point averages varied with the size of school categories. The (1-39) school category was not included in Tables XXXI, XXXII and XXXIII because the pupils did not attend that school in Grades XI and XII. The Transferee category was not included in these tables also because the
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TABLE XXIX
GRADE POINT AVERAGES EARNED BY GRADE AND PROGRAM
\begin{tabular}{|c|c|c|c|c|}
\hline \multirow[t]{2}{*}{Grade Point Averages} & \multicolumn{2}{|l|}{Matriculation} & \multicolumn{2}{|c|}{General} \\
\hline & Number & Per Cent & Number & Per Cent \\
\hline \multicolumn{5}{|l|}{Grade X} \\
\hline (H) 5 & 6 & 3 & - & - \\
\hline (A) 4.9-4.0 & 50 & 26 & - & - \\
\hline (B) 3.9-3.0 & 88 & 47 & 26 & 35 \\
\hline (C) 2.9-2.0 & 41 & 22 & 40 & 53 \\
\hline (D) 1.9-1.0 & 3 & 2 & 9 & 12 \\
\hline Totals & 188 & 100 & 75 & 100 \\
\hline \multicolumn{5}{|l|}{Grade XI} \\
\hline (H) 5 & 6 & 4 & - & - \\
\hline (A) 4.9-4.0 & 33 & 20 & - & - \\
\hline (B) 3.9-3.0 & 72 & 45 & 24 & 33 \\
\hline (C) 2.9-2.0 & 46 & 29 & 46 & 64 \\
\hline (D) 1.9-1.0 & 3 & 2 & 2 & 3 \\
\hline Totals & 160 & 100 & 72 & 100 \\
\hline \multicolumn{5}{|l|}{Grade XII} \\
\hline (H) 5 & - & - & - & - \\
\hline (A) 4.9-4.0 & 27 & 21 & - & - \\
\hline (B) 3.9-3.0 & 42 & 32 & 32 & 45 \\
\hline (C) 2.9-2.0 & 53 & 41 & 34 & 48 \\
\hline (D) 1.9-1.0 & 8 & 6 & 5 & 7 \\
\hline Totals & 130 & 100 & 71 & 100 \\
\hline
\end{tabular}

\section*{保}



Grade Point Average Standings

FIGURE 6
GRADE POINT AVERAGES IN THE \((9,8,7)\)
ABILITY LEVEL BY GRADE



FIGURE 7
GRADE POINT AVERAGES IN THE \((6,5,4)\) ABILITY LEVEL BY GRADE



FIGURE 8
GRADE POINT AVERAGES IN THE \((3,2,1)\)
ABILITY LEVEL BY GRADE


\section*{TABLE XXX}

\section*{GRade point averages by grade and ability}

\section*{Number and Per Cent in Each Ability Category}
```

Grade Point
Averages

```
\({ }_{\mathrm{N}}^{(9,8,7)} \%\)
\((6,5,4)\)
N
\((3,2,1)\)
N

Grade X
\begin{tabular}{lrrrrrr} 
(H) 5 & 6 & 10 & - & - & - & - \\
(A) \(4.9-4.0\) & 36 & 62 & 14 & 9 & - & - \\
(B) \(3.9-3.0\) & 15 & 26 & 87 & 56 & 13 & 24 \\
(C) 2.9-2.0 & 1 & 2 & 51 & 32 & 30 & 53 \\
(D) 1.9-1.0 & - & - & 4 & 3 & 6 & 12 \\
tals & 58 & 100 & 156 & 100 & 49 & 100
\end{tabular}

Grade XI
(H) 5
(A) 4.9-4.0
(B) 3.9-3.0

22
42
39
(C) 2.9-2.0

2
(D) 1.9-1.0

Totals
57
100
\(136 \quad 100\)
39
100
Grade XII
(H) 5
(A) 4.9-4.0

23
41
(B) 3.9-3.0

27
48
(C) 2.9-2.0

5
9
2
56100
\(120 \quad 100\)
25
12
(D) 1.9-1.0

Totals
56
\begin{tabular}{rrrr}
- & - & - & - \\
4 & 3 & - & - \\
44 & 37 & 4 & 16 \\
63 & 53 & 18 & 72 \\
9 & 7 & 3 & 12 \\
120 & 100 & 25 & 100
\end{tabular}

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}
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numbers were so small that the percentages would have been greatly inflated and wrong conclusions may have been drawn. It is commonly accepted that ability is one of the prime factors to be considered in making a comparison of achievement. Since the various-sized schools did not have equal proportions of the pupils in each ability category, it was decided to make a comparison of the schools according to ability categories.

Table XXXI shows that in the matriculation program the smaller school categories had larger proportions of their \((9,8,7)\) ability pupils in the \(A\) and \(H\) grade point average categories in Grades \(X\) and XI than in Grade XII. The largest school showed less difference in the proportions of pupils who earned \(A\) and \(H\) grade point averages in the three grades. The ratios in the (40-99) category were approximately 7:5:3 for Grades X, XI and XII respectively. In the \((100-200)\) and the \((300-399)\) categories the respective ratios for each grade and school category were 8:5:4 and 7:5:5. These facts would suggest that there was overrating in the smaller schools in Grades \(X\) and \(X I\) or underachievement in Grade XII.

Since a large proportion of the pupils in the (40-99)
and the (100-200) categories were given A grade point averages in Grades \(X\) and \(X I\), there were few B's in those grades. In Grade XII, however, there were many more B's. The largest school showed high consistency in the \(B\) grade


















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TABLE XXXI
GRADE POINT AVERAGES EARNED BY GRADE, PROGRAM AND CATEGORY
\begin{tabular}{|c|c|c|c|c|c|c|c|c|c|c|c|c|}
\hline \multirow[t]{3}{*}{Grade Point Averages} & \multicolumn{4}{|l|}{Grade X} & \multicolumn{4}{|l|}{Grade XI} & \multicolumn{4}{|l|}{Grade XII} \\
\hline & Ma. & ic & G & & & ic & G & & Ma & ic & & \\
\hline & N & \% & N & \% & N & \% & N & \% & & \% & N & \% \\
\hline \multicolumn{13}{|l|}{40-99} \\
\hline (H) 5 & - & - & - & - & 1 & 5 & - & - & - & - & - & \\
\hline (A) 4.9-4.0 & 16 & 70 & - & - & 9 & 43 & - & - & 7 & 33 & - & - \\
\hline (B) 3.9-3.0 & 6 & 26 & 1 & - & 10 & 47 & - & - & 11 & 53 & 2 & 100 \\
\hline (C) 2.9-2.0 & 1 & 4 & - & - & 1 & 5 & 2 & 100 & 3 & 14 & - & - \\
\hline (D) \(1.9 \div 1.0\) & _ & - & - & - & _ & - & _ & - & - & - & - & - \\
\hline Totals & 23 & 100 & 1 & 100 & 21 & 100 & 2 & 100 & 21 & 100 & 2 & 100 \\
\hline \multicolumn{13}{|l|}{100-200} \\
\hline (H) 5 & - & - & - & - & - & - & - & - & - & - & - & - \\
\hline (A) 4.9-4.0 & 6 & 86 & - & - & 4 & 57 & - & - & 3 & 43 & - & - \\
\hline (B) 3.9-3.0 & 1 & 14 & - & - & 3 & 43 & _ & - & 4 & 57 & - & - \\
\hline (C) 2.9-2.0 & _ & - & - & - & - & & - & - & - & 5 & _ & _ \\
\hline (D) 1.9-1.0 & - & - & - & - & - & - & - & - & - & - & - & - \\
\hline Totals & 7 & 100 & - & - & 7 & 100 & - & - & 7 & 100 & - & - \\
\hline \multicolumn{13}{|l|}{300-399} \\
\hline (H) 5 & 6 & 26 & - & - & 4 & 17 & - & - & - & - & - & - \\
\hline (A) \(4.9-4.0\) & 11 & 48 & - & - & 9 & 40 & _ & - & 12 & 55 & _ & - \\
\hline (B) 3.9-3.0 & 6 & 26 & - & - & 8 & 35 & - & - & 7 & 32 & - & - \\
\hline (C) 2.9-2.0 & _ & - & - & - & 1 & 4 & - & - & 2 & 9 & - & - \\
\hline (D) 1.9-1.0 & - & - & - & - & 1 & 4 & - & - & 1 & 4 & - & - \\
\hline Totals & 23. & 100 & - & - & 23 & 100 & - & - & 22 & 100 & - & - \\
\hline
\end{tabular}


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point category in all grades. This school had a ratio of 1:1.3:1.2 in Grades \(X, X I\) and XII respectively.

In the \(C\) and \(D\) grade point categories the largest school showed more consistency in its proportions than the (40-99) category. No one in the (100-200) category earned this grade point average at any grade level.

There were too few people of \((9,8,7)\) ability in the general program to permit a comparison of school categories. According to Table XXXII there appeared to be little difference in the proportions of \((6,5,4)\) ability pupils who obtained the various grade point averages in the matriculation program in the different schools.

In the general program the numbers in the (100-200) category were too small to make comparisons. The proportions of students in the (40-99) category who obtained B grade point averages were in an approximate ratio of \(3: 2: 6\) for Grades X, XI and XII respectively. The largest school had a ratio of approximately \(1: 1: 1\). It would appear that the small enrollments may have had some bearing on the inconsistent grading. In the \(C\) and \(D\) grade point categories the smallest schools had an approximate ratio of 2:2:1 as compared with 1:4:4.5 in the largest school. It would seem that the largest school either over-rated their \((6,5,4)\) ability pupils in the general program in Grade \(X\) or these pupils failed to achieve in accordance with their abilities in Grades XI and XII.





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TABLE XXXII
GRADE POINT AVERAGES EARNED BY GRADE, PROGRAM AND SCHOOL
\begin{tabular}{llllllllllll}
\hline \hline
\end{tabular}
(20)

In the \((3,2,1)\) ability category the total number of pupils in the various school categories was to small to draw any valid conclusions.

Courses Failed
In this study a failing mark is a mark which is below 50 per cent in the matriculation program in Grades \(X\), XI and XII with the exception of Social Studies and English. In these two courses a failing mark is below 40 per cent in Grade \(X\) and \(X I\) and below 50 per cent on the Grade XII level. In the general program which gives the student a High School Diploma but not matriculation, a failing mark is one which is below 40 per cent in all courses.

Table XXXIV reveals that the number of failures increased as the grade level increased. The number of courses failed was in an approximate ratio of 1:2:3 in Grades X, XI and XII respectively.

Table XXXV shows that proportionally the matriculation program had a much higher rate of failure than the general program at all grade levels. The ratio was approximately 2:1 in Grades \(X\) and \(X I\) and 4:1 in Grade XII.

When the pupils are grouped according to ability, Table XXXVI shows that in each ability group the number of courses failed increased with each ascending grade level. The \((9,8,7)\) ability group had the lowest failure rate and the \((3,2,1)\) group had the highest rate. In Grade \(X\) the ratio was approximately \(1: 2: 3\) for the \((9,8,7),(6,5,4)\) and








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TABLE XXXIII
GRADE POINT AVERAGES EARNED BY GRADE, PROGRAM AND SCHOOL SIZE IN (3,2,1) ABILITY CATEGORY


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TABLE XXXIV
NUMBER OF FAILURES PER PUPIL BY GRADE
\begin{tabular}{cccc}
\hline \hline & \begin{tabular}{c} 
Grade \\
Enrollment
\end{tabular} & \begin{tabular}{c} 
No. of Courses \\
Grade
\end{tabular} & \begin{tabular}{c} 
No. of Courses \\
Failed Per Pupil
\end{tabular} \\
X & 263 & 53 & .20 \\
XI & 232 & 80 & .34 \\
XII & 200 & 183 & .91 \\
\hline \hline
\end{tabular}

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TABLE XXXV

\section*{}
General Program
No. of No. of
No. of
Failed
7
15
23
Grade
Enrollment
Per Pupil
.09
.21
.33
\(-\)
\begin{tabular}{ccccc}
\hline \hline & \multicolumn{2}{c}{ Matriculation Program } & \\
Grade & \begin{tabular}{c} 
Grade \\
Enrollment of \\
Courses \\
Failed
\end{tabular} & \begin{tabular}{c} 
Courses Failed \\
Per Pupil
\end{tabular} & \begin{tabular}{c} 
Grade \\
Enrollment
\end{tabular} \\
\hline X & 188 & 46 & .24 & 75 \\
XI & 160 & 65 & .40 & 72 \\
XII & 130 & 160 & 1.22 & 70
\end{tabular}
TABLE XXXVI
NUMBER OF COURSES FAILED PER PUPIL BY GRADE AND ABILITY
\begin{tabular}{|c|c|c|c|c|c|c|c|c|c|}
\hline \multirow[t]{2}{*}{Grade} & \multicolumn{3}{|l|}{Stanines ( \(9,8,7)\)} & \multicolumn{3}{|l|}{Stanines (6,5,4)} & \multicolumn{3}{|l|}{Stanines ( \(3,2,1\) )} \\
\hline & Gr. Enrol. & No. C. Failed & No. C. Failed Per Pupil & \begin{tabular}{l}
Gr. \\
Enrol.
\end{tabular} & \begin{tabular}{l}
No. C. \\
Failed
\end{tabular} & No. C. Failed Per Pupil & \begin{tabular}{l}
Gr. \\
Enrol.
\end{tabular} & No. C. Failed & No. C. Failed Per Pupil \\
\hline X & 58 & 6 & . 10 & 156 & 33 & . 21 & 49 & 14 & . 29 \\
\hline XI & 57 & 8 & . 14 & 137 & 57 & . 41 & 38 & 15 & . 39 \\
\hline XII & 56 & 16 & . 28 & 119 & 137 & 1.15 & 25 & 30 & 1.20 \\
\hline
\end{tabular}


( \(3,2,1\) ) ability groups respectively. This ratio was not continued in Grades XI and XII where the failure rates were much higher. The ( \(3,2,1\) ) ability group had almost the same failure rate as the \((6,5,4)\) group in Grades XI and XII. The ratios were approximately \(1: 3: 3\) and \(1: 4: 4\) in Grades XI and XII respectively.

When the pupils were grouped according to ability and program, a much greater difference in the failure rate among the various ability groups is apparent. In Grade X , matriculation, the failure rates were 1:2:6 for the ( \(9,8,7\) ), \((6,5,4)\) and \((3,2,1)\) ability groups respectively. In Grades XI and XII, the ratios were approximately \(1: 3: 8\) and 1:6:9 for the respective ability groups.

In the general program, there were no failures in the \((9,8,7)\) ability group. The trend where the lowest ability category had the highest failure rate was reversed in Grades X and XI . In these grades the ratios of the number of courses failed in the \((6,5,4)\) ability category to the number of failures in the \((3,2,1)\) category were \(2: 1\) and 8:1 respectively. In Grade XII, the matriculation program failure rate was again obvious. The ratio of the rate of failures in the \((6,5,4)\) category to the rate of failures in the \((3,2,1)\) category was \(1: 4\). This information is given in Table XXXVII.

There appears to be an indication that many pupils in the \((6,5,4)\) and the \((3,2,1)\) ability categories found
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TABLE XXXVII
NUMBER OF COURSES FAILED PER PUPIL BY GRADE, ABILITY AND PROGRAM
\begin{tabular}{|c|c|c|c|c|c|c|c|c|c|}
\hline \multirow[t]{2}{*}{Grade} & \multicolumn{3}{|l|}{Stanines ( \(9,8,7)\)} & \multicolumn{3}{|l|}{Stanines (6,5,4)} & \multicolumn{3}{|l|}{Stanines ( \(3,2,1\) )} \\
\hline & Gr. Enrol. & No. C. Failed & No. C. Failed Per Pupil & \begin{tabular}{l}
Gr. \\
Enrol.
\end{tabular} & No. C. Failed & \begin{tabular}{l}
No. C. \\
Failed \\
Per Pupil
\end{tabular} & \begin{tabular}{l}
Gr. \\
Enrol.
\end{tabular} & No. C. Failed & No. C. Failed Per Pupil \\
\hline \multicolumn{10}{|l|}{Matriculation} \\
\hline X & 57 & 6 & . 10 & 113 & 28 & . 25 & 18 & 12 & . 67 \\
\hline XI & 55 & 8 & . 15 & 94 & 43 & . 46 & 11 & 14 & 1.27 \\
\hline XII & 53 & 16 & . 30 & 71 & 128 & 1.81 & 6 & 16 & 2.66 \\
\hline \multicolumn{10}{|l|}{General} \\
\hline X & 1 & - & - & 43 & 5 & . 12 & 31 & 2 & . 06 \\
\hline XI & 2 & - & - & 43 & 14 & . 33 & 27 & 1 & . 04 \\
\hline XII & 3 & - & - & 48 & 9 & . 19 & 19 & 14 & . 74 \\
\hline
\end{tabular}


the matriculation program too difficult. Some of the pupils continued to pursue matriculation in spite of failures at the Grade X or Grade XI level and occasionally at both levels. This also reinforces the assumption that the general program did not meet the needs of many students.

Table XXXVIII shows that the rate of failure in the (100-200) school category was higher than the failure rates in the (40-99) and the (300-399) categories. It was lowest in the (300-399) category. The (40-99) school category had a low failure rate in Grade \(X\) but a much higher one in Grades XI and XII. The greatest deviation from the rate of the total group was in the (100-200) school category which had consistently high failure rates in all the grades.

It should be noted that while the largest school had the lowest failure rate, it also had the highest proportion of its students enrolled in the matriculation program and the second lowest proportion of \((9,8,7)\) and \((6,5,4)\) ability pupils. The (100-200) school category, which had the highest failure rate, had the lowest proportion of its students in the two top ability categories, a high proportion of its students in the matriculation program and a ratio of 4 boys to 3 girls in the matriculation program. This reinforces the assumptions that success in schools depends on ability, on the program pursued and that boys need higher ability than girls to achieve as well. There appears to be an indication that other factors also play an important role in the achievement of pupils.
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TABLE XXXVIII
NUMBER OF COURSES FAILED PER PUPIL IN IN EACH GRADE
\begin{tabular}{|c|c|c|c|c|c|c|}
\hline Grade & ( \(1-39\) ) & (40-99) & (100-200) & (300-399) & Transferees & Total \\
\hline \multicolumn{7}{|l|}{X} \\
\hline School Enrollment & 4 & 98 & 40 & 110 & 11 & 263 \\
\hline No. of Courses Failed & - & 14 & 12 & 26 & 1 & 53 \\
\hline No. of Courses Failed Per Pupil & - & . 14 & . 30 & . 24 & . 09 & . 20 \\
\hline \multicolumn{7}{|l|}{XI} \\
\hline School Enrollment & - & 89 & 33 & 96 & 14 & 232 \\
\hline No. of Courses Failed & - & 33 & 11 & 33 & 3 & 80 \\
\hline No. of Courses Failed Per Pupil & - & .37 & . 33 & . 34 & . 21 & .34 \\
\hline \multicolumn{7}{|l|}{XII} \\
\hline School Enrollment & - & 75 & 29 & 86 & 10 & 200 \\
\hline No. of Courses Failed & - & 77 & 37 & 65 & 4 & 183 \\
\hline No. of Courses Failed Per Pupil & - & 1.03 & 1.27 & . 76 & . 40 & 1.09 \\
\hline
\end{tabular}

\section*{Summary}

The population in the study had more \((6,5,4)\) ability pupils and fewer ( \(3,2,1\) ) pupils than the normal distribution. The (40-99) school category had the greatest proportion of the most able pupils and the (100-200) category had the highest proportion of least able ones. There were more girls than boys in the \((9,8,7)\) and \((3,2,1)\) ability categories. The boys, on the whole, needed to have higher ability to score as well as the girls.

More pupils were enrolled in the matriculation than the general program in all the high school grades. As the grade level increased, the proportion of the pupils in the matriculation program decreased. Greater proportions of boys than of girls enrolled in the matriculation program in all the grades. In Grades X and XI , the various school categories paralleled each other closely in the proportion of students enrolled in the matriculation and the general program. The differences, which did exist, were between the boys and the girls. More boys than girls preferred the matriculation program in Grade \(X\) but there was no difference in Grade XI. In Grade XII, the (40-99) school category had the lowest proportion of its students in the matriculation program and the (300-399) category had the highest proportion. There was a predominance of boys in the matriculation program at the Grade XII level.

Almost all the pupils in the highest ability category enrolled in the matriculation program. As pupil ability



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decreased, the percentage of pupils in the matriculation program also decreased. In all ability groups, there was a greater proportion of boys than of girls in the matriculation program.

More than one and one-half times as many matriculation as general program pupils remained in the same program for three years. All the schools retained more matriculation than general program pupils. The largest school had the highest retention rate in both programs. The proportion of pupils who remained in the same program for three years was highest in the \((9,8,7)\) ability group. The proportions decreased as the ability level decreased. At the end of three years, 23 per cent of the pupils graduated with a Senior Matriculation Diploma and 17 per cent with a High School Diploma. More girls than boys were awarded diplomas in the matriculation and the general program. There was no definite pattern in the various-sized schools in the proportions of matriculation graduates. In the High School Diploma group, the proportion of graduates decreased as the size of school increased. Almost three times as many \((9,8,7)\) as \((6,5,4)\) ability pupils qualified for a Senior Matriculation Diploma. No one in the (3, 2, 1) category matriculated. The highest proportion of pupils who qualified for the High School Diploma was in the \((6,5,4)\) ability group. This proportion was almost equal to the proportion of \((9,8,7)\) pupils who matriculated. Very small







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proportions of the highest and the lowest ability groups received a High School Diploma.

Sixty per cent of the matriculation pupils who did not qualify for a Senior Matriculation Diploma at the end of three years returned to school for the fourth year. More boys than girls returned to school for the fourth year in all the school categories. A high proportion of the unsuccessful pupils, in all ability groups, returned to school for the fourth year.

Sixty per cent of the fourth year pupils chose to go to a larger high school than the one they attended previously.

In Grades \(X\) and XI, a high proportion of the pupils earned (35-39) and (30-34) credits. The trend was reversed in Grade XII. More than one-half of the pupils in Grade XII earned fewer than 30 credits. The pupils in the matriculation program earned more credits than the pupils in the general program, at all grade levels. There was some correlation between the ability of the pupils and the number of credits earned. As the ability of the pupils decreased, the proportion of the pupils who earned (35-39) credits also decreased. There were few deviations from the general trend among the various school categories.

The largest proportion of the pupils scored a B grade point average in Grade \(X\), and a \(C\) grade point average in Grades XI and XII. The pupils in the matriculation




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program scored higher grade point averages than the pupils in the general program. The proportion of the pupils in the higher grade point averages decreased as the grade level increased. The grade point average curve was skewed to the right for the \((9,8,7)\) ability group and to the left for the \((6,5,4)\) and \((3,2,1)\) groups. The largest school was most consistent in its proportions of (9,8,7) ability students who earned the various grade point averages in Grades \(X, X I\) and XII in the matriculation program. In the \((6,5,4)\) category, there was little difference in the matriculation program among the various school categories. In the general program the largest school was most consistent in the \(B\) average category but not so in the \(C\) and \(D\) categories. No valid comparison could be made in the \((3,2,1)\) ability group.

The number of courses failed per pupil increased with each grade level. The ratio was 1:2:3 for Grades \(X\), XI and XII respectively. The matriculation program pupils had a much higher failure rate than those in the general program. The failure rate also increased as the ability level decreased. The difference in failure rates among the ability groups increased when the pupils were grouped according to ability and program. In the matriculation program, the failure rate increased as the ability level decreased and the grade level increased. In the general program, the \((3,2,1)\) ability group had a lower failure

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rate than the \((6,5,4)\) group in Grades \(X\) and XI but not so in Grade XII. The highest failure rate was in the (100-200) school category and the lowest rate was in the (300-399) category.




\section*{CHAPTER V}

THE DROP-OUTS

The study of drop-outs is not concerned with the dropping of individual subjects but with the termination of a pupil's school career. In following the two hundred and sixty-three pupils through their high school careers, it was found that some had terminated their schooling in Grade \(X\), others in Grade XI and still others in Grade XII without qualifying for a Senior Matriculation or High School Diploma. It is hoped that by comparing the dropouts with the non-drop-outs some insight may be allowed us in regard to the suitability of the high school curriculum.

\section*{I. INCIDENCE OF DROP-OUT}

One method of determining the number and percentage of drop-outs is to take a class of students of any particular year and trace its numbers grade by grade for a stipulated period of time or until it disappears from the school records. Table XXXIX gives the figures of the class which in 1961 was in Grade \(X\) in the various schools. Table XL gives the total drop-out figures of the class over a three year period. During the three year period 96 pupils left school. This was almost 36 per cent of the
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TABLE XXXIX
NUMBER AND PER CENT OF ALL PUPILS BY SCHOOL SIZE AND SEX
\begin{tabular}{|c|c|c|c|c|c|c|}
\hline & 1-39 & 40-99 & 100-200 & 300-399 & Transferees & Total \\
\hline \multicolumn{7}{|l|}{Boys} \\
\hline Total School Enrollment & 4 & 98 & 40 & 110 & 11 & 263 \\
\hline Number of Boys & 2 & 51 & 18 & 51 & 4 & 126 \\
\hline Per Cent & 50 & 52 & 45 & 46 & 36 & 48 \\
\hline \multicolumn{7}{|l|}{Girls} \\
\hline Total School Enrollment & 4 & 98 & 40 & 110 & 11 & 263 \\
\hline Number of Girls & 2 & 47 & 22 & 59 & 7 & 137 \\
\hline Per Cent & 50 & 48 & 55 & 54 & 64 & 52 \\
\hline
\end{tabular}

total 1961 Grade \(X\) enrollment.

\section*{Sex}

Table XL also shows that approximately 36 per cent of the girls and 37 per cent of the boys dropped out of school. More boys than girls dropped out in all the school categories except the (40-99). This category was more successful in retaining the boys. Could the reason for the retention of more boys than girls in the smallest school category be that the girls who enrolled in the matriculation program found the program unsatisfactory and, hence, dropped out?

\section*{Grade}

Table XLI shows that 12 per cent of the total population in the study dropped out at the end of Grade \(\mathrm{X}, 9\) per cent at the end of Grade XI and another 15 per cent at the end of Grade XII. The table also shows that in all the schools the lowest proportion of drop-outs was in Grade XI.

School category (100-200) lost 25 per cent of its pupils, through drop-out, in Grade X. There were comparatively few drop-outs in this category in Grades XI and XII.

The highest proportion of drop-outs in Grade XII was in categories (40-99) and (300-399).

The per cent of drop-outs in Grades XI and XII increased when the number of drop-outs in each grade was





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TABLE XL
NUMBER OF DROP-OUTS TO TOTAL POPULATION IN VARIOUS-
SIZED SCHOOLS BY SEX
\begin{tabular}{|c|c|c|c|c|c|c|}
\hline & 1-39 & 40-99 & 100-200 & 300-399 & Transferees & Total \\
\hline \multicolumn{7}{|l|}{Boys 126} \\
\hline Enrollment Per School & 2 & 51 & 18 & 5 & 4 & \\
\hline Drop-Outs & 1 & 15 & 7 & 24 & - & 7 \\
\hline Per Cent & 50 & 30 & 40 & 47 & - & 37 \\
\hline \multicolumn{7}{|l|}{Girls 137} \\
\hline Enrollment Per School & 2 & 47 & 22 & 59 & 7 & 137 \\
\hline Drop-Outs & - & 18 & 6 & 21 & 4 & 49 \\
\hline Per Cent & - & 37 & 27 & 36 & 57 & 36 \\
\hline
\end{tabular}
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TABLE XLI
\begin{tabular}{|c|c|c|c|c|c|c|}
\hline Grade & \(1-39\) & 40-99 & \(100-200\) & 300-399 & Transferees & Total \\
\hline X & & & & & & \\
\hline School Enrollment & 4 & 98 & 40 & 110 & 11 & 263 \\
\hline Grade Drop-Outs & 1 & 9 & 7 & 14 & - & 31 \\
\hline Per Cent & 25 & 9 & 17 & 13 & - & 12 \\
\hline \multicolumn{7}{|l|}{XI} \\
\hline School Enrollment & 4 & 98 & 40 & 110 & 11 & 263 \\
\hline Grade Drop-Outs & - & 12 & 3 & 8 & 2 & 25 \\
\hline Per Cent & - & 12 & 8 & 7 & 18 & 9 \\
\hline \multicolumn{7}{|l|}{XII} \\
\hline School Enrollment & 4 & 98 & 40 & 110 & 11. & 263 \\
\hline Grade Drop-Outs & - & 12 & 3 & 23 & 2 & 40 \\
\hline Per Cent & - & 12 & 8 & 21 & 18 & 15 \\
\hline \multicolumn{7}{|l|}{Totals} \\
\hline School Enrollment & 4 & 98 & 40 & 110 & 11 & 263 \\
\hline Grade Drop-Outs & 1 & 33 & 13 & 45 & 4 & 96 \\
\hline Per Cent & 25 & 34 & 33 & 41 & 36 & 36 \\
\hline
\end{tabular}

compared with the actual enrollment in that grade. Table XLII shows that 11 per cent of the pupils enrolled in Grade XI and 20 per cent of those enrolled in Grade XII dropped out of school.

Table XLIII reveals that there was little difference between the boys and girls in the proportion of drop-outs in each grade.

It is interesting to note that of the 96 drop-outs, 36 per cent dropped out in Grade \(X, 22\) per cent in Grade XI and 42 per cent in Grade XII. This information is given in Table XLIV. The table also reveals that school category (100-200) had more than half of its drop-outs leave school in Grade \(X\) and category (300-399) had slightly more than one-half of its drop-outs leave in Grade XII.

\section*{Program}

As revealed in Table XLV, 26 per cent of the pupils in the matriculation and 61 per cent in general program dropped out of school. Similar findings were reported in the literature. \({ }^{1}\) The table also shows that more boys than girls dropped out of the matriculation program and more girls than boys dropped out of the general program. The proportions were 15 per cent boys to 11 per cent girls in the matriculation program and 37 per cent girls to 24 per
\({ }^{1}\) Supra, p. 13.

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TABLE XLII
NUMBER OF DROP-OUTS TO TOTAL ENROLLMENT BY SEX AND GRADE
\begin{tabular}{lllllllll}
\hline \hline
\end{tabular}


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\section*{TABLE XLIII}

DROP-OUTS BY SEX AND GRADE
\begin{tabular}{lcccc}
\hline \hline & \multicolumn{2}{c}{ Boys } \\
& Number Per Cent & Number Per Cent \\
Grade X & 15 & 12 & 16 & 12 \\
Grade XI & 13 & 10 & 12 & 9 \\
Grade XII & 19 & 15 & 21 & 15 \\
\cline { 2 - 5 } & & 47 & 37 & 49 \\
\hline \hline
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TABLE XLIV
NUMBER OF DROP-OUTS IN EACH GRADE TO TOTAL DROP-OUTS IN VARIOUS-SIZED SCHOOLS
\begin{tabular}{|c|c|c|c|c|c|c|}
\hline Grade & 1-39 & 40-99 & 100-200 & 300-399 & Transferees & Total \\
\hline \multicolumn{7}{|l|}{X} \\
\hline Total School Drop-Outs & 1 & 33 & 13 & 45 & 4 & 96 \\
\hline Grade Drop-Outs & 1 & 9 & 7 & 14 & - & 31 \\
\hline Per Cent & 100 & 28 & 54 & 31 & - & 32 \\
\hline \multicolumn{7}{|l|}{XI} \\
\hline Total School Drop-Outs & 1 & 33 & 13 & 45 & 4 & 96 \\
\hline Grade Drop-Outs & - & 12 & 3 & 8 & 2 & 25 \\
\hline Per Cent & - & 36 & 23 & 18 & 50 & 26 \\
\hline \multicolumn{7}{|l|}{XII} \\
\hline Total School Drop-Outs & 1 & 33 & 13 & 45 & 4 & 96 \\
\hline Grade Drop-Outs & - & 12 & 3 & 23 & 2 & 40 \\
\hline Per Cent & - & 36 & 23 & 51 & 50 & 42 \\
\hline
\end{tabular}

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TABLE XLV
NUMBER OF DROP-OUTS TO TOTAL NUMBER IN EACH PROGRAM
\begin{tabular}{|c|c|c|c|c|c|c|c|}
\hline Programs & & 1-39 & 40-99 & 100-200 & 300-399 & Transferees & Total \\
\hline \multicolumn{8}{|l|}{Matriculation} \\
\hline \multirow[t]{2}{*}{Boys -} & Total Enrollment & 2 & 35 & 15 & 42 & 4 & 98 \\
\hline & Drop-Outs & 1 & 5 & 4 & 19 & - & 29 \\
\hline \multirow[t]{3}{*}{Girls} & Per Cent & 50 & 14 & 27 & 45 & - & 29 \\
\hline & Total Enrollment & 2 & 34 & 13 & 36 & 5 & 90 \\
\hline & Drop-Outs & - & 11 & 1 & 7 & 2 & 21 \\
\hline & Per Cent & - & 33 & 7 & 19 & 40 & 23 \\
\hline \multicolumn{8}{|l|}{General} \\
\hline \multirow[t]{2}{*}{Boys -} & Total Enrollment & - & 16 & 3 & 9 & - & 28 \\
\hline & Drop-Outs & - & 10 & 3 & 5 & - & 18 \\
\hline \multirow[t]{4}{*}{Girls} & Per Cent & - & 62 & 100 & 55 & - & 64 \\
\hline & Total Enrollment & - & 13 & 9 & 23 & 2 & 47 \\
\hline & Drop-Outs & - & 7 & 5 & 14 & 2 & 28 \\
\hline & Per Cent & - & 54 & 55 & 61 & 100 & 59 \\
\hline
\end{tabular}

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cent boys in the general program.
In the largest school the ratio of drop-outs in the matriculation program to the drop-outs in the general program was approximately 1:2. The (40-99) and (100-200) categories had a ratio of \(1: 3\). It appears that the category with a broader course offering retained a greater proportion of its pupils in the general program.

Among boys, those who elect academic courses tend to remain at least until Grade XI. They drop-out in greater numbers in Grade XII. The girls in the academic program had a similar drop-out pattern. Similar findings, for the boys, were reported in the literature. \({ }^{2}\) This information is given in Table XLVI.

\section*{Ability}

Figure 9 is a graphical representation of Table XLVII. Of 58 pupils in the \((9,8,7)\) ability category, 3 pupils or 5 per cent were drop-outs as compared to 95 per cent who were non-drop-outs. As the ability level decreased the percentage of drop-outs at each level increased. Forty per cent of the pupils in the \((6,5,4)\) category and 61 per cent in the \((3,2,1)\) category were drop-outs. As mentioned in the literature, \({ }^{3}\) there appears
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\section*{FIGURE 9}

ABILITY OF DROP-OUTS AND NON-DROP-OUTS


TABLE XLVI
NUMBER OF DROP-OUTS BY GRADE, PROGRAM AND SEX
\begin{tabular}{ccccc}
\hline \hline & \multicolumn{2}{c}{ Matriculation } & \multicolumn{2}{c}{ General } \\
Grade & Boys & Girls & Boys & Girls \\
\hline X & 9 & 3 & 6 & 13 \\
XI & 5 & 4 & 8 & 8 \\
XII & 12 & 8 & 7 & 13 \\
\hline Totals & 26 & 15 & 21 & 34 \\
\hline \hline
\end{tabular}



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TABLE XLVII
NUMBER OF DROP-OUTS AND NON-DROP-OUTS BY ABILITY LEVEL AND ACHIEVEMENT ON THE GRADE IX EXAMINATIONS IN EACH SCHOOL SIZE
Achievement in Stanines
Drop-Outs

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TABLE XLVII (continued)
\begin{tabular}{ccccccc}
\hline & Drop-Outs & Non-Drop-Outs \\
Ability in \\
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\end{tabular}
to be a close relationship between ability and dropping out.

Figure 10 is another graphical representation of Table XLVII. This figure reveals that 33 per cent or onethird of the non-drop-outs had \((9,8,7)\) ability as compared to 3 per cent of the drop-outs. Similarly, 56 per cent of the non-drop-outs had \((6,5,4)\) ability and 11 per cent had \((3,2,1)\) ability as compared with 66 and 31 per cent, respectively, for the drop-outs.

Figure 10 also indicates that the (100-200) school category deviates most from the total population. It had twice as many non-drop-outs in the \((3,2,1)\) ability group as categories \((40-99)\) and \((300-399)\). This category also had a considerably lower percentage of its non-drop-outs in the \((9,8,7)\) group than the two other categories. The ratio was approximately 7:9.

\section*{Achievement on the Grade IX Final Examinations}

A comparison of achievement between drop-outs and non-drop-outs on the Grade IX examinations was made in hope of gaining some insight into whether or not the signs of dropping out were present as early as Grade IX.

In the \((9,8,7)\) ability group, all three drop-outs had achievement scores in the \((9,8,7)\) category, whereas 24 per cent of the non-drop-outs had achieved scores which were below stanines \((9,8,7)\).

In the \((6,5,4)\) ability group, very high proportions

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of drop-outs and non-drop-outs (91 and 90 per cent respectively) were in the \((6,5,4)\) achievement category. The lowest ability group showed more deviation. Approximately 70 per cent of the drop-outs and 50 per cent of the non-drop-outs had achievement scores in the lowest category. All the others scored in the \((6,5,4)\) category. On the basis of achievement according to ability there appeared to be little evidence on the Grade IX level to establish a criterion which would differentiate between the drop-outs and the non-drop-outs. However, since most students make their decisions on achievement only, this study corroborates the findings stated in the literature, \({ }^{4}\) that high achievement is associated with retention in school and low achievement with drop-out. Table XLVII reveals that 70 per cent of the \((3,2,1)\) achievement group, 26 per cent of the \((6,5,4)\) group and 8 per cent of the \((9,8,7)\) group dropped out of school.

Table XLVII also shows that there were comparatively few differences among the school categories in the proportions of pupils who dropped out of each achievement category.

Credits
Table XLVIII shows that there was a direct relationship between the number of credits earned and the drop-outs

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\({ }^{4}\) Supra, p. 22.
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TABLE XVIII
CREDITS OBTAINED BY DROP-OUTS AND NON-DROP-OUTS IN GRADES X, XI AND XII



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Number Per Cent


Drop-Outs
Number Per Cent
Credits




and non-drop-outs. There also appeared to be a relationship between the credits earned and the grade level for both the drop-outs and non-drop-outs.

In Grade \(X, 69\) per cent of all the pupils earned (35-39) credits. As might be expected, 56 per cent of the drop-outs as compared to 81 per cent of the non-drop-outs earned that many credits. There was a similar ratio between the drop-outs and the non-drop-outs when the two top credits categories were considered.

In Grade XI, there was a much bigger spread between the drop-outs and the non-drop-outs who had earned (35-39) credits. About one-half as many drop-outs as non-drop-outs earned credits in the top category. It should be noted however, that in Grade XI, the big difference between the drop-outs and non-drop-outs was only in the (35-39) category. There was close parallel in all other categories between the two groups.

The wide spread between the proportions of pupils in the drop-outs and the non-drop-outs who earned (35-39) or (30-34) credits continued in Grade XII. Only 2 per cent of the drop-outs and 59 per cent of the non-dropouts earned credits in the two top categories. It would appear that almost all the drop-outs found it difficult to cope with the province-wide examinations. The non-drop-outs also found that the competition on the provincewide examinations was more keen than on the school-wide

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or grade examinations.
The general trend, mentioned earlier, was similar in all the school categories with a few exceptions.

In Grade X the greatest deviation was in the (100-200) category. Fifty per cent of the drop-outs and 90 per cent of the non-drop-outs earned 35-39 credits. The difference between the two groups was decreased when the two top categories were considered. The proportions were 71:97 per cent respectively.

In Grade XI, the (100-200) category deviated again. No pupils in either group earned below 30 credits. All the other school categories showed a decline in the proportion of pupils in the two top categories and an increase in the lower categories in both the drop-out and non-drop-out groups.

At the Grade XII level, all the school categories had shown a pronounced increase in the proportions of the non-drop-outs who had earned below 30 credits. The 39 per cent in the (100-200) category was equalled by the (300-399) and surpassed by the (40-99) category which had 51 per cent of its non-drop-outs earn below 30 credits. This information is given in Tables XLIX, L, and LI.

Grade Point Averages
Table LII reveals that there is a pronounced difference between the grade point averages of the dropouts and the non-drop-outs. No drop-outs obtained an \(H\)

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TABLE XLIX
CREDITS OBTAINED BY DROP-OUTS AND NON-DROP-OUTS IN THE VARIOUS-SIZED SCHOOLS, IN GRADE X


TABLE XLIX (continued)
\begin{tabular}{|c|c|c|c|c|c|c|}
\hline \multirow[t]{2}{*}{Credits} & \multicolumn{2}{|l|}{Drop-Outs} & \multicolumn{2}{|l|}{Non-Drop-Outs} & \multicolumn{2}{|l|}{Total} \\
\hline & Number & Per Cent & Number & Per Cent & Number & Per Cent \\
\hline \multicolumn{7}{|l|}{School Size: (300-399)} \\
\hline 35-39 & 25 & 55 & 56 & 86 & 81 & 65 \\
\hline 30-34 & 7 & 15 & 6 & 9 & 13 & 12 \\
\hline 25-29 & 8 & 18 & 2 & 3 & 10 & 9 \\
\hline Under 25 & 5 & 12 & 1 & 2 & 6 & 6 \\
\hline Total & 45 & 100 & 65 & 100 & 110 & 100 \\
\hline \multicolumn{7}{|l|}{Transferees} \\
\hline 35-39 & 3 & 75 & 5 & 72 & 8 & 73 \\
\hline 30-34 & 1 & 25 & 1 & 14 & 2 & 18 \\
\hline 25-29 & - & - & - & - & - & - \\
\hline Under 25 & - & - & 1 & 14 & 1 & 9 \\
\hline Total & 4 & 100 & 7 & 100 & 11 & 100 \\
\hline
\end{tabular}


TABLE
CREDITS OBTAINED BY DROP-OUTS AND NON-DROP-OUTS IN THE VARIOUS-SIZED SCHOOLS, IN GRADE XI
\begin{tabular}{|c|c|c|c|c|c|c|}
\hline \multirow[t]{2}{*}{Credits} & \multicolumn{2}{|l|}{Drop-Outs} & \multicolumn{2}{|l|}{Non-Drop-Outs} & \multicolumn{2}{|l|}{Total} \\
\hline & Number & Per Cent & Number & Per Cent & Number & Per Cent \\
\hline \multicolumn{7}{|l|}{School Size: (40-99)} \\
\hline 35-39 & 5 & 21 & 47 & 72 & 52 & 58 \\
\hline 30-34 & 10 & 42 & 14 & 22 & 24 & 27 \\
\hline 25-29 & 3 & 12 & 3 & 5 & 6 & 7 \\
\hline Under 25 & 6 & 25 & 1 & 1 & 7 & 8 \\
\hline Total & 24 & 100 & 65 & 100 & 89 & 100 \\
\hline \multicolumn{7}{|l|}{School Size: (100-200)} \\
\hline 35-39 & 4 & 67 & 23 & 85 & 27 & 82 \\
\hline 30-34 & 2 & 33 & 4 & 15 & 6 & 18 \\
\hline 25-29 & - & - & - - & - & - & - \\
\hline Under 25 & - & - & - & - & - & - \\
\hline Total & 6 & 100 & 27 & 100 & 33 & 100 \\
\hline \multicolumn{7}{|l|}{School Size: (300-399)} \\
\hline 35-39 & 15 & 49 & 44 & 68 & 59 & 62 \\
\hline \[
30-34
\] & 9 & 29 & 12 & 18 & 21 & 22 \\
\hline 25-29 & 5 & 16 & 5 & 8 & 10 & 10 \\
\hline Under 25 & 2 & 6 & 4 & 6 & 6 & 6 \\
\hline Total & 31 & 100 & 65 & 100 & 96 & 100 \\
\hline \multicolumn{7}{|l|}{Transferees} \\
\hline 35-39 & - & - & 4 & 37 & 4 & 37 \\
\hline 30-34 & - & - & 2 & 18 & 2 & 18 \\
\hline 25-29 & - & - & 3 & 27 & 3 & 27 \\
\hline Under 25 & - & - & 2 & 18 & 2 & 18 \\
\hline Total & - & - & 11 & 100 & 11 & 100 \\
\hline
\end{tabular}



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TABLE LI
CREDITS OBTAINED BY DROP-OUTS AND NON-DROP-OUTS IN THE
VARIOUS-SIZED SCHOOLS, IN GRADE XII
\begin{tabular}{|c|c|c|c|c|c|c|}
\hline \multirow[t]{2}{*}{Credits} & \multicolumn{2}{|l|}{Drop-Outs} & \multicolumn{2}{|l|}{Non-Drop-Outs} & \multicolumn{2}{|l|}{Total} \\
\hline & Number & Per Cent & Number & Per Cent & Number & Per Cent \\
\hline \multicolumn{7}{|l|}{School Size: (40-99)} \\
\hline 35-39 & - & - & 8 & 13 & 8 & 11 \\
\hline 30-34 & 1 & 8 & 24 & 38 & 25 & 33 \\
\hline 25-29 & 4 & 33 & 13 & 21 & 17 & 23 \\
\hline Under 25 & 7 & 59 & 18 & 28 & 25 & 33 \\
\hline Total & 12 & 100 & 63 & 100 & 75 & 100 \\
\hline \multicolumn{7}{|l|}{School Size: (100-200)} \\
\hline 35-39 & - & - & 3 & 11 & 3 & 10 \\
\hline 30-34 & - & - & 13 & 48 & 13 & 43 \\
\hline 25-29 & 3 & 100 & 5 & 19 & 8 & 27 \\
\hline Under 25 & - & - & 6 & 22 & 6 & 20 \\
\hline Total & 3 & 100 & 27 & 100 & 30 & 100 \\
\hline \multicolumn{7}{|l|}{School Size: (300-399)} \\
\hline 35-39 & - & - & 9 & 14 & 9 & 10 \\
\hline 30-34 & - & - & 31 & 48 & 31 & 35 \\
\hline 25-29 & 9 & 39 & 10 & 15 & 19 & 22 \\
\hline Under 25 & 14 & 61 & 15 & 23 & 29 & 33 \\
\hline Total & 23 & 100 & 65 & 100 & 88 & 100 \\
\hline \multicolumn{7}{|l|}{Transferees} \\
\hline 35-39 & - & - & 3 & 33 & 3 & 27 \\
\hline 30-34 & - & - & 4 & 45 & 4 & 37 \\
\hline 25-29 & 2 & 100 & 1 & 11 & 3 & 27 \\
\hline Under 25 & - & - & 1 & 11 & 1 & 9 \\
\hline Total & 2 & 100 & 9 & 100 & 11 & 100 \\
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grade point average and only 4 of the 96 drop-outs got an A. The largest proportions of the drop-outs, at all grade levels, obtained a \(C\) grade point average. The proportions increased with each ascending grade level in the C category and decreased accordingly in the B category. The proportions of drop-outs in the \(C\) average category were \(46: 66: 72\) per cent for Grades \(X\), XI and XII respectively. In the B category, the respective proportions were 42:31:13 per cent.

Six non-drop-outs obtained \(H\) grade point averages in Grade X and again in Grade XI. More than one-quarter of the Grade \(X\) pupils and lesser proportions of the Grades XI's and XII's had A grade point averages. The highest and almost equal proportions of the non-drop-outs, in all the grades, obtained a B. The C category proportions increased with each ascending grade level. The ratio was 21:29:36 per cent for Grades X, XI and XII respectively. The trend, where the largest proportion of the drop-outs obtained a \(C\) grade point average and very few or no H's and A's as compared with the non-drop-outs who had the highest proportion of \(B\) averages and more than 25 per cent of A's and H's, was present in the (40-99) and the (100-200) school categories in Grade \(X\). In the (300399) category, approximately 53 per cent of the drop-outs obtained B grade point averages and more than one-third of the non-drop-outs had \(A^{\prime}\) 's and H's in addition to a high







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TABLE LII
GRADE POINT AVERAGES EARNED BY DROP-OUTS AND NON-DROP-OUTS

proportion of \(\mathrm{B}^{\prime}\) s. The Transferee category had 60 per cent of the drop-outs obtain \(B\) grade averages and all the non-drop-outs had \(A^{\prime}\) 's and B's. This information is given in Table LIII.

In Grades XI and XII very high proportions of the drop-outs obtained \(C\) grade point averages. In most school categories the proportions increased in the higher grades. The (100-200) category had very high proportions of C's in all the grades. The proportions were 77,83 and 75 per cent for Grades X, XI and XII respectively as compared to 46,58 and 59 per cent in the (40-99) and 38,68 and 79 per cent in the (300-399) categories.

Approximately one-half of the non-drop-outs earned B grade averages in Grade XI in all the school categories. In Grade XII, about one-third of the non-drop-outs earned B's and a slightly larger proportion of C's in the (100200) and the (300-399) categories. The (40-99) category, which was reported to have the highest proportion of the most able pupils, had more than half of its non-drop-outs obtain a B grade average on the Grade XII level. This information is given in Tables LIV and LV.

\section*{Reasons for Drop-Outs}

To this point the chapter on the drop-outs has been concerned with retention or drop-out and certain other factors; no attempt has been made to establish causal relationship. A knowledge of those factors which are

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GRADE POINT AVERAGES OF THE DROP-OUTS AND THE NON-DROP-OUTS IN THE VARIOUS-SIZED SCHOOLS, IN GRADE X
\begin{tabular}{|c|c|c|c|c|c|c|}
\hline \multirow[t]{2}{*}{Grade Point Averages} & \multicolumn{2}{|l|}{Drop-Outs} & \multicolumn{2}{|l|}{Non-Drop-Outs} & \multicolumn{2}{|l|}{Totals} \\
\hline & Number & Per Cent & Number & Per Cent & Number & Per Cent \\
\hline \multicolumn{7}{|l|}{School Size: (1-39)} \\
\hline (H) 5 & - & - & - & - & - & - \\
\hline (A) 4.9-4.0 & - & - & 1 & 25 & 1 & 25 \\
\hline (B) 3.9-3.0 & 1 & 100 & 2 & 75 & 3 & 75 \\
\hline (C) 2.9-2.0 & - & - & - & - & _ & - \\
\hline (D) 1.9-1.0 & - & - & - & - & - & - \\
\hline Totals & 1 & 100 & 3 & 100 & 4 & 100 \\
\hline \multicolumn{7}{|l|}{School Size: (40-99)} \\
\hline (H) 5 & - & - & - & - & - & - \\
\hline (A) 4.9-4.0 & 2 & 6 & 18 & 28 & 20 & 20 \\
\hline (B) 3.9-3.0 & 11 & 33 & 31 & 48 & 42 & 43 \\
\hline (C) 2.9-2.0 & 15 & 46 & 15 & 23 & 30 & 31 \\
\hline (D) 1.9-1.0 & 5 & 15 & 1 & 1 & 6 & 6 \\
\hline Totals & 33 & 100 & 65 & 100 & 98 & 100 \\
\hline \multicolumn{7}{|l|}{School Size: (100-200)} \\
\hline (H) 5 & - & - & - & - & - & - \\
\hline (A) 4.9-4.0 & - & - & 10 & 37 & 10 & 25 \\
\hline (B) 3.9-3.0 & 2 & 15 & 10 & 37 & 12 & 30 \\
\hline (C) 2.9-2.0 & 10 & 77 & 7 & 26 & 17 & 43 \\
\hline (D) 1.9-1.0 & 1 & 8 & - & - & 1 & 2 \\
\hline Totals & 13 & 100 & 27 & 100 & 40 & 100 \\
\hline
\end{tabular}

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TABLE LIII (continued)
\begin{tabular}{|c|c|c|c|c|c|c|}
\hline \multirow[t]{2}{*}{Grade Point Averages} & \multicolumn{2}{|l|}{Drop-Outs} & \multicolumn{2}{|l|}{Non-Drop-Outs} & \multicolumn{2}{|l|}{Totals} \\
\hline & Number & Per Cent & Number & Per Cent & Number & Per Cent \\
\hline \multicolumn{7}{|l|}{School Size: (300-399)} \\
\hline (H) 5 & - & - & 6 & 9 & 6 & 5 \\
\hline (A) 4.9-4.0 & - & - & 17 & 26 & 17 & 15 \\
\hline (B) 3.9-3.0 & 24 & 53 & 27 & 42 & 51 & 46 \\
\hline (C) 2.9-2.0 & 17 & 38 & 14 & 22 & 31 & 30 \\
\hline (D) 1.9-1.0 & 4 & 9 & 1 & 1 & 5 & 4 \\
\hline Totals & 45 & 100 & 65 & 100 & 110 & 100 \\
\hline \multicolumn{7}{|l|}{Transferees} \\
\hline (H) 5 & - & - & - & - & - & - \\
\hline (A) 4.9-4.0 & - & - & 2 & 33 & 2 & 18 \\
\hline (B) 3.9-3.0 & 3 & 60 & 4 & 67 & 7 & 64 \\
\hline (C) 2.9-2.0 & 2 & 40 & - & - & 2 & 18 \\
\hline (D) 1.9-1.0 & - & - & - & - & & - \\
\hline Totals & 5 & 100 & 6 & 100 & 11 & 100 \\
\hline
\end{tabular}
TABLE LIV
GRADE POINT AVERAGES OF THE DROP-OUTS AND THE NON-DROP-OUTS IN THE
VARIOUS-SIZED SCHOOLS, IN GRADE XI
\begin{tabular}{|c|c|c|c|c|c|c|}
\hline \multirow[t]{2}{*}{Grade Point Averages} & \multicolumn{2}{|l|}{Drop-Outs} & \multicolumn{2}{|l|}{Non-Drop-Outs} & \multicolumn{2}{|l|}{Totals} \\
\hline & Number & Per Cent & Number & Per Cent & Number & Per Cent \\
\hline \multicolumn{7}{|l|}{School Size: (40-99)} \\
\hline 5 & - & - & 1 & 1 & 1 & 1 \\
\hline 4.9-4.0 & - & - & 12 & 19 & 12 & 14 \\
\hline 3.9-3.0 & 9 & 38 & 28 & 43 & 37 & 42 \\
\hline 2.9-2.0 & 14 & 58 & 23 & 36 & 37 & 42 \\
\hline 1.9-1.0 & 1 & 4 & 1 & 1 & 1 & 1 \\
\hline Totals & 24 & 100 & 65 & 100 & 89 & 100 \\
\hline \multicolumn{7}{|l|}{School Size: (100-200)} \\
\hline 5 & - & - & - & - & - & - \\
\hline 4.9-4.0 & - & - & 7 & 26 & 7 & 21 \\
\hline 3.9-3.0 & 1 & 17 & 14 & 52 & 15 & 46 \\
\hline 2.9-2.0 & 5 & 83 & 6 & 22 & 11 & 33 \\
\hline 1.9-1.0 & - & - & - & - & - & - \\
\hline Totals & 6 & 100 & 27 & 100 & 33 & 100 \\
\hline
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TABLE LIV (continued)
\begin{tabular}{|c|c|c|c|c|c|c|}
\hline \multirow[t]{2}{*}{Grade Point Averages} & \multicolumn{2}{|l|}{Drop-Outs} & \multicolumn{2}{|l|}{Non-Drop-Outs} & \multicolumn{2}{|l|}{Totals} \\
\hline & Number & Per Cent & Number & Per Cent & Number & Per Cent \\
\hline \multicolumn{7}{|l|}{School Size: (300-399)} \\
\hline 5 & - & - & 4 & 6 & 4 & 4 \\
\hline 4.9-4.0 & - & - & 11 & 17 & 11 & 11 \\
\hline 3.9-3.0 & 9 & 29 & 32 & 49 & 41 & 43 \\
\hline 2.9-2.0 & 21 & 68 & 17 & 26 & 38 & 40 \\
\hline 1.9-1.0 & 1 & 3 & 1 & 2 & 2 & 2 \\
\hline Totals & 31 & 100 & 65 & 100 & 96 & 100 \\
\hline \multicolumn{7}{|l|}{Transferees} \\
\hline 5 & - & - & 1 & 10 & 1 & 7 \\
\hline 4.9-4.0 & - & - & 3 & 30 & 3 & 21 \\
\hline 3.9-3.0 & 1 & 25 & 2 & 20 & 3 & 21 \\
\hline 2.9-2.0 & 3 & 75 & 3 & 30 & 6 & 43 \\
\hline 1.9-1.0 & - & - & 1 & 10 & 1 & 7 \\
\hline Totals & 4 & 100 & 10 & 100 & 14 & 100 \\
\hline
\end{tabular}
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TABLE LV
GRADE POINT AVERAGES OF THE DROP-OUTS AND THE NON-DROP-OUTS IN THE VARIOUS-SIZED SCHOOLS, IN GRADE XII
\begin{tabular}{|c|c|c|c|c|c|c|}
\hline \multirow[t]{2}{*}{Grade Point Averages} & \multicolumn{2}{|l|}{Drop-Outs} & \multicolumn{2}{|l|}{Non-Drop-Outs} & \multicolumn{2}{|l|}{Totals} \\
\hline & Number & Per Cent & Number & Per Cent & Number & Per Cent \\
\hline \multicolumn{7}{|l|}{School Size: (40-99)} \\
\hline 5 & - & - & - & - & - & - \\
\hline 4.9-4.0 & - & - & 7 & 11 & 7 & 9 \\
\hline 3.9-3.0 & 4 & 33 & 32 & 51 & 36 & 48 \\
\hline 2.9-2.0 & 7 & 59 & 21 & 33 & 28 & 38 \\
\hline 1.9-1.0 & 1 & 8 & 3 & 5 & 4 & 5 \\
\hline Totals & 12 & 100 & 63 & 100 & 75 & 100 \\
\hline \multicolumn{7}{|l|}{School Size: (100-200)} \\
\hline 5 & - & - & - & - & - & - \\
\hline 4.9-4.0 & - & - & 5 & 19 & 5 & 17 \\
\hline 3.9-3.0 & - & - & 9 & 33 & 9 & 30 \\
\hline 2.9-2.0 & 2 & 75 & 12 & 45 & 14 & 47 \\
\hline 1.9-1.0 & 1 & 25 & 1 & 3 & 2 & 6 \\
\hline Totals & 3 & 100 & 27 & 100 & 30 & 100 \\
\hline
\end{tabular}

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TABLE LV (continued)
\begin{tabular}{|c|c|c|c|c|c|c|}
\hline \multirow[t]{2}{*}{\begin{tabular}{l}
Grade Point \\
Averages
\end{tabular}} & \multicolumn{2}{|l|}{Drop-Outs} & \multicolumn{2}{|l|}{Non-Drop-Outs} & \multicolumn{2}{|l|}{Totals} \\
\hline & Number & Per Cent & Number & Per Cent & Number & Per Cent \\
\hline \multicolumn{7}{|l|}{School Size: (300-399)} \\
\hline 5 & - & - & - & - & - & - \\
\hline 4.9-4.0 & 1 & 4 & 13 & 20 & 14 & 16 \\
\hline 3.9-3.0 & - & - & 23 & 35 & 23 & 26 \\
\hline 2.9-2.0 & 18 & 79 & 25 & 39 & 43 & 49 \\
\hline 1.9-1.0 & 4 & 17 & 4 & 6 & 8 & 9 \\
\hline Totals & 23 & 100 & 65 & 100 & 88 & 100 \\
\hline \multicolumn{7}{|l|}{Transferees} \\
\hline 5 & - & - & - & - & - & - \\
\hline 4.9-4.0 & - & - & 1 & 11 & 1 & 9 \\
\hline 3.9-3.0 & 1 & 50 & 7 & 78 & 8 & 73 \\
\hline 2.9-2.0 & 1 & 50 & 1 & 11 & 2 & 18 \\
\hline 1.9-1.0 & - & - & - & - & - & - \\
\hline Totals & 2 & 100 & 9 & 100 & 11 & 100 \\
\hline
\end{tabular}
closely associated with retention or drop-out may help to identify potential drop-outs and may throw some light on actual causes, but does not in itself establish causation.

The drop-outs supplied this information by selecting the three most important reasons why they left school from seven probable reasons. Each pupil was asked to choose the reasons that most applied to him and mark them in order of importance. Provision was made for other reasons. The information secured is tabulated in Table LVI.

The three most important reasons for leaving school in order of importance, were:
1. Dropped out because the desired courses were not offered, 82 per cent.
2. Dropped out because they preferred work to school, 82 per cent.
3. Dropped out for other reasons, 39 per cent.

Other important reasons for leaving school were that the work was too difficult, given by 32 per cent of the drop-outs, and that they left because of marriage plans given by 15 per cent of the group.

Factors relating to the school, then, were the most important ones for their leaving school, as far as the drop-outs themselves were concerned. Similar findings were reported in the literature. \({ }^{5}\) A large proportion of

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\({ }^{5}\) Supra, p. 21.
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to name three reasons.
Note:-
the drop-outs were not getting the courses they desired. They were probably getting little of any value from attending. The 82 per cent who said they preferred work to school implied in saying so that they had a dislike for school. The school had little attraction for them; consequently, they lost interest, and this resulted in low or failing grades. \({ }^{6}\) This failure of courses could have contributed further to the lack of interest. In addition to this 32 per cent found the work in school difficult. The resulting low grades and the lack of interest in this group, too, prompted them to leave school. Eventually, they left school to look for work.

It should be noted that 33 boys and 32 girls returned the completed questionnaires. Table LVII indicates that of the boys who returned the questionnaire, 88 per cent indicated that they could not get the desired courses as compared to 78 per cent of the girls. The most common reason for leaving school among the girls was preference for work rather than school. This reason was given by 84 per cent of the girls and 82 per cent of the boys.

As indicated earlier, a greater proportion of all the boys enrolled in the matriculation program. Could this be the reason that a greater proportion of boys than
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TABLE LVII
REASONS FOR DROPPING OUT OF SCHOOL BY SEX
\begin{tabular}{lccccc}
\hline \hline Reasons & \begin{tabular}{c} 
First \\
Choice
\end{tabular} & \begin{tabular}{l} 
Second \\
Choice
\end{tabular} & \begin{tabular}{l} 
Third \\
Choice
\end{tabular} & Number Per Cent \\
Boys & & & & \\
To find work & 2 & 1 & 1 & 4 & 12 \\
Illness & 1 & 1 & 1 & 3 & 9 \\
Desired courses not offered & 11 & 10 & 8 & 29 & 88 \\
Work too difficult & 4 & 4 & 4 & 12 & 36 \\
Preferred work to school & 9 & 12 & 6 & 27 & 82 \\
Marriage plans & 1 & - & - & 1 & 3
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TABLE LVII (continued)
Reasons
\begin{tabular}{lllc} 
& & \\
First & Second & Third & Total \\
Choice & Choice & Choice &
\end{tabular}
Girls
To find work
Illness
Desired courses not offered
Work too difficult
Preferred work to school
Marriage plans
Friends not at school
Other reasons

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of girls stated that they left school because they found the work too difficult? The proportions were 36 per cent for the boys and 28 per cent for the girls.

It should also be noted that 52 per cent of the boys and 34 per cent of the girls had other reasons than the ones listed for leaving school before graduation.

Of the 65 drop-outs who returned the completed questionnaire, 35 were enrolled in the matriculation and 30 in the general program. Table LVIII reveals that the reason that the desired courses were not offered was given by 95 per cent of the matriculation drop-outs as compared to 80 per cent of the general program drop-outs. Could it be that some pupils enrolled in the matriculation program because the general program did not meet their needs, and that a larger proportion of those who did enroll in the general program were dissatisfied with it later and, hence, dropped out?

As indicated earlier, a greater proportion of the lower ability pupils enrolled in the general rather than in the matriculation program. This may be one of the reasons why 33 per cent of the pupils in the general program as compared with 23 per cent in the matriculation program indicated that they found the work too difficult. A higher proportion of the matriculation drop-outs than general program drop-outs had reasons, other than the ones listed, for leaving school. The proportions were
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TABLE LVIII
REASONS FOR DROPPING OUT OF SCHOOL BY PROGRAM
\begin{tabular}{|c|c|c|c|c|c|c|c|c|c|c|}
\hline \multirow[t]{2}{*}{Reasons} & \multicolumn{5}{|l|}{Matriculation} & \multicolumn{5}{|l|}{General} \\
\hline & F.C. & S.C. & T.C. & & & F.C. & S.C. & T. C. & & \% \\
\hline To find work & 1 & 1 & 1 & 3 & 9 & - & - & - & - & - \\
\hline Illness & 1 & 1 & 1 & 3 & 9 & 1 & 1 & - & 2 & 7 \\
\hline Desired courses not offered & 16 & 8 & 9 & 33 & 95 & 7 & 11 & 5 & 24 & 80 \\
\hline Work too difficult & - & 3 & 5 & 8 & 23 & 3 & 5 & 2 & 10 & 33 \\
\hline Preferred work to school & 11 & 15 & 4 & 30 & 86 & 12 & 8 & 5 & 25 & 83 \\
\hline Marriage plans & 2 & 1 & 4 & 7 & 20 & 3 & - & - & 3 & 10 \\
\hline Friends not at school & - & 2 & 1 & 3 & 9 & - & - & 2 & 2 & 7 \\
\hline Other reasons & 4 & 3 & 8 & 15 & 43 & 4 & 1 & 5 & 10 & 33 \\
\hline Note:- F.C. - First Choice The numbers do not & \[
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43:33 per cent respectively.
Table LIX shows that in all the schools the proportion of drop-outs who selected factors relating to the school as the most important ones for their dropping out, paralleled each other with one exception. The exception was the (100-200) school category where 100 per cent of the drop-outs said they preferred work to school as compared with 74 per cent in the ( \(40-99\) ) and 81 per cent in the (300-399) categories.

The (100-200) school category also deviated from the others in the proportion of pupils who said they had other reasons than the ones listed, for dropping out of school. The proportions were 18 per cent in the (100-200) category, 47 per cent in the (40-99) and 41 per cent for the (300-399) categories.

What the Schools Could Have Done to Encourage Pupils to Stay at School

This was another attempt to establish what the drop-outs felt the school was lacking most. A knowledge of those factors may provide some direction as to the steps the school should take to reduce the number of drop-outs.

The drop-outs supplied this information by selecting two of the most important things the school could have done to encourage them to remain at school until graduation. Provision was also made for an indication that there was nothing the school could have done. The information


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TABLE LIX

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TABLE LIX (continued)
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secured is tabulated in Table LX.
The two most important things the schools could have done to encourage the pupils to continue their education until graduation in order of importance, were:
1. To provide a wider range of courses, 77 per cent.
2. To provide counsellors with whom one might discuss his problems, 54 per cent.

Another important thing the school could have done, according to the drop-outs, was to make studies more interesting, given by 51 per cent.

Factors relating to the drop-outs' programs further suggest that a large proportion of those pupils were not getting the courses desired and consequently this resulted in low interest. Table LX shows that 88 per cent of boys and 66 per cent of girls said that the schools should provide a wider range of courses and another 56 and 45 per cent, respectively, found the studies uninteresting.

Almost equal proportions of boys and of girls indicated a need for guidance counsellors with whom to discuss problems.

The literature also reported that intensive guidance service definitely reduces early school leaving in high school. \({ }^{7}\)

The highest proportion of the pupils who felt a need
\({ }^{7}\) Supra, p. 24.









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TAble LX
things the school could have done to encourage the
Boys
\begin{tabular}{|c|c|c|c|c|c|c|c|c|}
\hline \multirow[t]{2}{*}{Things the School Could Have Done} & \multirow[t]{2}{*}{F.C.} & \multicolumn{3}{|l|}{Boys} & \multicolumn{4}{|l|}{Girls} \\
\hline & & S.C. & & & F.C. & S.C. & To & \% \\
\hline Provide counsellors & 5 & 13 & 18 & 54 & 11 & 6 & 17 & 53 \\
\hline Wider range of courses & 23 & 6 & 29 & 88 & 12 & 9 & 21 & 66 \\
\hline Better sports program & - & 1 & 1 & 3 & 1 & 2 & 3 & 6 \\
\hline More interesting studies & 4 & 11 & 15 & 45 & 5 & 13 & 18 & 56 \\
\hline More music, drama, art & - & - & - & & - & 1 & 1 & 3 \\
\hline Nothing & 1 & - & 1 & 3 & 3 & 4 & 7 & 22 \\
\hline \multicolumn{9}{|l|}{Note:- F.C. - First Choice; S.C. - Second Choice.} \\
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\end{tabular}

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for a counsellor was in the (300-399) school category where the proportion was 59 per cent as compared with 53 per cent and 45 per cent in the \((40-99)\) and (100-200) categories respectively. This information is given in Table LXI.

The Size of High School the Drop-Outs Would Attend
As mentioned earlier, 77 per cent of the drop-outs said that a wider range of courses could have encouraged them to stay at school but Table LXII shows that only 41 per cent would attend a larger school, if they were to go to school again. The difference in these proportions may be due to a lack of realization that a wider range of courses is possible only in a larger school or the fact that a larger school would not provide them with the same sense of security that a smaller one did.

Summary
More than one-third of the 1961 Grade X class dropped out of school during the following three year period. Almost equal proportions of the boys and of the girls dropped out of school. The (40-99) school category retained the greatest proportion of the boys. Grade XII had the highest proportion of drop-outs and Grade XI had the lowest proportion. More than one-half of the dropouts in the (100-200) category left school in Grade \(X\). In the (300-399) category more than 50 per cent of the dropouts left school in Grade XII.
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TABLE LXI
THINGS THE SCHOOL COULD HAVE DONE TO ENCOURAGE THE PUPILS
STAY AT SCHOOL, BY SCHOOL SIZE
\begin{tabular}{|c|c|c|c|c|c|c|c|c|c|c|}
\hline \multirow[t]{2}{*}{Things the School Could Have Done} & \multicolumn{2}{|l|}{40-99} & \multicolumn{2}{|l|}{100-200} & \multicolumn{2}{|l|}{300-399} & \multicolumn{2}{|l|}{Transferees} & \multicolumn{2}{|l|}{Total} \\
\hline & F.C. & S.C. & F.C & S.C. & F.C. & S.C. & F.C. & S.C. & N & \% \\
\hline Provide counsellors & 3 & 7 & 3 & 2 & 10 & 9 & - & 1 & 35 & 54 \\
\hline Wider range of courses & 11 & 4 & 6 & 3 & 16 & 8 & 2 & - & 50 & 77 \\
\hline Better sports programs & 1 & - & - & - & - & 3 & - & - & 4 & 6 \\
\hline More interesting studies & 2 & 5 & 1 & 5 & 6 & 14 & - & - & 33 & 51 \\
\hline More music, drama, art & - & - & - & - & - & - & - & 1 & 1 & 1 \\
\hline Nothing & 2 & 3 & 1 & 1 & - & - & 1 & 1 & 9 & 14 \\
\hline
\end{tabular}

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Note: -
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\section*{TABLE LXII \\ THE SIZE OF HIGH SCHOOL THE DROP-OUTS WOULD ATTEND, IF THEY WERE TO GO TO SCHOOL AGAIN}
\begin{tabular}{lcc}
\hline \hline School Size & Same Size & Larger Size \\
\hline \(40-99\) & 8 & 9 \\
\(100-200\) & 5 & 7 \\
\(300-399\) & 14 & 11 \\
Transferees & 3 & - \\
\hline Totals & 30 & 27 \\
\hline \hline
\end{tabular}

Note:- The numbers do not add up to 65 since eight of the pupils did not respond to the question.
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Almost two and one-half times as many general program as matriculation pupils dropped out of school. Proportionally more boys than girls dropped out of the matriculation program. The reverse was true in the general program. School categories with broader course offerings retained a greater proportion of their general program pupils.

There appeared to be a close relationship between ability and drop-outs. The proportion of the drop-outs increased, in a 1:8:12 ratio, with the decrease in ability.

On the basis of achievement according to ability, there appeared to be little evidence on the Grade IX level to predict potential drop-outs. However, in considering achievement only, the majority of the drop-outs were in the low achievement categories.

Lower proportions of the drop-outs than of the non-drop-outs earned credits in the top categories in all the grades. The difference in proportions was greatest in Grade XII. School category (100-200) had the highest proportion of its pupils earn credits in the two top categories in Grade \(X\) and \(X I\). Its record was surpassed, in Grade XII, by the (40-99) category.

A large majority of the drop-outs obtained a \(C\) grade point average in all grades. The proportions increased with each grade. The non-drop-outs had a predominance of B averages. The (100-200) school category which had the



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highest proportion of least able pupils also had the highest proportion of \(C\) grade point averages at all grade levels. The school category with the highest proportion of most able pupils had grade point averages commensurate with pupil ability, particularly in Grade XII. There was a close relationship between lack of achievement and dropouts.

The factors relating to the school were the most important ones for the pupils leaving school.

A wider range of courses and the availability of a counsellor were, according to the drop-outs, the two most important things the school could have done to encourage them to stay.



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\section*{CHAPTER VI}

\section*{SUMMARY, FINDINGS AND IMPLICATIONS}

The major purpose of this study was to compile information as to the factors relating to the academic careers of the students of varying ability in the Lacombe County high schools from 1961-1964. This was accomplished by considering the progress of the pupils in the different programs and the various school categories. Other purposes were:
(1) To determine the seriousness of the drop-out problem in the two programs, and in the various ability and school size categories.
(2) To examine some of the chief differences between the drop-outs and the non-drop-outs.

This chapter summarizes the procedure followed in carrying out the study, lists the major findings, and suggests a number of measures implied by the findings which, it is believed, if acted upon would provide more satisfactory educational experiences for the students and lower the drop-out rate for these and other Alberta schools.
I. SUMMARY OF PROCEDURE

Chapter I set forth the problem, its background, the need for and delimitations of, the study. The various

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sources of data used in the study were also given, and certain terms which were employed throughout the report were defined.

In Chapter II, the literature on programs of study and pupil ability, on size of school, programs and dropouts was studied. This was done with emphasis in four main areas: (1) the type of programs the pupils of various abilities pursue with success in American and Canadian schools; (2) the size of school and pupil retention; (3) the major reasons for students withdrawing from school as found by people who have done extensive research in the field; and (4) the solutions put forward by these people as a result of their studies to reduce school drop-out rate.

Chapter III dealt with the method in which the data for the study was collected and analyzed. From the records at the Department of Education, the names and the records of the June, 1961, Grade IX class, in the County of Lacombe were secured. In all, 288 pupils were listed, and the record cards of 285 were on file in the Department of Education. Twenty-two students whose names appeared on the Grade IX summaries did not register in Grade \(X\) in any Alberta high school. The total population in the study was 263. The names of the high schools attended by the 263 pupils were obtained from the individual record cards at the Department of Education and categorized according

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to enrollment.
To supplement the information on the students who left school before graduation, a questionnaire was constructed and sent to each of the 96 drop-outs in the study. Of this number eight questionnaires were not received by the addressees. Of the 88 possible returns, 65 of the drop-outs completed and returned the questionnaire. The data supplied in the questionnaire were presented in Chapter V.

\section*{II. MAJOR FINDINGS}

The major findings of this study are summarized and discussed below under ten headings. These findings are based on the information received from the records in the Department of Education, and the 65 drop-outs who returned the questionnaires.

Ability and Achievement as Measured by Grade IX Examinations
Approximately 22 per cent of the pupils in the study were in the \((9,8,7)\) ability category, 59 per cent in the \((6,5,4)\) and 19 per cent in the \((3,2,1)\) categories. School category (40-99) had the greatest proportion of its pupils in the \((9,8,7)\) and the \((6,5,4)\) categories and the smallest proportion in category (3,2,1). The reverse was true for the (100-200) school category. There were more girls than boys in the \((9,8,7)\) and the \((3,2,1)\) ability categories.
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Seventy-six per cent of the \((9,8,7)\) ability group, 90 per cent of the \((6,5,4)\) and 61 per cent of the \((3,2,1)\) groups ranked in corresponding achievement groups. The various school categories paralleled the total population in the study. A greater proportion of boys than of girls was found to be ranked low in achievement, in comparison to their abilities.

\section*{Program}

Many more pupils enrolled in the matriculation than the general program in all three grades. The ratio of matriculation to general program was approximately 2.5:1 in Grade \(X\) and 2:1 in Grades XI and XII. More boys than girls enrolled in the matriculation program at all grade levels. The reverse was true in the general program. The various school categories paralleled each other closely in the proportions of the pupils in each program in Grades \(X\) and XI. In Grade XII, the \((40-99)\) category had the lowest proportion of its pupils in the matriculation program and the (300-399) category had the highest, proportional, matriculation enrollment. Many more boys than girls in the (100-200) and the (300-399) categories showed a preference for the matriculation program. Almost all the \((9,8,7)\) ability pupils enrolled in the college preparatory program. As the ability decreased, the proportions enrolled in the college preparatory program also decreased. Almost threequarters of the \((6,5,4)\) and more than one-third of the

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(3,2,1) ability groups also enrolled in this program. More boys than girls in all ability levels enrolled in the matriculation program.

Seventy per cent of the matriculation and 44 per cent of the general program pupils remained in their original programs for three years. The largest school had the best holding power in both programs. Almost all the pupils in the \((9,8,7)\) ability were retained by all the school categories. The proportions of the pupils in the original program decreased with the decrease of ability.

At the end of three years 23 per cent of the pupils graduated with a Senior Matriculation Diploma and 17 per cent with a High School Diploma. More girls than boys were awarded diplomas. The second largest proportion of Senior Matriculation Diplomas and the smallest proportion of High School Diplomas were in the largest school. There was a high correlation between ability level and qualification for a Senior Matriculation Diploma.

Sixty per cent of the unsuccessful Senior Matriculation pupils returned to school for the fourth year. A greater proportion of these pupils were boys in all school categories. High proportions of all ability categories were amongst the returnees.

\section*{Achievement}

Seventy per cent of the Grade \(X\) pupils and 55 per cent of the Grade XI pupils earned (35-39) credits. In








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Grade XII, where many pupils needed only (30-34) credits, there were only 12 per cent of the pupils in the (35-39) category. More than one-half of the pupils in Grade XII earned below 30 credits. There was a higher proportion of the matriculation than the general program pupils in the (35-39) credits range. The proportion of pupils in this range decreased with the ability. In Grade XII, 93 per cent of the \((9,8,7)\) ability group, 38 per cent in the \((6,5,4)\) and 16 per cent in the \((3,2,1)\) groups earned (3039) credits. There was a close parallel amongst the various school sizes in the number of credits earned.

The largest proportion of the Grade X pupils obtained a B grade point average. The Grade XI's and XII's obtained C averages in greater proportions. The pupils in the matriculation program scored higher grade point averages in greater proportions than the general program pupils. The grade point average curve for the \((9,8,7)\) ability category was skewed to the right, but the \((6,5,4)\) and \((3,2,1)\) groups formed curves skewed to the left. It appears that the largest school was most consistent in the proportion of students in the various grade point average categories at all grade levels.

The number of courses failed per pupil in Grades X , XI and XII were in a \(1: 2: 3\) ratio respectively. There were more failures in the matriculation than the general program in all grades. The ratio was 2:1 in Grades X and XI and























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4:1 in Grade XII. The number of failures increased with a decrease in ability. In Grade \(X\) the ratio was 1:2:3 for the \((9,8,7),(6,5,4)\) and \((3,2,1)\) ability groups. In Grades XI and XII the ratios for the respective ability category and grade were \(1: 3: 3\) and \(1: 4: 4\). Greater differences in the ratios appeared when ability and program were considered. In Grade \(X\), matriculation, the failure rates were 1:2:6 for the \((9,8,7),(6,5,4)\) and \((3,2,1)\) ability groups. In Grade XI and XII, the ratios were approximately 1:3:8 and 1:6:9 for the respective ability groups. In the general program greater proportions of \((6,5,4)\) than of (3, 2,1) ability groups failed in Grades \(X\) and XI. The proportions were 2:1 and 8:1 respectively. In Grade XII, the lowest ability category had the largest. number of failures per pupil. The highest failure rates were in the (100-200) school category and the lowest ones in the (300-399) category.

School Size
School category (40-99) had the highest proportion of the \((9,8,7)\) ability pupils and the lowest proportion of the ( \(3,2,1\) ) pupils. The reverse was true for the (100-200) category. The proportions of the highest and the lowest ability pupils in the \((300-399)\) category approximated the average of the two smaller school categories. All the school categories had almost equal proportions of the (6,5,4) ability pupils.





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The various school categories paralleled each other closely in the proportions of pupils each one enrolled in the matriculation and the general program at the Grade \(X\) and XI level. In Grade XII, the (40-99) category had the lowest proportion of the matriculations pupils and the (300-399) category had the highest proportion. Greater proportions of boys enrolled in the matriculation program in the (300-399) and the (100-200) categories than the (40-99).

The pupils who remained in the same program for three years did so in the greatest proportion in the (300399) category.

At the end of three years, the largest proportions of the pupils who qualified for the Senior Matriculation and the High School Diplomas were in the (100-200) school category. The lowest proportion of the matriculants was in the (40-99) category and the lowest proportion qualifying for the High School Diploma was in the largest school.

On the basis of the number of credits earned in Grade XII, it would appear that school categories (40-99) and (100-200) over-rated their students in Grades \(X\) and XI. Grade point averages also bear out this fact, particularly in the matriculation program in the \((9,8,7)\) ability group and the general program in the \((6,5,4)\) ability group. The number of courses failed per pupil was

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still another way of determining achievement. The highest failure rate in Grades X, XI and XII was in the (100-200) category and the lowest rate was in the (300-399).

The students in the small high schools tended to drop-out of school in lower grades than the students in the larger schools. More than fifty per cent of the dropouts left school in Grade \(X\), in the (100-200) category and in Grade XII, in the (300-399).

These facts indicate that the (40-99) school category which had the highest proportion of the most able pupils and the lowest proportion of the least able ones did not have the best holding power, nor the highest proportion of its students graduate with either type of diploma. Its failure rate was not the lowest. At the Grade XII level, the pupils in this category, on the whole, earned fewer credits than the pupils in the larger schools. The largest school, which had average ability pupils and the highest proportion of its pupils in the matriculation program had the best holding power and the lowest failure rate. It also had a larger proportion of its pupils earn a higher number of credits in Grade XII and a greater proportion of diplomas than the smaller schools.

\section*{The Drop-Out Problem}

During the three year period, 96 of the 263 pupils dropped out of school. This was 36 per cent of the total 1961 enrollment in Grade X. This fact attests to the








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seriousness of the problem.
Of the 96 drop-outs 47 were boys and 49 were girls. Only the (40-99) school category had fewer boys than girls drop-out of school.

Twelve per cent of the total population in the study dropped out in Grade \(X, 9\) per cent in Grade XI and 15 per cent in Grade XII. Of the 96 students who dropped out, 32 per cent did so during the Grade \(X\) year, 22 per cent during the Grade XI year, and 42 per cent during the first Grade XII year. School category (100-200) had more than one-half of its total drop-outs leave school in Grade X. The largest school retained more than one-half of its drop-outs for three years.

\section*{Ability and Programs of Drop-Outs}

As a group, the drop-outs had lower ability than the non-drop-outs. Three per cent of the drop-outs were in the \((9,8,7)\) ability category, 66 per cent in the \((6,5,4)\) category and 31 per cent in the \((3,2,1)\) category, whereas 33 per cent of those pupils who stayed in school were in the \((9,8,7)\) ability category, 56 per cent in the \((6,5,4)\) and only 11 per cent in the \((3,2,1)\) category. These facts indicate that many pupils who dropped out of school had a comparatively limited academic potential, and this undoubtedly had some bearing on their dropping out. However, almost two-thirds of the drop-outs were in the same ability group as more than one-half of the non-drop-outs.






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On the basis of their ability category, many drop-outs had the mental ability to finish high school, while still others were capable of going on at least another grade. In spite of this, they left school.

An important observation was that at the Grade IX level, there were no differences in the achievement of the drop-outs and the non-drop-outs who were in the \((9,8,7)\) and \((6,5,4)\) ability categories. Why, then, was there a big difference in the achievement in the high school? The drop-outs who were enrolled in almost equal proportions in the matriculation and the general programs obviously were not satisfied with their programs. In some schools the pupils were forced to enroll in the courses offered. These were not necessarily the courses of their choice. In all the schools the absence of guidance counsellors to help the pupils in their choices of courses and also show interest in them when they, perhaps, needed the interest and help most may have contributed to the incidence of drop-out.

Achievement of Drop-Outs
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\text { Fifty-six per cent of the drop-outs earned }(35-39)
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credits in Grade \(X ; 81\) per cent of the non-drop-outs earned a similar number of credits. In Grade XI, there was no difference between the two groups when the two top categories were considered. In Grade XII, however, only 2 per cent of the drop-outs earned (30-39) credits as


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compared with 59 per cent of the non-drop-outs.
A large majority of the drop-outs obtained C grade point averages. The proportions in the lower categories increased with each ascending grade level. The non-dropouts had a predominance of \(B\) averages and a larger proportion of A's and H's than C's and D's. The proportions in the higher categories decreased as the pupils progressed through school. There appeared to be a direct relationship, then, between the incidence of low grade point averages and credits which meant failure in many cases and the rate of dropping out of school. It follows that if the failure rate or low achievement can be reduced, the number of drop-outs will, in all probability, be lowered. The failure rate will be kept to a minimum if the pupils are enrolled in programs which are meaningful to them, and if the pupil load is adjusted to his ability. Highlyqualified teachers and good teaching practices will also help to keep failure rate at a minimum. According to one educator, basic attitudes, habits and skills developed in the elementary grades probably have more effect on the student's desire and ability to graduate from high school than the quality of instruction at the secondary level. \({ }^{1}\)

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\({ }^{1}\) J. E. Cheal, Investment in Canadian Youth (Toronto: The McMillan Company of Canada Limited, 1963), pp. 58-61.
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\section*{Curriculum}

Eighty-two per cent of the drop-outs stated that they dropped out of school because the desired courses were not offered. Since almost equal proportions of the drop-outs were in the matriculation and the general program, the indication was that pupils in both programs felt that they did not get the desired courses. How could the pupils in the academic program not have the desired courses? Not all the pupils go to university, in actual fact, only a very small proportion of the Alberta students go to university. The program needs to be more diversified in order to attract and meet the needs of the majority of the pupils whom it serves. Many pupils in the general program, even in the largest school, also felt dissatisfied with the course offerings. Many courses in the general program are intended for students who prefer business education. Not all the general program students show a preference for these courses. Diversification of the general program can have a direct bearing on the potential drop-out's attitude. It follows that if the courses taken are likely to have significance in later life, there is less tendency for the students to waste their time or have a negative attitude toward school work.

\section*{Lack of Interest}

Most of the drop-outs left school for one or more of the three stated reasons: (1) the desired courses were

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not offered; (2) they preferred work to school; (3) the work was too difficult. All three reasons pointed to the fact that they did not like, and were not interested in, the program the school was offering. This would indicate that if the school is going to increase its holding power over these pupils, then the whole curriculum must be reexamined, and secondly, the organization of the various school districts must be studied.

\section*{Counsellors}

Fifty-four per cent of the drop-outs expressed the need for a guidance counsellor with whom to discuss their problems. Girls and boys in all the school categories expressed this need. This would indicate that every school must have a counsellor or teachers with training in counselling so that the students may have the assistance of trained personnel in making wise school program and vocational choices, and in resolving personal and emotional problems. Above all, the counsellor or teacher has to show more interest in, and concern over, the potential drop-out if the school is to increase its holding power.

\section*{III. IMPLICATIONS}

The findings listed have certain implications for the rural high schools in Alberta. It is suggested that certain procedures might be followed in an attempt to
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provide a curriculum to meet the needs of all Alberta youth, and to lower the drop-out rate from the schools. These measures apply, in some cases, not only to dropouts, but to all pupils in the school, while others pertain solely to potential drop-outs.
1. The school should attempt to acquire, by some consistent and regular procedure, as much knowledge as possible about the capabilities of each pupil, and thus be in a position to keep the failure rate to a minimum by encouraging the pupils to enroll in a program where the work will challenge but not overtax these capabilities. The procedure used to gather this information might consist, at least in part, of ability and achievement tests administered at regular intervals as the pupil progresses through the school.
2. To accommodate the pupils who are not academically inclined and who are not interested in business education, the school should provide a more diversified general program. In order that such a program be feasible, the school boards need to co-operate and bring the schools together to form larger educational units.
3. To deal with the problem of failure, it is recommended that the school boards hire well-qualified teachers. The teaching staff should be sufficiently large to permit specialization.
4. To facilitate good teaching and to help keep




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failures to a minimum, school administrators should make every effort to ensure that the teacher is placed in the area of school work where he is most competent.
5. The three most important reasons the drop-outs gave for leaving school were all centred in one fact: they were dissatisfied with what the school had to offer them. Consequently, if the school hopes to prevent such people from leaving, it must, among other things, either change the content of the courses being offered, or re-examine drastically the way in which these courses are taught (both measures may be necessary).
6. The school should provide counsellors who can help in the detection of potential drop-outs and help the pupils to overcome their difficulties and make a successful adjustment to school life.
7. The school, should keep on hand, and with the assistance of the counsellor encourage the pupils to use, a supply of literature regarding employment opportunities, especially as they exist in Alberta. This literature could include such information as number and type of jobs available, educational and other qualifications necessary for such work, locations of jobs, salaries and other pertinent aspects.
8. Teachers and administrators should co-operate in the development of a grading system of teacher-made and teacher-scored examinations at the Grade \(X\) and Grade XI






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levels to keep over-grading down to a minimum. This grading system needs to be planned in such a manner that the Grade \(X\) and \(X I\) pupils will be encouraged to go on, and the Grade XII pupils will not be disillusioned and frustrated to the point that they will drop-out of school.

\section*{IV. TOPICS FOR INVESTIGATION}

A number of areas for further study arose in the mind of the writer during the course of the investigation for this report. Research in these fields would, it is believed, yield much valuable information concerning programs of pupils of varying abilities, and the drop-out problem in Alberta high schools.
1. A study could be done of the \((6,5,4)\) ability group to determine the stanine score necessary before the student could be reasonably sure that success in the matriculation program is within his reach. A large number of pupils in the \((6,5,4)\) ability group who are pursuing various programs in several Alberta schools could comprise the sample for the study.
2. A study might be done within the province of Alberta to determine areas of pupil satisfaction and dissatisfaction with the school. A large sample from various-sized schools and different parts of the province could be used.
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3. A study might be done of drop-outs and non-dropouts to determine the need for counsellors and their effectiveness, as seen by the students. Schools with well established counselling services and schools with no counselling services could be selected.




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A P P E N D I X
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14508 - 106A Avenue, Edmonton, Alberta. June 15, 1965.

Dear

As a part of the University of Alberta's study of small high schools, I am conducting an investigation of the schools and pupils in the County of Lacombe. I am particularly interested in the people who have left school before obtaining the high school diploma.

The enclosed questionnaire will provide me with information which will be used for the betterment of education of all students in Alberta.

Please check off an answer to each question in pen or pencil. All the information will be treated as confidential.

I am enclosing a stamped envelope with my name and address on it.

I will be looking forward to getting your questionnaire back within the next few days.

Thank you for doing this for me.
Yours truly,

Kay Gavinchuk
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1. Name
2. How old were you when you left school? Check one.
(1) 14 years ()
(2) 15 years ( )
(3) 16 years
(4) 17 years or more ().
3. Are you single ( ) married ( ) . Check one.
4. What grade did you last attend? Check one.
(1) Grade 10 ( )
(2) Grade 11
( )
(3) Grade 12 ().
5. What was the most important reason why you left high school. Check one.
(1) I left to find work to help support my family.
(2) I had to leave because of illness. ( )
(3) I felt I was not getting the type of courses I wanted.
(4) The school work was too hard. ( )
(5) I preferred work to school. ( )
(6) I left because of marriage plans. ( )
(7) My friends were not going to school. ( )
(8) Other reasons. ()
6. Of the reasons listed in question 5, what was the second most important reason why you left school? Put the number here. ( )
7. Of the reasons listed in question 5, what was the third most important reason why you left school? Put the number here. ( )
8. Have you taken any training since you left High School? Check one.
Yes ( ) No ( )
9. If your answer is 'yes' to number 8, check one.
(1) Business course ()
(2) Vocational course
(3) Nursing Aids ( )
(4) High School courses in Night School ( )
10. What is your present occupation? Check one.
(1) Farming ( )
(2) Office and Clerical ( )


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(3) Sales ( )
(4) Trades and Apprenticeship ( )
(5) Factory ( )
(6) Transportation and Communication ( )
(7) Labor ( )
(8) Miscellaneous ( )
(9) Unemployed ( )
11. What could the school have done to encourage you to stay in school. Check one.
(1) Provide counsellors with whom one may discuss his problems. ( )
(2) Provide a wider range of courses from which to choose. ( )
(3) Provide a better sports program. ( )
(4) Make studies more interesting. ( )
(5) Provide more student activities in the form of music, drama and art. ( )
(6) Nothing. ( )
12. Of the items listed in number 11 , what would be the second most important thing the school could have done to encourage you to stay? Put the number here. ( )
13. Knowing what you do now, what would you do if you were just beginning high school? Check one.
(1) I would go to the same high school that I did before. ( )
(2) I would go to a larger high school. ( )
14. Also, knowing what you do now, what would you do if you were just beginning high school? Check one.
(1) I would finish high school. ( )
(2) I would quit school as I did before.


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\(14508-106\) A Avenue,
Edmonton, Alberta.
June 30,1965 .

Dear
I am terribly sorry to bother you again about the questionnaire which \(I\) sent to you a short time ago. I know you are probably busy, and have not had a chance to fill it in yet. Or, perhaps you have mailed it and I have not, as yet, received it. In any case, I would certainly appreciate it if you would take a few minutes tonight and do this for me if you have not already done so. As I told you in my first letter, \(I\) cannot carry out my study until I get your questionnaire back. You can understand, then, how very important this is to me.

I want to thank you for helping me in this way. I feel sure you will not let me down, and I will be looking forward to hearing from you in the next day or so.

Yours truly,
K. Gavinchuk

\(14508-106\) A Avenue,
Edmonton, Alberta.
July 13, 1965 .

\section*{Dear}

I hope you will forgive me for sending you the second reminder regarding the questionnaire which \(I\) sent to you on June \(15^{\text {th }}\). Please take a few minutes tonight and do this for me if you have not already done so. We, at the University of Alberta, are anxiously waiting for your reply.

Should you have misplaced the questionnaire, please let me know and I shall gladly send you another one.

I want to thank you, for your co-operation.

Yours truly,
K. Gavinchuk



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