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AN ANALYSIS OF GENERAL AND ACADEMIC HIGH SCHOOL STUDENTS IN NEWFOUNDLAND ON FAMILY BACKGROUND, AREA OF RESIDENCE, SCHOOL SIZE AND SCHOOL TYPE FACTORS

CENTRE FOR NEWFOUNDLAND STUDIES

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AN ANALYSIS OF GENERAL AND ACADEMIC HIGH SCHOOL STUDENTS IN NEWFOUNDLAND ON FAMILY BACKGROUND, AREA OF RESIDENCE, SCHOOL SIZE AND SCHOOL TYPE FACTORS

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by

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ABSTRACT

The purpose of this study was to compare Grade Eleven students enrolled in the Academic (Matriculation) Program in Newfoundland high schools with students enrolled in the General Program. The students were compared on socio-economic background, community and school size and type factors. It was felt that this research would give an indication of the influence of these factors on the program of study in which a student is enrolled.

The information for this study was obtained from the results of a questionnaire sent to all students enrolled in Grade Eleven in the Province of Newfoundland. The questionnaire was part of a study being conducted by Memorial University on the sudden drop in university enrollment which occured in 1973. The population for the study was all those students who returned usable responses to the Career Decisions of Newfoundland Youth questionnaire. Using the selected variables, a computer program gave descriptive statistics for the Academic and General Groups.

When the results from the research instrument were analyzed it was found that with the exception of sex, the Academic and General Students differed significantly with respect to the chosen socio-economic factors.

The analysis of the results for the region of Newfoundland showed that the area of the Province in which the student lived was a sig-

nificant factor in determining the program of study in which a student enrolled. The East Coast of Newfoundland had the smallest percentage in the Academic Program while the South Coast region had the largest. The urban area in the rural/urban dichotomy had the largest percentage in the Academic Program. The Avalon area, when compared with the Non-Avalon area, had the largest percentage in the Academic Program.

The analysis of the results for size of school showed that regardless of the school size the Academic Program had the highest percentage of students. The only major variations occured in schools with ten to nineteen teachers where the Academic Program had 70 per cent of the students compared to 80 per cent for the other size schools. The analysis using type of school as a variable found that the all grade type of school had the largest percentage in the Academic Program when it was compared with Central and Regional High Schools. A comparison of the two types of high schools showed that the Regional High School had the greatest percentage in the Academic Program; however, when size was controlled it was found that the small Central High School had the largest percentage in the Academic Program.

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CHAPTER I

INTRODUCTION TO THE STUDY

This chapter will present a discussion of the background of the problem being studied, the rationale for the study, research questions and hypotheses, the study's scope and limitations as well as definition of terms. The chapter ends with a section on the organization of the thesis.

I. THE DEVELOPMENT OF CURRICULUM DIFFERENTIATION IN NEWFOUNDLAND HIGH SCHOOLS

Before the mid 1960's secondary education in Newfoundland appears to have been a special type of education for a few; it appears to have been academic in character and was designed to prepare students for entrance to university.[1] With the increase in high school enrollment and with only a small proportion of young people proceeding to university, the academic nature of the traditional high school courses caused them to be unsuitable for the majority of students. Consequently, it became necessary to make changes in the program being offered.

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[1] Educational Policies Committee of the Canada and Newfoundland Education Association, Trends in Education, A survey of Current Educational Development in the nine provinces of Canada and in Newfoundland. 22nd Convention of the Association, 1944 (Toronto: 1944), p. 29.

As early as 1944, the problem of establishing an effectual curriculum program in Newfoundland schools was being examined. In that year the Educational Policies Commission of Canada and Newfoundland stated that

> . . . efforts have been made to add other subjects of more general appeal to the program of the academic school - - including art, music, ship work, home economics and various extra curricular activities. But owing to administrative difficulties these new offerings have been available in the lower grades of secondary schools, and as a rule only the large urban schools have facilities to present them adequately.[2]

In 1956 Frecker argued for a diversified curriculum to serve those students who would be going to vocational training or to work as well as those going to University.[3] The establishment of regional high schools was seen by Frecker as a way to diversify the school program, thus enabling the school to meet the needs of the pupils, the community and the region it serves.[4]

The Royal Commission on Education and Youth received recommendations for a diversified high school curriculum. A brief from Memorial University recommended that

> . . . radical changes be introduced in curriculum policies, allowing greater flexibility within individual grades so as to permit curriculum enrichment, the satisfaction of special needs and interests, the development of individual programmes of study, subject promotion, and the like.[5]

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[2] Ibid.

[3] G. A. Frecker, Education in the Atlantic Provinces (Toronto: W. J. Gage and Co. Ltd, 1956), p. 92.

[4] G. A. Frecker, Educational Survey: Interim Report (1946-47-48), p. 4.

[5] Memorial University of Newfoundland, Draft of a Brief to be presented to the Royal Commission on Education and Youth (St. John's: 1956), p. 46.

This brief also proposed that a distinction be made between Matriculation and Non-Matriculation students.

In 1966 the Curriculum Division of the Department of Education announced that high school students would be able to choose to do either University Preparatory (Academic) courses or General courses.[6] It was hoped that this would make possible the offering of a more diversified program in the high schools.[7]

Another reason expressed for establishing a two-stream program was to ensure that no student would be beyond his depth.[8] The Academic program (also known as the advanced or A-level) would be for those students capable of taking advanced level courses while the General program (also known as the ordinary or O-level) would be available to students who were not capable of taking an advanced level program or who did not require matriculation credit. The hope, originally expressed, was that all students who were capable would take the Academic program whether or not they anticipated a need for matriculation.

As stated above, it was expected that all who were capable would take the Academic program, but it is possible that factors other than academic capability influence a student's choice of a high school program of study. One such factor is the student's

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[6] Newfoundland Department of Education Newsletter, Vol. XVII, No. 7 (March, 1966).

[7] Ibid.

[8] Newfoundland Royal Commission on Education and Youth, Province of Newfoundland and Labrador, (St. John's: 1967), Vol. I, p. 164.

choice of career. Research carried out in Canada in the past several years has shown that high school students experienced difficulty in making a career choice and thus choosing a program of study in high school associated with that career.[9, 10]

The student is influenced by many factors of which the school is but one. In several studies, isolated factors such as intelligence, socio-economic status, and family influences have been identified as factors influencing a student's activities and choices. The student is, then, the product of a large environment including the home and community; the school has to accept this fact and recognize the extent of this influence on the high school program of study in which the student enrolls.

Family background, community of residence and other related factors impose restraints upon the student. The school has to operate within boundaries established by these factors. They are often thought of as intervening variables and must be taken into account when considering a student's choice of program.[11]

All studies of what high school students hope and expect to do after high school show a relationship between their educational aspirations and expectations and their social class position.[12] This

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[9] Raymond Breton and C. MacDonald, Career Decisions of Canadian Youth: A Compilation of Basic Data (Ottawa: Department of Manpower and Immigration, 1967), p. 3.

[10] Raymond Breton, Social and Academic Factors in the Career Decisions of Canadian Youth (Ottawa: Information Canada, 1972), p. 17.

[11] Breton and MacDonald, p. 3.

[12] Marian R. Porter, John Porter, and B. R. Blishen, Does Money Matter? (Toronto: Institute of Behavioral Research, York University, 1973), p. 44.

is such a well established finding that, as Breton wrote, if a survey did not show such a relationship, the methodology of the survey would be suspect.[13]

II. STATEMENT OF THE PROBLEM

The central purpose of this study is to determine the relationship between selected background factors and the high school program of study in which a student is enrolled.

Specifically, the purposes of the study are:

1. To study the importance of sex as a factor influencing the high school program of study in which a student enrolls.

2. To study the importance of parents' occupation as a factor influencing the high school program of study in which a student enrolls.

3. To study the importance of parents' record of unemployment as a factor influencing the high school program of study in which a student enrolls.

4. To study the importance of parents' education as a factor influencing the high school program of study in which a student enrolls.

5. To study the importance of family size as a factor influencing the high school program of study in which a student enrolls.

6. To study the importance of position in family as a factor influencing the high school program of study in which a student enrolls.

7. To study the importance of the number of brothers or sisters attending post-secondary institutions and/or working as factors influencing the high school program of study in which a student enrolls.

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[13] Breton, p. 29.

8. To study the importance of the region of Newfoundland in which he lives as a factor influencing the high school program of study in which a student enrolls.

9. To study the importance of the size of school which he attends as a factor influencing the high school program of study in which a student enrolls.

III. SIGNIFICANCE OF THE STUDY

The investigation of the possible influences of the variables being considered in this research will be one of the first studies of the two-program system in Newfoundland high schools. The discovery of the influence of certain variables on a student's choice of a high school program of study might have implications for the future advice given students regarding the two programs.

The discovery, that students in the Academic program and General program differ because of the area of the Province in which they reside, could lead to a change in the programs being offered in the different areas being studied.

The value of this study to the educational administrator might be recognized when one looks at the administrator's involvement in the planning and organization of the school program. To do his work successfully the administrator needs additional knowledge of the program and the client it serves.

If the Academic and General programs offered by our high schools are segregating the school population by family background, region of residence and size of school, then our schools are not providing equal educational opportunity for all students. Factors other than academic achivement might be denying students access to high school pro-

grams.

If students are enrolled in different high school programs due to differences in their family backgrounds—that is, if father's occupation or size of family influences the program in which a student enrolls—one may conclude that it is one of the reasons for the differences in prestige accorded the two programs in our high schools. This would be expected to contribute to a lower self-concept, not only on the part of the students participating in the "lower-class program" but also on the part of the teachers engaged in teaching in these areas.

Generally, then, information from this study will be helpful in the evaluation of our present high school program and in setting up new programs.

IV. HYPOTHESES

The study will attempt to test the following null hypotheses:

Hypothesis I: There is no significant relationship between sex and the student's high school program of study.

Hypothesis 2: There is no significant relationship between parents' occupation and a student's high school program of study.

Hypothesis 3: There is no significant relationship between parents' unemployment record and a student's high school program of study.

Hypothesis 4: There is no significant relationship between parents' education and a student's high school program of study.

Hypothesis 5: There is no significant relationship between size of family and a student's high school program of study.

Hypothesis 6: There is no significant relationship between

the number of older brothers and sisters and the student's high school program of study.

Hypothesis 7: There is no significant relationship between the number of older brothers and sisters attending post-secondary institutions and a student's high school program of study.

Hypothesis 8: There is no significant relationship between the region in which a student lives and his high school program of study.

Hypothesis 9: There is no significant relationship between the size of school and a student's high school program of study.

V. DEFINITION OF TERMS

For the purpose of this study program is defined as the program of study set down by the Department of Education as being appropriate for Grade XI students. The term will be used interchangeably with "course" and in a limited sense with "class".

The Academic or Matriculation program is defined as consisting of the following subjects:— English Language, English Literature, Algebra and Geometry, plus three other subjects chosen from the following groups, so that the student does at least one subject from each group:

Group A	Group B
Geography	Biology
History	Chemistry
Economics	Physics
a second language	Earth Science

The General or Non-Matriculation program is defined as consist-

ing of the following subjects: General English, General Mathematics, plus three subjects selected from the subject groups as for the Academic program. General English is a combination of English Language and English Literature, and is supposedly not as complex or difficult as the separate subjects of Literature and Language offered in the Matriculation program. Also General Mathematics is presumably simpler and less involved than the separate Algebra and Geometry of the Academic program. In theory, General Mathematics is geared to students going to vocational school or going to work immediately after leaving high school.

In this study urban is defined as consisting of responses from the major centres of population in Newfoundland and Labrador. The urban areas are St. John's, Gander, Grand Falls-Windsor, Corner Brook, Stephenville, Happy Valley-Goose Bay and Labrador City-Wabush.

Rural refers to responses from the sections of Newfoundland and Labrador not included in the urban areas given above.

VI. SCOPE AND LIMITATIONS OF THE STUDY

The scope of this study is limited to those students who were enrolled in Grade XI in Newfoundland in 1973-74 and who responded to the Career Decisions of Newfoundland Youth questionnaire. This questionnaire was part of a study on the decline in university enrollment conducted by Memorial University of Newfoundland. The scope is also limited to the specific factors of the student's background identified in the hypotheses.

The study is limited by how well the students understood the questions on the questionnaire and by the accuracy of their responses. The study is also limited by the statistical procedures employed in

the analysis of the data.

An additional limitation is the limited use of the variables as control factors. The variables sex and socio-economic status are used as control factors in several instances, but not throughout the entire study. Also, no attempt was made to apply statistical controls to the variables.

VII. ORGANIZATION OF THE THESIS

Chapter II presents a review of literature related to this study. In Chapter III a description of the design of the study is given. An analysis of the findings is contained in Chapter IV. The final chapter comprises a summary of the study, some conclusions, and some recommendations for further research.

CHAPTER II

REVIEW OF RELATED LITERATURE

This chapter will present a review of literature related to the problem being studied. The review includes terminology in the literature, the present status of related research, both on the universal and Newfoundland levels, research on sex, social class, parents' education, area of residence, size of school and streaming.

I. TERMINOLOGY IN THE LITERATURE

The differentiation of students for instructional purposes has many and varied definitions applied to it. This differentiation has been referred to in the literature by terms such as grouping, streaming, classifications, sectioning, and grade placement, to list a few. Sorensen defines the division of a school's student body into subgroups of a permanent nature as organizational differentiation. He states:

> Any educational system assigns students to groups for instructional purposes. The existence of classes, grades, sections, etc. defines formal education in contrast to the learning and training that takes place in the family or in work-and-play groups. The term organizational differentiation stresses the reference to a deliberate and formal structuring of a student body initiated by educational authorities for instructional purposes.[1]

This study deals with the method of differentiation often em-

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[1] Aage B. Sorensen, "Organizational Differentiation of Students and Educational Opportunity", Sociology of Education, XLIII (Fall, 1970), pp. 355-376.

ployed in Newfoundland high schools and commonly referred to in the literature as streaming or tracking.[2]

Describing the North American system of organization for instruction Jencks states:

> At the secondary level there are also variations in course content, which supposedly reflect variations in students' interests, as well as variations in their ability to do academic work. In many cases students are formally assigned to a "college preparatory" curriculum, a "technical" curriculum, a "business" curriculum, or a "general" curriculum. There are sometimes further distinctions between fast and slow tracks within these curriculums.[3]

Sorensen makes a useful distinction between vertical and horizontal differentiation.[4] Vertical differentiation is the organization of students in such a way as to reduce the amount of variation in whatever characteristics the school assumes relevant for a student's learning capacity. Horizontal differentiation has as its aim the reduction of the amount of variation in the kinds of skills or the kind of knowledge the school attempts to transmit to students within a given period of time; under this system students are assigned to classes on the basis of curriculum.[5] It appears that both these types of differentiation are being used almost indistinguishably in Newfoundland high schools. While students in Newfoundland schools are grouped according to curriculum (Academic or General), the basis for group-

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[2] Eric Calvin Coish, "A Comparison of Students Enrolled in Academic and General Programs on Attitude towards School, Attitude towards Self-Participation in Extra-Curricular Activities and Rating of Students by Teachers". Unpublished Master's Thesis, Memorial University of Newfoundland, 1970.

[3] Christopher Jencks, Inequality A Reassessment of the Effect of Family and Schooling in America (New York: Basic Books, Inc., 1972), p.33.

[4] Sorensen, op. cit., p. 360.

[5] Ibid. p. 360.

ing them is thought to be academic achievement. All students, who are capable are expected to do the Academic course while the less bright are expected to do the General course.

Harnalaimen[6] was one writer who distinguished between homogeneous and hetergeneous grouping. Students are grouped homogeneously on the basis of characteristics they have in common. Hetergeneous grouping is the grouping together of students with certain different characteristics. Grouping in Newfoundland schools would appear to be homogeneous in nature. This homogeneous grouping is thought to be based on the student's academic ability.

It becomes more difficult to define the different types of streaming when the terms academic and general education are used. The term general program is used by Alpren[7] in the same way as the term Academic program is used in Newfoundland high schools. High schools in Newfoundland use the term Academic program when referring to the program to be used by those students who are supposedly oriented towards university studies or other areas requiring junior matriculation. Students taking the General courses are supposedly preparing for entrance to a technical or vocational institution.

College-preps and non-college-preps are the terms used by Schafer and Olexa.[8] This is similar to the Newfoundland system of referring to Academic students as Matriculation students and to stu-

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[6] Arthur E. Harnalaimen, "Method of Grouping Pupils Should Provide Normal Social Situations", The Nation's Schools, XLV (June, 1950), pp. 34-35.

[7] Morton Alpren (ed.), The Subject Curriculum: Grades K-12 (Colombus, Ohio: Charles E. Merrill Books, Inc., 1967).

[8] Walter E. Schafer and Carol Olexa, Tracking and Opportunity (Scraton: Chandler Publishing Co., 1971).

dents enrolled in the General program as Non-Matriculation students.

Krug,[9] writing on curriculum planning, used the terms general, liberal and academic synonymously. He referred to other types of education as vocational or practical education.

Describing the American high school system, Hansen[10] referred to four tracks: (1) Honours--for the exceptionally able; (2) Regular college prep--for average students planning to go to university; (3) General track--for those not planning or not qualified to go to university; and (4) Basic track--for the severely academically retarded.

It would appear then that there exists an abundance of terms employed in describing the streaming process. What has occurred is that areas where streaming is employed have developed their own terminology to refer to the various aspects of the procedure.

II. THE PRESENT STATUS OF RELATED RESEARCH

The Situation Generally

There is very little research on streaming which examines the variables being considered in this study. Most research has dealt with achievement and its connection with streaming. Chetcah described the situation in the following statement:

> . . . most of the research carried out to find the effect of streaming have used attainment as their measuring rod. This has proved inconclusive because the gap between intelligence

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[9] E.A. Krug, Curriculum Planning (New York: Harper and Brothers, 1950).

[10] Carl L. Hansen, The Four-Track Curriculum in Today's High School (Englewood Cliffs, N.J.: Prentice-Hall, Inc., 1964).

and attainment can be filled with many variables--personality factors, social climate, pupils' and teachers' attitudes, teaching methods, etc.--and many of these have been disregarded.[11]

This statement has been supported by other writers who reviewed research on streaming. Ekstrom[12] reviewed thirty-three studies and found only one dealing with personal adjustment and social factors. Miller's and Otto's[13] review found studies dealing with academic achievement. Byers[14] and Franseth[15] noted the lack of research into the non-academic areas of streaming and saw a need for reasearch into the social and emotional aspects of grouping. Ogletree[16] in his review of researah noted that most research concerned itself with grouping in the elementary and junior high school.

Research in Newfoundland

The historical development of streaming in Newfoundland high schools was dealt with in chapter one. There is very little other local literature on the subject and what does exist deals with opin-

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[11] F. Chetcah, "A Study of the Morale of A Stream and C Stream Pupils in Secondary Schools with Special Reference to any Differences in the Attitude and Behaviour of Their Teachers", Educational Review, XIV (November, 1961), p. 49.

[12] Ruth B. Ekstrom, "Experimental Studies of Homogeneous Grouping: A Critical Review", School Review (Summer, 1961), pp. 216-226.

[13] W. A. Miller and H. J. Otto, "Analysis of Experimental Studies in Homogeneous Grouping", Journal of Educational Research, XXI, pp. 95-102.

[14] Loretta Byers, "Ability Grouping--Help or Hindrance to Social and Emotional Growth", The School Review, LXIX (Winter, 1961), pp. 449-456.

[15] Jane Franseth, "Does Grouping Make a Difference in Pupil Learning?" Grouping in the Elementary School, ed. Anne Morgenstern (New York: Pitman Publishing Corp., 1966), p. 120.

[16] Earl Ogletree, "Homogeneous Ability Grouping--British Style", Peabody Journal of Education, XLVII (July, 1969), pp. 20-25.

ions and speculation rather than research findings.

A recent contribution to the study of grouping in Newfoundland high schools was made by Coish.[17] He studied the Academic and General program students using three variables; attitudes towards school and self, participation in extra-curricular activities and the non-academic rating of students by teachers. He found that the Academic and General groups did not differ significantly on their attitude-towards-school or attitude-towards-self score. Nor were any significant differences found between the sexes, or between students of the same sex in different curriculum groups on these attitude scores.

An examination of the participation pattern in extra-curricular activities revealed that students in the Academic group participated in significantly more activities of the non-sport variety than did students in the General group. Females in the whole sample, and in each curriculum group, took part in a significantly greater number of these activities than did their counterparts in the General group. In comparing students who were transported by bus and students who were not transported by bus, Coish found no significant difference in extra-curricular participation.

An examination of the intercorrelations among the rating of pupils by three teachers showed that eighty-three per cent of the correlations for the Academic group were significant, indicating that teachers were relatively consistent in the non-academic ratings of the same students. For the General group sixty-six percent of the correlations were significant, indicating a slightly lower degree of con-

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[17] Coish, op. cit.

currence among teacher ratings than was found in the Academic group.

In his conclusions Coish states:

> . . . the findings of this study offer sufficient cause for a careful reassessment of curriculum streaming in Newfoundland schools, particulary in relation to the extra-curricular participation programs offered by different schools. The case of each individual student should be thoroughly assessed before placement in either stream, especially the Non-Matriculation one, is carried out.[18]

It would appear, then, that Newfoundland high schools are useing a system of grouping that has received very little comment in the literature and very little study.

III. RESEARCH RELATED TO THIS STUDY

Sex and Streaming.

Very little attention has been given in the literature to the influence of sex on the program of study in which a student enrolls. One study concerning itself with this variable was carried out by George.[19] He found that female students in Ontario were more likely to enter the four year arts and science program and technical programs than the five year arts and science programs. In George's opinion this resulted from the lower educational aspirations of females as compared to the aspirations of males. He also stated that girls see greater usefulness of their present study for their future career. He concludes that the educational system tends to perpetuate the male dominated social system.

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[18] Ibid. p. 96.

[19] P. M. George, "Social Factors and Educational Aspirations of Canadian High School Students." (London, Ontario: Department of Sociology, University of Western Ontario, October, 1970).

Results reported by Porter, et al[20] disagreed with those of George in that they found that when they controlled for mental ability and social class a larger percentage of girls than boys were in the five year arts and science programs of Ontario. This program made possible entrance to university. Porter, however, did not report the results when social class and mental ability were not controlled.

From the evidence, then, it appears that no conclusion can be drawn regarding the influence of sex on the program of high school study in which the student enrolls.

Social Class and Streaming

More attention appears to have been given in the literature to the effects of social class upon the program in which a student enrolls, than to the effects any of the other variables being considered in this study. Coleman[21] found in his study that eighty-nine per cent of the lower-working class sons were enrolled in the General program, while ninety per cent of the upper-middle class sons were enrolled in the College preparatory program. Coleman expressed the opinion that there exists in high schools a rigidity of curriculum for both the lower-working class and the upper-middle class. He further states that:

> Effects and results of more flexible curriculum selection by the student irrespective of social class need to be determined. But existing stumbling blocks which tend to discourage, if not to prohibit, the lower-working class child from moving into the College Preparatory Curriculum should be abolished if the purpose of

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[20] M. R. Porter, B. R. Blishen. Does Money Matter? Prospects for Higher Education (Toronto: York University, 1973), pp. 124-125.

[21] Alvin B. Coleman, "Class Structure: A Comparison of Lower-Working and Upper Middle Family Characteristics." Clearing House, XLII (April, 1968), pp. 468-473.

our schools is to provide as much education for each student as he is capable. Similar impediments, actual or implied, which tend to discourage upper-middle class students from even becoming partially involved in the General Curriculum should also be eliminated.[22]

Coleman also found that students from lower-working class families were only "sometimes" or "seldom" interested in or satisfied with what went on in their classes in school. He concludes that this is related to the rigidity of curriculum according to social class, especially in the case of the lower-working class student.[23]

Describing the Ontario situation George suggested that perhaps the greatest handicap the lower class students face in their education is the program they enter while in high school.[24] He found the lower class student over represented in four year and technical programs as opposed to the five year arts and science programs. According to George, the high school places curriculum handicaps on students from lower social classes in addition to the cultural one he faces at home. The upper class children not only get into "better" programs but also feel better adjusted to the program they chose and see greater chance for completing a degree or diploma.[25]

The Survey of Ontario Students' Aspirations (SOSA) undertaken by Porter, Porter, and Blishen, related the choice of program to social class. They found that the proportion in each social class who were in

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[22] Ibid. p. 472.

[23] Ibid. p. 472.

[24] George, op. cit., p. 10.

[25] Ibid. p. 10.

the five year arts and science program decreased in each social class level from seventy-eight per cent of high social class students to forty per cent of low social class students.[26]

Correspondingly, in the four year vocational programs (the Business and Commerce and the Science, Technology and Trades) they found the proportions increased in each class level from eight per cent of high social class students to thirty-nine per cent of low social class students. Also the proportion in the four year Arts and Science and the five year Science, Technology and Trade, increased in each class level but not nearly as strikingly as with the four year vocational courses. The proportions in five year Science, Technology and Trade courses were not related to social class.[27]

Parsons,[28] in a study of how the choice of high school courses is affected by social class and academic aptitude in a selected community in Ontario, found that not only are students distributed in courses on the basis of ability but socio-economic status is also a determing factor. He reported that the correlation between socio-economic status and courses selected is greater for boys than for girls. In the case of boys, he concluded that other factors besides ability and socio-economic status appear to be operating.

An interesting study on social class and school programs was

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[26] Porter, Porter and Blishen, op. cit., p. 58.

[27] Ibid. p. 60.

[28] Llewellyn Parsons, "Social Class, Academic Aptitude, and Selection of High School Courses", unpublished paper, (St. John's: Memorial University of Newfoundland, 1968).

carried out by Harker on comprehensive schools in New Zealand.[29] The New Zealand secondary school system is said to be universal and non-selective yet Harker found that pupils from a "working class" background are at an educational disadvantage. The professional class of New Zealand had sixty per cent of its members in the top three streams while the manual group had only two per cent. The bottom three streams contained half the manual group, but only five per cent of the professional group. Harker concludes that since the majority of the future university students in the total group can be expected to come from the top stream, then already, in the first year of secondary schooling, the proportion of manual group children in the most favoured group for further education is greatly reduced.[30]

The relationship between social class and education in England and France has been examined by Jean Froud.[31] He states that although secondary schools have become agents of social mobility, certain schools are still the prime source of recruits for all non-manual occupations and have a virtual monopoly of entry to the high-ranking professional and managerial occupations.

Froud also found that the higher the proportion of non-manual workers in the local population, the larger the proportion of the eleven-year age group admitted to grammar schools. He also found that the relationship of the provision of places in grammar schools to the ability

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[29] P. K. Harker, "Social Class Factors in a New Zealand Comprehensive School", Educational Research, XIII (February, 1971), pp. 155-160.

[30] Ibid. p. 156.

[31] Jean Froud, "Social Class Factors in Educational Achievement" in Family Class and Education. A Reader, Maurice Craft (ed.), (London: Longman Group Ltd., 1970).

of students was loose to the point of arbitrariness.[32]

His conclusion was that although the proportion of children from working class families now entering the more selective schools have increased, it was still well below the percentage of the total population occupied by that group.

From the literature reviewed in this section it appears then that a close relationship exists between the social class of the family and the student's program of study.

Parents' Education and Streaming

Very little has been written regarding the education level of parents and its relationship to the program of study in which the student is enrolled. This could result from parents' education often being included with father's occupation as an indicator of social class. George[33] studied the enrollment in high school programs using parents' education and father's occupation as separate indicators of social class. George found sixty per cent of the upper class students (as determined by father's education) were enrolled in the prestigeous five year arts and science program while thirty-six per cent of the lower class students were in the same program. The four year Business and Commerce program had twenty-five per cent of the lower class students while only twelve per cent of the upper class students were in that program.[34] The figures for social class as determined by father's occupation showed the upper class students had only thirty-seven per cent of their

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[32] Ibid. p. 34.

[33] George, op. cit.

[34] Ibid. p. 39.

members in the five year arts and science program while lower class students were over-represented in the four year and technical programs.

The question of the influence of parents' education as distinct from other measures of social class on the program of study in which a student enrolls can be studied, for although the social class and education of the parents are correlated the correlation is not perfect, thus it is possible for the educational level of the parents to be studied as factors influencing decisions regarding programs of study made by the student.

Area of Residence and Streaming

In this section, area of residence includes the part of the country where the student resides. It refers in particular to whether the student resides in an urban or rural area.

The educational needs of rural youth may be different from the needs of those in urban areas. If rural youth are to continue in rural pursuits, they need particular elements in their educational programs which emphasize the appropriate skills.[35] The rural area with its larger families is providing a continuous stream of migrants to the urban areas. Education, then, needs to give as much attention to the requirements of rural youth as to those of the city.[36] In Ontario, rural students, like the lower class and female students, tend to be under-represented in the five year arts and science programs, the program geared to college or university.[37] In all five year programs in Ontario the urban

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[35] Porter, Porter, Blishen, op. cit., p. 66.

[36] Ibid. p. 68.

[37] George, op. cit., p. 13.

students were over-represented when compared with the percentage from rural areas. From this finding George concludes that rural students are handicapped long before they enter the game. The educational system, he concludes, tends to perpetuate the urban-dominated social structure.[38]

Size of School and Streaming

School size can be determined by the use of a number of different criteria: for example, number of teachers, number of classrooms, and number of students can all be indicators of school size. This factor has received very little attention in the literature. Breton[39] mentioned it as a factor in the number of programs offered by a school. He suggested that a large school would be more likely to provide multi-programs, thus giving greater opportunity for a student to find a program suited to his interests and needs than a program for which he has little interest.[40]

IV. SUMMARY

This chapter has been concerned with a review of literature related to high school streaming. It began with a discussion of the terms used in the literature and found a lack of consistency in their use in the literature.

A review of the present status of related research found very little regarding high school streaming. There appears to have been very little research on streaming in Newfoundland. An exception was Coish who investigated students enrolled in Academic and General pro-

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[38] Ibid. p. 37.

[39] Breton, Social and Academic Factors in the Career Decisions of Canadian Youth.

[40] Ibid. p. 302.

grams regarding their attitude toward self and school and also their participation in extra-curricular activities and the rating of students by teachers.

A review of research related to the factors being considered in this study was the third section of this chapter. The influence of sex and social class as factors influencing a student's program of study were well covered in the literature. However, education of parents, area of residence, and size of school were found to be neglected by the writers reviewed.

CHAPTER III

THE DESIGN OF THE STUDY

This chapter will deal with a description of the design of the study and will include information about the following: the sample, the instrument, the selected variables, the population and the statistical procedures used to analyse the data.

I. THE POPULATION

When Memorial University experienced a sudden drop in enrollment in September of 1973 the president of the university commissioned the Committee on Enrollment 1973-74 under the chairmanship of Dr. L. Parsons. This committee was to investigate the drop in university enrollment in Newfoundland and as part of its study it sent a questionnaire to all students then enrolled in Grade XI in the Province of Newfoundland. The population of this study is all those students who returned usable responses to the Career Decisions of Newfoundland Youth questionnaire.

II. THE INSTRUMENT

The instrument used to gather data for this study was that used by the Committee on Enrollment 1973-74, namely, a questionnaire entitled, Career Decisions of Newfoundland Youth. However, only a sub-section of the questions used in that questionnaire will be analysed in this study.

Specifically, the questions from the questionnaire, Career Deci-

sions of Newfoundland Youth, upon which this study is based are:

1. Sex
2. What are your parents' occupations?
3. How much unemployment, if any, have your parents experienced over the past two or three years?
4. How far did your parents go in school?
5. How many brothers and sisters do you have?
6. How many of your brothers and sisters are older than you?
7. How many of your brothers and sisters go to post-secondary schools and how many have jobs?
8. Which program of studies are you enrolled in this year?

A copy of the total questionnaire is given in Appendix A of this study.

III. SELECTED VARIABLES

The selected variables of this study can be divided into three categories--those that are socio-economic in nature, and those of the community and those of the school.

The socio-economic variables include parents' occupation, parents' education, size of family, position in family and activity of older brothers and sisters. Reliance upon socio-economic variables to explain school achievement has received attention from sociology in the last few years. Coleman in his controversial report, indicates the desirability of dealing with socio-economic variables as sources of information that will explain achievement or lack of achievement experienced by pupils rather than relying upon educational variables to explain such achievement. Coleman suggests that "the effects of school

staff and facilities on achievement do not seem large for either black or white, at least when the characteristics are compared to the effects of family background."[1] As well, Jencks reasons that fifty per cent of educational attainment can be attributed to family background.[2] Generalizing to the Newfoundland scene, it is perhaps not too presumptious to suggest that educational variables are not the only ones that influence the program of study in which a student enrolls.

The variables concerned with the community include the region where the school is located, whether it is urban or rural and whether it is located on the Avalon or in the remainder of the Province. The variables concerned with the school include the type of school, whether it is an all grade school, a central or regional high school, the number of rooms, the number of teachers and the enrollment of the school. Information on these variables was obtained through an examination of the Notice of Opening which is completed by each school and filed with the Department of Education.

IV. COLLECTION OF DATA

Through the cooperation of the Newfoundland Department of Education, the school boards, the Newfoundland Teachers' Association and the personnel of the school systems, the Committee on Enrollment

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[1] David Armor, "School and Family Effects on Black and White Achievement: A Re-Examination of the USOE Data", as reported in, On Equality of Educational Opportunity, (eds.) Frederick Mosteller and Daniel P. Moynihan, (New York: Random House, 1972), p. 168.

[2] Christopher Jencks, Inequality - A Reassessment of the Effects of Family and Schooling in America, (New York: Harper and Row, publishers, 1972), p. 143.

distributed its questionnaires to all students enrolled in Grade XI (1973-74). All chairman of boards of education and district school superintendents were contacted to explain the purposes of the study and to enlist their cooperation. Before the questionnaires were sent to the schools each principal was contacted to explain how the questionnaires were to be administered. Teachers were requested to have each student answer the questionnaire and seal it himself in the envelopes provided to ensure the confidentiality of the return. Questionnaires were then collected, bundled and returned to the university where each questionnaire was coded by school and district. There were 7008 usable responses to the questionnaire. This represented 87.5 per cent of the Grade XI population. The data were arranged for computer analysis throughout the winter of 1974.

V. A DESCRIPTION OF THE POPULATION

A description of the population of 8000 Grade XI students (1973-74) as represented by the 7008 returns which were coded and analysed and a summary of students' responses to the questionnaire follows.

Sex

There were 3406 males (48.6 per cent) and 3602 females (51.4 per cent) in the population being studied.

Fathers' Occupations

Group I		
owners of large business	6.7%	
owners of small business	4.6%	
professional-technical	4.9%	
		16.3%

Fathers' Occupations (cont'd)

Group II		
clerical	5.4%	
sales	2.6%	
service and recreation	3.6%	
transportation and communication	5.5%	
		17.1%
Group III		
craftsmen	19.5%	
		19.5%
Group IV		
fishing	5.5%	
farming	.9%	
logging and mining	3.0%	
labourers	11.5%	
unemployed	6.6%	
		27.5%
Group V		
others - policemen		
- firemen		
- Armed Forces		
- home duties, etc.	19.6%	
		19.6%
Total		100.0%

Fathers' Employment

Sixty-one per cent of the students reported that their fathers were employed full time, while thirty-nine per cent of the students reported that their fathers had experienced some unemployment over the

past two or three years.

Fathers' Education

Approximately one-fourth (25.5 per cent) of the students' fathers have Grade V education or less; 50.4 per cent have Grade VIII or less; 71.3 per cent did not go beyond Grade X. The mean educational level of students' fathers is Grade VIII.

Size of Family

There were six children in the average family; 21.6 per cent of the students have eight children in the family; 38.1 per cent have more than six, while 50.1 per cent have more than five children in the family.

Regions

The students were distributed around the Province as follows:

Avalon	45.1%
East Coast	10.2%
Northeast Coast	7.5%
Great Northern Peninsula	3.1%
Labrador	2.0%
Central Newfoundland	7.4%
West Coast	15.3%
Burin Peninsual and Fortune Bay	5.1%
South Coast	3.2%
Other	1.1%
Total	100.0%

Rural/Urban

There were 57.2 per cent of the students living in urban areas while 42.5 per cent were in rural areas.

Avalon/Non-Avalon

There were 54.9 per cent of the students living on the Avalon Peninsula while 45.1 per cent were living in Non-Avalon areas.

Size of School

Several measures of the size of school were used. When size of school was determined by number of rooms, it was found that 2.9 per cent were enrolled in all grade schools; 19.9 per cent in schools of two to ten rooms; 35.1 per cent in schools of eleven to twenty rooms; and 42.1 per cent in schools of over twenty-one rooms.

When size was determined by the number of teachers, the population was divided as follows; all grade schools had 2.9 per cent of the students; schools with two to nine teachers had 11.1 per cent; those with ten to nineteen teachers had 41.3 per cent; and those with over twenty teachers had 44.7 per cent.

Type of School

When the student population was examined by type of school it was found that 2.9 per cent attended all grade schools, 40.1 per cent attended Central High Schools, while 57.0 per cent attended Regional High Schools.

VI. THE STATISTICAL PROCEDURES

Since the study is one of description, the statistical procedure

employed was the use of crosstabulations. A crosstabulation is basically a joint frequency distribution of cases according to two or more classification variables.

In the descriptions and analysis, the column percentages as generated by the crosstabulation method were reported. No attempt was made to report differences or variations within each program since this was outside the scope of this study. Also reported were the Chi Square with degress of freedom stated, the level of significance which was established at $P < .0001$ and the Contingency Coefficient.

VII. SUMMARY

This chapter has discussed the various aspects of the research involved and the procedures employed in this study.

The chapter began with a description of the sample and following this the questionnaire entitled Career Decisions of Newfoundland Youth was described. The questions on the questionnaire with which this study is specifically concerned were given. The third section of the chapter dealt with the selected variables of this study and reasons given for their inclusion. The collection of data was described in the fourth section with section five giving a detailed description of the population. The chapter concluded with a statement of the statistical procedures employed.

CHAPTER IV

ANALYSIS OF THE DATA

This chapter is concerned with an analysis of the data yielded by the computer program. The chapter will present the analysis of the data under the headings of socio-economic, area of residence and size of school.

I. SOCIO-ECONOMIC FACTORS

Sex

As indicated in Table I, no significant relationship was found between the sex of the students and the program of study in which he was enrolled. For the males 74.6 per cent were in the Academic Program while for the female students it was 75.7 per cent. In the General Program it was found that 25.4 per cent of the students were male and 24.3 per cent of the students were female.

TABLE I

PROGRAM OF STUDY BY SEX OF STUDENTS

	MALE	FEMALE	TOTAL
ACADEMIC	74.6%	75.7%	75.2%
GENERAL	25.4%	24.3%	24.8%
COLUMN TOTAL	3320	3500	6820
PERCENT OF TOTAL	48.7%	51.3%	100.0%

Chi Square = 1.00 (1 d.f) P = 0.3173 Contingency Coefficent = 0.01211

Fathers' Occupation

When social class was measured by fathers' occupation it was found that the lower the social class the smaller the percentage of students from that class enrolled in the Academic Program. Table II shows that the Upper Middle Class had 87.0 per cent of its students in the Academic Program and only 13.0 per cent were in the General Program. For the Lower Middle Class the per cent in the Academic Program was 80.2 and in the General Program the per cent was 19.8. The Upper Working Class had 72.9 per cent in the Academic Program and 27.1 per cent in the General Program. The percentages for the Lower Working Class were 69.8 in the Academic Program and 30.2 in the General Program. These percentages show that the number of students in the General Program increased from Upper Middle Class to Lower Working Class while for the Academic Program the number of students decreased.

TABLE II

PROGRAM OF STUDY BY FATHERS' OCCUPATION

	UPPER MIDDLE CLASS	LOWER MIDDLE CLASS	UPPER WORKING CLASS	LOWER WORKING CLASS	OTHER	TOTAL
ACADEMIC	87.0%	80.2%	72.9%	69.8%	66.7%	76.2%
GENERAL	13.0%	19.8%	27.1%	30.2%	33.3%	23.8%
COLUMN TOTAL	1008	1058	1206	1681	33	4986
PERCENT OF TOTAL	20.2%	21.2%	24.2%	33.7%	0.7%	100.0%

Chi Square = 121.63 (4 d.f) $p < .0001$ Contingency Coefficient = 0.154

When students were compared by fathers' occupation controlling for the influence of sex (Table III), it was found that with the exception

of the Lower Middle Class a greater percentage of the female students were in the Academic Program than in the General Program. The Lower Working Class had the greatest difference with 70.9 per cent of the female students in the Academic Program compared to 67.9 per cent of the male students from the same group in the same program.

TABLE III

PROGRAM OF STUDY BY FATHERS' OCCUPATION

CONTROLLING FOR SEX

	UMC		LMC		UWC		LWC		OTHER		
	M	F	M	F	M	F	M	F	M	F	TOTAL
ACADEMIC %	86.3	87.7	80.1	80.0	72.2	73.4	67.9	70.9	63.2	69.2	76.1
GENERAL %	13.7	12.3	19.1	20.0	27.8	26.6	32.1	29.2	36.8	30.8	23.9
COLUMN TOTAL	527	472	487	561	589	605	773	894	19	13	23.9
PERCENT OF TOTAL	22.0	18.5	20.3	22.0	24.6	23.8	32.3	35.1	0.8	0.5	100

Chi Square = 56.22 (9 d.f) $p < .0001$ Contingency Coefficient = 0.14863

Mothers' Occupation

When mothers' occupation is considered as a measure of social class it was found that in all groups used more students were enrolled in the Academic Program than in the General Program (Table IV). The Upper Working Class had the largest number in the Academic Program; 84.8 per cent compared with 15.2 per cent in the General Program. The Upper Working Class

had the smallest per cent in the Academic Program (64.3 per cent), and 35.7 per cent in the General Program (the Upper Working Class had only 0.2 per cent of the population.)

TABLE IV

PROGRAM OF STUDY BY MOTHERS' OCCUPATION

	UPPER MIDDLE CLASS	LOWER MIDDLE CLASS	UPPER WORKING CLASS	LOWER WORKING CLASS	OTHER	TOTAL
ACADEMIC	84.8%	80.9%	64.3%	70.3%	74.3%	75.5%
GENERAL	15.2%	19.1%	35.7%	29.7%	25.7%	24.5%
COLUMN TOTAL	409	613	14	293	4574	5903
PERCENT OF TOTAL	6.9%	10.4%	0.2%	5.0%	77.5%	100.0%

Chi Square = 37.94 (4 d.f) $p < .0001$ Contingency Coefficient = 0.079

Fathers' Unemployment

Table V shows that the more unemployment experienced by fathers, the greater was the percentage of students in the General Program. Also, the more employment of fathers, the greater was the percentage of students in the Academic Program. It was found that 78.7 per cent of those students whose fathers had experienced no unemployment were in the Academic Program and 21.3 per cent were in the General Program. 71.0 per cent of the students whose fathers had experienced some unemployment were in the Academic Program and 29.0 per cent were in the General Program.

TABLE V

PROGRAM OF STUDY BY FATHERS' UNEMPLOYMENT

	NONE	SOME	TOTAL
ACADEMIC	78.7%	71.0%	76.1%
GENERAL	21.3%	29.0%	23.9%
COLUMN TOTAL	3848	1998	5846
PERCENT OF TOTAL	65.8%	34.2%	100.0%

Chi Square = 43.47 (1 d.f) $p < .0001$ Contingency Coefficient = 0.084

Fathers' Education

As the fathers' educational level increased, the percentage of students in the Academic Program increased. Table VI shows that when the fathers' education was grade six or less, 67.8 per cent of the students were in the Academic Program and 32.2 per cent were in the General Program. With the fathers' educational level at grade seven to ten, the per cent in the Academic Program was 73.5 per cent and in the General Program it was 26.5 per cent. When fathers' level of education was grade eleven or more, 87.1 per cent of the students were in the Academic Program and 12.9 per cent of the students were in the General Program. Although the Academic Program had the most students in all categories, there was a definite association between the fathers' educational level and the percentage of students in each program.

Mothers' Education

As was the case with fathers' educational level, an increase in the mothers' educational level was associated with an increase in the per-

centage of students in the Academic Program (Table VII). It was found that 64.4 per cent of the students whose mothers had grade six or less were in the Academic Program and 35.6 per cent were in the General Program. When mothers' educational level was grade seven to ten, 71.7 per cent of the students were in the Academic Program and 28.3 per cent were in the General Program. Approximately 87.6 per cent of the students whose mothers had grade eleven or more were in the Academic Program. As stated above, an increase in the mothers' educational level was associated with an increase in the percentage of students in the Academic Program.

TABLE VI

PROGRAM OF STUDY BY FATHERS' EDUCATION

	GRADE 6 OR LESS	GRADE 7 TO 10	GRADE 11 OR MORE	TOTAL
ACADEMIC	67.8%	73.5%	87.1%	75.4%
GENERAL	32.2%	26.5%	12.9%	24.6%
COLUMN TOTAL	2055	2328	1699	6082
PERCENT OF TOTAL	33.8%	38.3%	27.9%	100.0%

Chi Square = 194.220 (2 d.f) $p < .0001$ Contingency Coefficient = 0.175

Family Size

Table VIII shows that the larger the family the higher the percentage of students in the General Program and the lower the percentage in the Academic Program. When the family size was three or less, 85.0 per cent of the students were in the Academic Program and 15.0 per cent were in the General Program. Seventy-eight per cent of the grade eleven

students whose families had four to five children were in the Academic Program and 22.0 per cent were in the General Program. When the family size was six to eight, 72.0 per cent were in the Academic Program and for the General Program it was 28.0 per cent. When the family size was nine or more, 67.6 per cent were in the Academic Program and 32.4 per cent were in the General Program. There was then, a definite association between the size of the family and the program of study in which the student enrolled.

TABLE VII

PROGRAM OF STUDY BY MOTHERS' EDUCATION

	GRADE 6 OR LESS	GRADE 7 TO 10	GRADE 11 OR MORE	TOTAL
ACADEMIC	64.4%	71.7%	87.6%	75.2%
GENERAL	35.6%	28.3%	12.4%	24.8%
COLUMN TOTAL	1314	2923	1995	6232
PERCENT OF TOTAL	21.1%	46.9%	32.0%	100.0%

Chi Square = 267.205 (2 d.f) $p < .0001$ Contingency Coefficient = 0.202

TABLE VIII

PROGRAM OF STUDY BY SIZE OF FAMILY

	THREE OR LESS	FOUR TO FIVE	SIX TO EIGHT	NINE OR MORE	TOTAL
ACADEMIC	85.0%	78.0%	72.0%	67.6%	75.6%
GENERAL	15.0%	22.0%	28.0%	32.4%	24.4%
COLUMN TOTAL	1516	1912	1945	1461	6834
PERCENT OF TOTAL	22.2%	28.0	28.5%	21.4%	100.0%

Chi Square = 144.31 (3 d.f) $p < .0001$ Contingency Coefficient = 0.143

Older Siblings

When students were compared using older siblings, it was found that 79.0 per cent of the students with three or fewer older siblings were in the Academic Program and 21.0 per cent were in the General Program. As the number of older siblings increased, the percentage in the Academic Program decreased while in the General Program the percentage increased. Of the students with three to four older siblings, 75.4 per cent were in the Academic Program and 24.6 per cent were in the General Program. Approximately seventy-one per cent of the students with five to six older siblings were in the Academic Program and 28.4 per cent were in the General Program. When the students had seven or more older siblings, 67.7 per cent were in the Academic Program and 32.2 per cent were in the General Program. There was a definite association between the number of older siblings and the program of study in which a student was enrolled.

TABLE IX

PROGRAM OF STUDY BY OLDER SIBLINGS

	TWO OR LESS	THREE TO FOUR	FIVE TO SIX	SEVEN OR MORE	TOTAL
ACADEMIC	79.0%	75.4%	71.6%	67.7%	75.4%
GENERAL	21.0%	24.6%	28.4%	32.3%	24.6%
COLUMN TOTAL	3086	1905	1037	892	6920
PERCENT OF TOTAL	44.6%	27.5%	15.0%	12.9%	100.0%

Chi Square = 57.549 (3 d.f) $p < .0001$ Contingency Coefficient=0.090

Older Siblings Attending Post-Secondary Institutions

When students were compared using older siblings attending post-secondary institutions, it was found that 72.9 per cent of the students with one or fewer siblings attending post-secondary institutions were in the Academic Program and 27.1 per cent were in the General Program (Table X). Of the students with two siblings attending post-secondary institutions, 85.3 per cent were in the Academic Program and 14.7 per cent were in the General Program. When the number of siblings attending post-secondary institutions was three, 90.7 per cent of the students were in the Academic Program and 9.3 per cent were in the General Program. Eighty-eight per cent of the students with four or more siblings attending post-secondary institutions were in the Academic Program and 12.0 per cent were in the General Program.

When the number of siblings attending post-secondary institutions increased, the percentage of students in the Academic Program increased up to a high of 90 per cent with three siblings attending post-secondary institutions. The percentage of students in the General Program in the same category decreased to 10.0 per cent.

TABLE X

PROGRAM OF STUDY BY OLDER SIBLINGS ATTENDING POST-SECONDARY INSTITUTIONS

	ONE OR LESS	TWO	THREE	FOUR OR MORE	TOTAL
ACADEMIC	72.9%	85.3%	90.7%	88.0%	75.4%
GENERAL	27.1%	14.7%	9.3%	12.0%	24.6%
COLUMN TOTAL	5624	977	227	92	6920
PERCENT OF TOTAL	81.3%	14.1%	3.3%	1.3%	100.0%

Chi Square = 106.76 (3 d.f) $p < .0001$ Contingency Coefficient = 0.124

II. AREA OF RESIDENCE

Regions of Newfoundland

When compared on the basis of region of Newfoundland in which they lived, it was found that the South Coast had the largest percentage of students in the Academic Program with 85.3 per cent and the East Coast had the smallest percentage with 59.8 per cent (Table XI).

TABLE XI

PROGRAM OF STUDY BY REGION

	AVALON	EAST COAST	NORTH EAST COAST	GREAT NORTHERN PENINSULA	LABRADOR	CENTRAL NEWFOUNDLAND	WEST COAST	BURIN PENINSULA AND FORTUNE BAY	SOUTH COAST	OTHER	TOTAL
ACADEMIC %	79.6	59.8	70.9	69.7	73.6	73.6	75.3	78.5	85.3	70.7	75.4
GENERAL %	20.4	40.2	29.1	30.3	26.4	26.4	24.7	21.5	14.7	29.3	24.6
COLUMN TOTAL	3126	707	523	218	140	515	1038	353	225	75	6920
PERCENT OF TOTAL	45.2	10.2	7.6	3.2	2.0	7.4	15.0	5.1	3.3	1.1	100.0

Chi Square = 147.86 (9 d.f) $p < .0001$ Contingency Coefficient = 0.146

The Avalon Peninsula, with 45.2 per cent of the responding students, had the second largest group in the Academic Program with 79.5 per cent while 20.4 per cent were in the General Program. The figures for

MAP 1 REGION OF NEWFOUNDLAND

A AVALON

B EAST COAST

C NORTH EAST COAST

D GREAT NORTHERN PENINSULA

E LABRADOR

F CENTRAL NEWFOUNDLAND

G WEST COAST

H BURIN PENINSULA AND FORTUNE BAY

J SOUTH COAST

the other regions were as follows: the North East Coast 70.9 per cent in the Academic Program and 29.1 per cent in the General Program; the Great Northern Peninsula had 69.7 per cent in the Academic Program and 30.3 per cent in the General Program; Labrador had 73.6 per cent in the Academic Program and 26.4 per cent in the General Program; Central Newfoundland had 73.6 per cent in the Academic Program and 26.4 per cent in the General Program; the West Coast had 75.3 per cent in the Academic Program and 24.7 per cent in the General Program; and the Burin Peninsula and Fortune Bay had 78.5 per cent in the Academic Program and 21.5 per cent in the General Program. Table XII shows the regions ranked by percentage in each Program.

TABLE XII

REGIONS RANKED BY PERCENTAGE OF STUDENTS IN THE ACADEMIC AND GENERAL PROGRAMS

REGION	ACADEMIC %	GENERAL %
SOUTH COAST	85.3	14.7
AVALON	79.6	20.4
BURIN PENINSULA AND FORTUNE BAY	78.5	21.5
WEST COAST	75.3	24.7
CENTRAL NEWFOUNDLAND	73.6	26.4
LABRADOR	73.6	26.4
NORTH EAST COAST	70.9	29.1
GREAT NORTHERN PENINSULA	69.7	30.3
EAST COAST	59.8	40.2

When students were compared by region and controlling for the influence of fathers' occupation, it was found that only in the Avalon region was the fathers' occupation significant enough to have an effect on the program in which the student was enrolled (Table XIII). In the other regions it was not effective enough to be significant. Students from Upper Middle Class families on the Avalon Peninsula had 90.3 per cent in the Academic Program as compared with 9.7 per cent of their members in the General Program. The percentage for the Lower Middle Class was 82.4 per cent in the Academic Program and 17.6 per cent in the General. In the Upper Working Class 76.7 per cent were in the Academic Program and 23.3 per cent were in the General Program. The percentages for the Lower Working Class were 73.3 in the Academic Program and 26.7 in the General Program. As was found for the Province as a whole, the higher the social class the greater the percentage of students in the Academic Program.

TABLE XIII

PROGRAM OF STUDY BY FATHERS' OCCUPATION

CONTROLLING FOR REGION

AVALON

	UPPER MIDDLE CLASS	LOWER MIDDLE CLASS	UPPER WORKING CLASS	LOWER WORKING CLASS	OTHER	TOTAL
ACADEMIC	90.3%	82.4%	76.7%	73.3%	33.3%	80.5%
GENERAL	9.7%	17.6%	23.3%	26.7%	66.7%	19.5%
COLUMN TOTAL	547	586	407	554	12	2206
PERCENT OF TOTAL	24.8%	26.6%	23.0%	25.1%	0.5%	100.0%

Chi Square = 74.92 (4 d.f) $p < .0001$ Contingency Coefficient = 0.1812

Rural/Urban Regions

Map 2 shows the major urban regions of Newfoundland and Labrador. When students were compared using the rural/urban dichotomy, it was found that 80.5 per cent of the urban students were in the Academic Program and 19.5 per cent were in the General Program (Table XIV). Among rural students it was found that 71.7 per cent were in the Academic Program and 28.3 per cent were in the General Program. The percentage of students in urban areas in the Academic Program was higher than for rural areas and also higher than for the Province as a whole where 75.4 per cent were in the Academic Program.

TABLE XIV

PROGRAM OF STUDY BY URBAN/RURAL REGION

	RURAL	URBAN	TOTAL
ACADEMIC	71.7%	80.5%	75.4%
GENERAL	28.3%	19.5%	24.6%
COLUMN TOTAL	3971	2949	6920
PERCENT OF TOTAL	57.4%	42.6%	100.0%

Chi Square = 70.384 (1 d.f) $p < .0001$ Contingency Coefficient = 0.10034

Avalon and Non-Avalon

A comparison was made of students living on the Avalon Peninsula with those living in the remainder of the Province (Table XV). It was found that 79.6 per cent of the Avalon students were in the Academic Program as compared with 72.0 per cent for the remainder of the Province. The percentages for the General Program were 20.4 per cent and 28.0 per cent respectively.

MAP 2 URBAN - RURAL AREAS

URBAN AREAS

A ST. JOHN'S

B GANDER

C GRAND FALLS-WINDSOR

D CORNER BROOK

E STEPHENVILLE

F HAPPY VALLEY-GOOSE BAY

G LABRADOR CITY-WABUSH

TABLE XV

PROGRAM OF STUDY BY AVALON AND NON-AVALON REGIONS

	AVALON	NON-AVALON	TOTAL
ACADEMIC	79.6%	72.0%	75.4%
GENERAL	20.4%	28.0%	24.6%
COLUMN TOTAL	3126	3794	6920
PERCENT OF TOTAL	45.2%	54.8%	100.0%

Chi Square = 53.228 (1 d.f) $p < .0001$ Contingency Coefficient = 0.087

III. SIZE OF SCHOOL

There are many possible measures of school size; some examples are, number of pupils, number of rooms and number of teachers. For purposes of this study two indicators were used: one, the number of teachers; the other, the number of students in grade eleven. The first was chosen because the number of teachers can have a great influence on the programs offered by the school and the second measure was chosen because the number of students enrolled in grade eleven can influence the program offered by a school because it determines the number and size of classes.

Number of Teachers and Program

The program of study of grade eleven students with varying numbers of teachers was compared (Table XVI). In all grade schools where the numbers of teachers teaching high school grades could not be determined, it was found that 80.0 per cent of the grade eleven students were in the

Academic Program and 20.0 per cent were in the General Program. This was above the Provincial percentages for the Academic Program which on a Province wide basis had 75.5 per cent of the students. In schools of two to nine teachers and over twenty teachers, it was found that the percentages were very close to all grade schools with 80.4 per cent in the Academic Program in two to nine teacher schools and 79.3 per cent in the over twenty teacher schools. In schools having ten to nineteen teachers the percentages were 69.7 for the Academic Program and 30.3 per cent for the General Program. This was well below the percentages for the other categories and also below the percentages for the total Province.

TABLE XVI

PROGRAM OF STUDY BY NUMBER OF TEACHERS

	ALL GRADE SCHOOLS	2 TO 9 TEACHERS	10 TO 19 TEACHERS	OVER 20 TEACHERS	TOTAL
ACADEMIC	80.0%	80.4%	69.7%	79.3%	75.5%
GENERAL	20.0%	19.6%	30.3%	20.7%	24.5%
COLUMN TOTAL	200	761	2855	3099	6915
PERCENT OF TOTAL	2.9%	11.0%	41.3%	44.8%	100.0%

Chi Square = 88.538 (3 d.f) $p < .0001$ Contingency Coefficient = 0.112

Number of Pupils Enrolled in Grade Eleven

A comparison of the enrollment in the two programs by the number of pupils enrolled in grade eleven revealed that schools with the smallest numbers in grade eleven had the largest percentage in the Academic Program (Table XVII). When schools had one to thirty pupils in grade eleven, they had 81.1 per cent in the Academic Program and 18.9 per cent

in the General Program. Schools with thirty-one to eighty pupils in grade eleven had 69.0 per cent in the Academic Program and 31.0 per cent in the General Program. Schools with over eighty pupils enrolled in grade eleven had 77.8 per cent in the Academic Program and 22.2 per cent in the General Program. It was found that the two extremes had larger percentages in the Academic Program than did the middle sized school of thirty-one to eighty pupils.

TABLE XVII

PROGRAM OF STUDY BY GRADE XI ENROLLMENT

	ALL GRADE SCHOOLS	1 TO 30 PUPILS	31 TO 80 PUPILS	OVER 80 PUPILS	TOTAL
ACADEMIC	80.0%	81.1%	69.0%	77.8%	75.5%
GENERAL	20.0%	18.9%	31.0%	22.2%	24.5%
COLUMN TOTAL	200	739	2161	3815	6915
PERCENT OF TOTAL	2.9%	10.7%	31.3%	55.2%	100.0%

Chi Square = 73.798 (3 d.f) $p < .0001$ Contingency Coefficient = 0.10276

A comparison of the two programs by the grade eleven enrollment controlling for type of high school, showed differences which were not determined by size alone (Tables XVIII(a) and XVIII(b). In schools with one to thirty pupils enrolled in grade eleven, it was found that Central High Schools had 80.6 per cent in the Academic Program while Regional High Schools had 86.2 per cent. In schools of thirty-one to eighty students in grade eleven, the Central High Schools had 69.7 per cent in the Academic Program while the figures for the Regional High School was 67.5 per cent. The greatest difference occured in the largest size schools; in schools with over eighty pupils, the Central High Schools had 70.1 per

cent in the Academic Program while the Regional High Schools had 79.5 per cent. It would appear then that the percentage in each program is influenced by the size of the grade eleven class and the type of school the pupils attend.

TABLE XVIII(a)

PROGRAM OF STUDY BY GRADE XI ENROLLMENT

CONTROLLING FOR TYPE OF SCHOOL

CENTRAL HIGH SCHOOLS

	1 TO 30 PUPILS	31 TO 80 PUPILS	OVER 80 PUPILS	TOTAL
ACADEMIC	80.6%	69.9%	70.1%	72.6%
GENERAL	19.4%	30.1%	29.9%	27.4%
COLUMN TOTAL	681	1374	702	2757
PERCENT OF TOTAL	24.7%	49.8%	25.5%	100.0%

Chi Square = 29.123 (2 d.f) $p < .0001$ Contingency Coefficient = 0.102

Type of School

In Newfoundland and Labrador there are three types of schools teaching grade eleven students, they are All Grade Schools, Central High Schools and Regional High Schools.

Table XIX shows that all grade schools have a higher percentage of their students in the Academic Program than the Central High School or the Regional High School. The Central High School has the lowest percentage in the Academic Program with 72.6 per cent in that Program and 28.4 per cent in the General Program. The figures for the Regional High School were 77.2 per cent in the Academic Program and 22.8 per cent in

the General Program. A possible explanation for the high percentage of the all grade schools is that its size does not always permit the offering of two programs and the more prestigeous Academic Program is the one offered.

TABLE XVIII(b)

PROGRAM OF STUDY BY GRADE XI ENROLLMENT

CONTROLLING FOR TYPE OF SCHOOL

REGIONAL HIGH SCHOOLS

	1 TO 30 PUPILS	31 TO 80 PUPILS	OVER 80 PUPILS	TOTAL
ACADEMIC	86.2%	67.5%	79.5%	77.2%
GENERAL	13.8%	32.5%	20.5%	22.8%
COLUMN TOTAL	58	787	3113	3958
PERCENT OF TOTAL	1.5%	19.9%	78.7%	100.0%

Chi Square = 54.407 (2 d.f) $p < .0001$ Contingency Coefficient = 0.116

TABLE XIX

PROGRAM OF STUDY BY TYPE OF SCHOOL

	ALL GRADE SCHOOLS	CENTRAL HIGH SCHOOLS	REGIONAL HIGH SCHOOLS	TOTAL
ACADEMIC	80.0%	72.6%	77.2%	75.5%
GENERAL	20.0%	28.4%	22.8%	24.5%
COLUMN TOTAL	200	2757	3958	6915
PERCENT OF TOTAL	2.9%	39.8%	57.3%	100.0%

Chi Square = 35.25 (4 d.f) $p < .0001$ Contingency Coefficient = 0.158

When schools were compared controlling for the number of rooms, it was found that Central High Schools of two to ten rooms had the largest percentage of students in the Academic Program with 85.5 per cent. (See Table XX). The second largest percentage was found in the Regional High School with over twenty rooms. This size school had 82.2 per cent of its students in the Academic Program. With the exception of the small Central High Schools mentioned above, the Regional High School, regardless of its size, had a greater percentage of its students in the Academic Program than did the Central High School. In Central High Schools of over ten rooms, the number of rooms did not influence the program in which the student was enrolled. When the Central High School had eleven to twenty rooms and over twenty rooms, the percentage in the Academic Program in both instances was 67.6; in the General Program the percentage was 32.4. In Regional High Schools, the number of rooms did influence the program in which the student was enrolled. The lowest percentage for the Academic Program was found in those Regional High Schools of eleven to twenty rooms.

In conclusion, it can be said that in the two types of high schools being examined, the number of rooms the school had appears to be a factor in determining the program of studies in which a student enrolls. The Central High Schools with two to ten rooms had the largest percentage of students in the Academic Program while the Central High Schools with eleven to twenty rooms and over twenty rooms had the smallest percentage in the same program.

TABLE XX

PROGRAM OF STUDY BY TYPE OF SCHOOL

CONTROLLING FOR NUMBER OF

ROOMS

	ALL GRADE SCHOOLS	CENTRAL HIGH SCHOOL			REGIONAL HIGH SCHOOL			TOTAL
		2 TO 10 ROOMS	11 TO 20 ROOMS	OVER 20 ROOMS	2 TO 10 ROOMS	11 TO 20 ROOMS	OVER 20 ROOMS	
ACADEMIC %	80.0	85.5	67.6	67.6	72.4	68.2	82.2	75.5
GENERAL %	20.0	14.5	32.4	32.4	27.6	31.8	17.8	24.5
COLUMN TOTAL	200	771	1439	547	604	983	2371	6915
PERCENT OF TOTAL	2.9	11.1	20.8	7.9	8.7	14.3	34.3	100.0

Chi Square = 139.683 (6 d.f) $p < .0001$ Contingency Coefficient = .1476

IV. SUMMARY

This chapter has concerned itself with an analysis of the data under the major headings Socio-Economic Factors, Area of Residence, Size of School, and Type of School.

Under Socio-Economic Factors it was found that sex was not a significant factor in relation to the program of study in which a student was enrolled. It was found that fathers' occupation was significant since the lower the social class of the student as measured by fathers' occupation,

the smaller the percentage of students from that class enrolled in the Academic Program. The same was also found to be true for mothers' occupation. Under fathers' education it was found that as the level of the fathers' education increased, the percentage of students in the Academic Program also increased. The same was also found to be true for mothers' education. With family size it was found that the larger the family, the higher the percentage of students in the General Program and the smaller the percentage in the Academic Program. A comparison of students using older siblings as a factor showed that as the number of older siblings increased, the percentage of students in the Academic Program decreased. Also, when the number of siblings at University increased, the percentage of students in the Academic Program did the same.

The section of the chapter entitled Area of Residence was divided into several sub-categories. These categories included Region of Newfoundland, Urban/Rural Areas, and an Avalon and Non-Avalon division. A comparison of students by region showed the region in which a student lived was a factor influencing the program in which he was enrolled. It was found that the South Coast had the largest percentage of students in the Academic Program and the East Coast had the smallest percent in the same program. Under rural/urban dichotomy, it was found that in the urban areas the percentage of students in Academic Program was higher than the percentage in the same program in the rural areas. A comparison of Avalon and Non-Avalon students also showed that the Academic Program on the Avalon had a higher percentage of students than did the same program in the Non-Avalon area.

The third major heading of the chapter was Size of School. A comparison of students using the number of teachers as a basis for comparison found that in most schools 80 per cent were in the Academic Program and 20 per cent were in the General Program. The only major exception was in schools with ten to nineteen teachers where the Academic Program had approximately 70 per cent and the General Program had approximately 30 per cent.

Under the category Type of School, it was found that the all grade schools had the largest number of students in the Academic Program. A comparison of the two major types of high schools showed that the Regional High School had the larger percentage in the Academic Program. When a comparison of high schools was made, controlling for the number of rooms, it was found that the Central High School with two to ten rooms had the largest percentage of students in the Academic Program.

CHAPTER V

SUMMARY, CONCLUSIONS, IMPLICATIONS AND RECOMMENDATIONS

This chapter will attempt to give some acceptable explanations of the findings of this study and also to expand the findings. This concluding chapter is organized under the following: (1) Summary of Thesis, (2) Summary of Findings, (3) Conclusions, Implications and Recommendations for Future Study.

I. SUMMARY OF THESIS

The main aim of this study was to compare Grade Eleven students enrolled in the Academic (Matriculation) Program in Newfoundland high schools with students enrolled in the General Program on socio-economic background factors, community factors and school type and size factors. It was felt that this research would give an indication of the influence of these factors on the program of study in which a student is enrolled.

The information for this study was obtained from the results of a questionnaire sent to all students enrolled in Grade Eleven in the Province of Newfoundland. The questionnaire was part of a study being conducted by Memorial University on the sudden drop in university enrollment which occured in 1973. The population for the study was all those students who returned usable responses to the Career Decisions of Newfoundland Youth questionnaire. Using the selected variables, a computer program gave descriptive statistics for the Academic and General

Groups.

When the results from the research instrument were analysized, it was found that with the exception of sex, the Academic and General Program students differed significantly with respect to the chosen socio-economic factors.

The analysis of the results for the region of Newfoundland showed that the area of the Province in which the student lived was a significant factor in determining the program of study in which a student enrolled. The East Coast of Newfoundland had the smallest percentage in the Academic Program while the South Coast region had the largest. The urban area in the rural/urban dichotomy had the largest percentage in the Academic Program. The Avalon area, when compared with the Non-Avalon area, had the largest percentage in the Academic Program.

In the analysis of results for size of school, it was found that regardless of the school size the Academic Program had the highest percentage of students. The only major variation occured in schools with ten to nineteen teachers where the Academic Program had 70 per cent of the students compared to 80 per cent for other size schools. The analysis using type of school as a variable found that the all grade type of school had the largest percentage in the Academic Program when it was compared with Central and Regional High Schools. A comparison of the two types of high schools showed that the Regional High School had the greatest percentage in the Academic Program; however, when size was controlled it was found that the small Central High School had the largest percentage in the Academic Program.

II. SUMMARY OF FINDINGS

This section of Chapter 5 will concern itself with the rejection and acceptance of the null hypotheses stated at the beginning of the study. Some discussion will also be presented on the various findings of the study.

Null Hypotheses Rejections and Acceptances

The major findings of this study can be summarized by a presentation of the null hypotheses and the conclusions reached concerning each null hypothesis.

Hypothesis 1: There is no significant relationship between sex and the student's high school program of study.

Using the Chi Square Test of Significance with the significance level set at 0.0001, it was found that sex was not a significant factor in determining the high school program of study in which a student enrolls. The Academic Program had a significantly larger percentage of both male and female students than did the General Program. The null hypothesis could therefore be accepted.

Hypothesis 2: There is no significant relationship between parents' occupation and a student's high school program of study.

Using the Chi Square Test of Significance with the significance level set at 0.0001, the null hypothesis was rejected. Those students whose parents were employed in the more prestigeous occupations were more likely to be found in the Academic Program while those with parents of lower occupational status were more likely to be found in the General Program. There was a significant relationship found between parents' occupation and a student's high school program of study.

Hypothesis 3: There is no significant relationship between parents' unemployment record and a student's high school program of study.

Using the Chi Square Test of Significance with the significance level set at 0.0001, the null hypothesis was rejected. An analysis of the employment records of fathers showed that students from families with no record of unemployment were most likely to be found in the Academic Program and those with a record of some unemployment were to be found in the General Program. Although for both groups the percentage of students found in the Academic Program was greater than that found in the General Program, the percentage for some unemployment was lower in the Academic Program. A significant relationship was found between a parents' unemployment record and a student's high school program of study.

Hypothesis 4: There is no significant relationship between parents' education and a student's high school program of study.

Using the Chi Square Test of Significance with the significance level set at 0.0001, the null hypothesis was rejected.

An analysis of the data on fathers' and mothers' education revealed that the higher the educational level of the parents, the higher was the percentage of students enrolled in the Academic Program and the lower the educational level of the parents, the higher was the percentage enrolled in the General Program. It was concluded that there was a significant relationship between parent's education and a student's high school program of study.

Hypothesis 5: There is no significant relationship between size of family and a student's high school program of study.

An analysis of the data on family size revealed that the smaller the family, the larger the percentage of students enrolled in the Academic Program and the larger the family, the larger the percentage enrolled in the General Program. Using the Chi Square Test of Significance with the significance level set at 0.0001, the null hypothesis was rejected. The anaylsis showed that a significant relationship existed between size of family and a student's high school program of study.

Hypothesis 6: There is no significant relationship between the number of older brothers and sisters and the student's high school program of study.

Using the Chi Square Test of Significance with the significance level set at 0.0001, the null hypothesis was rejected. The analysis revealed that the larger the number of older children, the smaller the percentage in the Academic Program and the larger the percentage in the General Program. It was concluded that there was a significant relationship between the number of older brothers and sisters and the student's high school program of study.

Hypothesis 7: There is no significant relationship between the number of older brothers and sisters attending post-secondary institutions and the student's high school program of study.

An analysis of the data revealed that the larger the number of older siblings attending post-secondary institutions, the larger the percentage of students in the Academic Program and the smaller the percentage in the General Program. Using the Chi Square Test of Significance and with the significance level set at 0.0001, the null hypothesis was rejected. A significant relationship was revealed between older siblings

attending post-secondary institutions and a student's high school program of study.

Hypothesis 8: There is no significant relationship between the region in which a student lives and his high school program of study.

This null hypothesis was tested using three different indicators of region; first was the division of the Province into eight regions, next was the urban/rural dichotomy and finally the divison of the Province into Avalon and Non-Avalon regions. With all indicators used, the analysis of the data revealed that the region in which a student lives had a significant relationship to the high school program of study in which the student was enrolled. Using the Chi Square Test of Significance with the significance level set at 0.0001, the null hypothesis was rejected.

Hypothesis 9: There is no significant relationship between the size of school and a student's high school program of study.

Using the Chi Square Test of Significance with the significance level set at 0.0001, the null hypothesis was rejected. Several indicators of school size were used such as type of school, number of pupils enrolled in grade eleven, number of teachers and number of rooms. It was found that there was a significant relationship between school size and the high school program of study in which the student was enrolled.

Summary of Rejection and Acceptance of Null Hypothesis

Table XXI shows the null hypotheses that were rejected and those that were accepted based on the analysis of the data. Out of a total of nine null hypotheses, one was accepted and eight were rejected.

TABLE XXI

REJECTION AND ACCEPTANCE

OF NULL HYPOTHESES

HYPOTHESIS	REJECTED	ACCEPTED
1		X
2	X	
3	X	
4	X	
5	X	
6	X	
7	X	
8	X	
9	X	

III. CONCLUSIONS, IMPLICATIONS, AND RECOMMENDATIONS FOR FUTURE STUDY

Conclusions

The results obtained from the study of the variables in this research indicated a significant difference among high school students in the programs of study in which they were enrolled. Although over 75 per cent of the Province's grade eleven students were enrolled in the Academic Program, different variables caused the percentage to range above and below that number.

Those variables concerned with socio-economic factors indicated that the students' family background had significance in determining the

program of study in which he or she was enrolled. It was obvious that the lower the socio-economic status of a student and his family, the greater was the possiblity of his being enrolled in the General Program. The background of the student is a limiting factor in his high school studies. The student finds himself limited by his birth into a certain segment of society.

The analysis of the data on area of residence indicated that these variables were significant factors in determining the high school program of study in which a student was enrolled. Students living in certain regions of Newfoundland appeared to have a greater possibility of being enrolled in the Academic Program than in the General Program. The conclusion is that the region in which a student lives influences the program of study in which he or she enrolls. The kind of area also seems to be a factor; areas such as urban/rural and Avalon and Non-Avalon influence the high school program of study in which the student enrolls.

The final group of factors investigated were associated with the type and size of school the students attended. Here it was found that the type of school and the size of the school were significant factors in determining the high school program of study in which a student enrolls. The type of school and the size of the school available to the students influenced his high school program of study.

Implications

The major implication arising from this study is that high school students in Newfoundland are limited by three groups of factors over which they have little control. They are limited by their family background, their place of birth and the educational facilities made available

to them.

The schools are sorting out students according to their socio-economic background. The schools of this Province do not appear to be 'the great leveling agents' many would like for them to be; they are instead maintaining a status quo. The high schools, by sorting according to socio-economic standing, are making it possible for those of high socio-economic standing to maintain their positions. Upper class students are in the Academic Program and are bound for university and the positions it offers. Lower Class students are in the General Program and bound for vocational and technical schools, thus the status quo is maintained. There would appear to be a need for the high school to reasses its function and to establish courses to help overcome the obvious barriers caused by the students' family background.

The barriers placed upon a student by his area of residence are more the responsibility of school boards and the Department of Education then they are of the various individual schools. The school boards and the Department of Education are responsible for education over a much wider area and have greater influence on policy making and budgets than individual schools. There is a need for school boards and the Department of Education to realize that educational opportunities are not always the same for all students in the Province and indeed for all students in a given district. There is a need to recognize that the need for assistance is often greater in rural areas. There is a need for additional personnel, courses and physical facilities to ensure that all students, regardless of area of residence, have the same educational opportunity.

Type and size of school are very often determined by factors of geography, this makes it very difficult to change unless new approaches to education are developed. Many students have their high school program of study determined by what is available at the local high school rather than what ability they have or what career aspirations. The results of this study would appear to imply that when a school is a certain size, students enter programs on the basis of how many are needed to fill a class rather than the needs or wishes of the student. The small high school with few General Program students would seem to indicate that the small school chooses the Academic Program regardless of the needs of its students. This could be related to the high drop out rate of small high schools.

In summary, then, the findings of this study would seem to indicate a need to reassess the curriculum organization as it now exists in Newfoundland schools. It would also seem to indicate a need to take factors other than academic achievement into consideration when students are placed in various curriculum groups.

Recommendations for Future Study

1. A study should be made of the academic ability of students in the two streams.

2. Student aspirations and expectations should be studied to see if there is any correlation between a student's aspirations and expectations and his program of study.

3. It is further recommended that the students enrolled in the pre-vocational courses be studied on family background and program of study factors.

4. It is recommended that teacher attitudes towards the two programs and to the students enrolled in these programs be studied.

5. It is recommended that inequality of educational opportunity, as it is caused by a students area of residence, be studied.

BIBLIOGRAPHY

BIBLIOGRAPHY

1. BOOKS

Alcorn, M. D., and Linley, J. M. Issues in Curriculum Development. New York: World Book Company, 1959.

Alpren, Morton (ed.). The Subject Curriculum: Grades K-12. Columbus, Ohio: Charles E. Merrill Books, Inc., 1967.

Bachman, Gerald G. "The Impact of Family Background and Intelligence on Tenth-Grade Boys." in Youth in Transition, Volume II Ann Arbor: Institute for Social Research, The University of Michigan, 1969.

Blishen, Bernard R. "A Socio-Economic Index for Occupations in Canada." in Canadian Society, ed. Bernard R. Blishen, et al, Toronto: Macmillan of Canada, 1971.

Borg, Walter R. Ability Grouping in the Public Schools. Madison, Wisconsin: Dembar Educational Research Services, Inc., 1966.

Breton, Raymond. Social and Academic Factors in the Career Decisions of Canadian Youth. Ottawa: Information Canada, 1972.

Coleman, James. Equality of Educational Opportunity. Washington: United States Department of Health, Education, and Welfare, 1966.

Counts, George S. The Selective Character of American Secondary Education. New York: Arno Press and the New York Times, 1969.

Ferri, Elsa. Streaming: Two Years Later. Stough: National Foundation for Educational Research in England and Wales, 1971.

Findley, W. S., and Bryan, M. W. Ability Grouping: 1970 Status, Impact and Alternatives. Athens, Georgia: Center for Educational Improvement, University of Georgia, 1971.

Frecker, G. A. Education in the Atlantic Provinces. Copyright, Quance Lectureship Committee. Toronto: W. J. Gage and Co., 1956.

Froud, Jean. "Social Class Factors in Educational Achievement" in Family Class and Education. A Reader, Maurice Craft (ed.), London: Longman Group Ltd., 1970.

George, P. M. Social Factors and Educational Aspirations of Canadian High School Students. London, Ontario: Department of Sociology, University of Western Ontario, 1970.

Glass, Gene V., and Stanley, Julian C. Statistical Methods in Education and Psychology. Englewood Cliffs: Prentice-Hall, Inc., 1970.

Goldberg, Mirian L.; Passow, A. H.; and Justman, Joseph. The Effects of Ability Grouping. New York: Teachers' College Press, 1966.

Graham, Grace. The Public School in the New Society. New York: Harper and Row, 1969.

Hansen, Carl F. The Four-Track Curriculum in Today's High Schools. Englewood Cliffs, New Jersey: Prentice-Hall, Inc., 1964.

Humpheys, Edward H. "Equality? The Rural-Urban Disparity in Ontario Elementary Schools," in Hugh A. Stevenson, et al, The Best of Times/The Worst of Times. Toronto: Holt, Rinehart and Winston, 1972.

Jackson, B. Streaming: An Education System in Miniature. London: Routledge and Kegan Paul, 1946.

Jenchs, Christopher. Inequality. A Reassessment of the Effect of Family and Schooling in America. New York: Basic Books, Inc., 1972.

Katz, Joseph (ed.) Canadian Education Today. Toronto: McGraw-Hill Co. of Canada, 1956.

Krug, E. A. Curriculum Planning. New York: Harper and Brothers, 1950.

Lunn, Joan C. Baker. Social Class Attitudes and Achievement. London: National Foundation for Educational Research in England and Wales, 1971.

Mayeski, George W., et al. A Study of Our Nation's Students: Variations in Achievement and Motivation by Family Background and Geographic Location at the Individual and School Level. Washington: Office of Program Planning and Evaluation (DHEWOE), 1970.

Mosteller, F., and Moynihan, Daniel P. On Equality of Educational Opportunity. New York: Random House, 1972.

Newfoundland Royal Commission on Education and Youth, Vols. 1 and 2. St. John's: Province of Newfoundland and Labrador, 1967.

Nie, Norman; Brent, Dale H.; and Hull, C. Hadlar. Statistical Package for the Social Sciences. Toronto: McGraw-Hill Book Company, 1970.

Porter, Marian R.; Porter, John; and Blishen, B. R. Does Money Matter? Toronto: Institute of Behavioral Research, York University, 1973.

Roscoe, John T. Fundamental Research. Statistics for the Behavioral Sciences. New York: Holt, Rinehart and Winston, 1969.

Schafer, Walter E., and Olexa, Carol. Tracking and Opportunity-The Locking-Out Process and Beyond. Scranton: Chandler Publishing Company, 1971.

Siemens, Leonard B. The Influence of Selected Family Factors on the Educational Occupational Aspiration Levels of High School Boys and Girls. Winnipeg: Faculty of Agriculture and Home Economics, University of Manitoba, 1965.

Siemens, Leonard B. and Jackson, Winston. Educational Plans and Their Fulfillment: A Study of Selected High School Students in Manitoba. Winnipeg: Faculty of Agriculture and Home Economics, University of Manitoba, 1965.

Turabian, Kate L. A Manual for Writers of Term Papers, Theses, and Dissertations. 3rd. Edition. Chicago: Phoenix Books, University of Chicago Press, 1967.

Warren, P. J. Quality and Equality in Secondary Education in Newfoundland. St. John's: Memorial University of Newfoundland, 1973.

Yates, Alfred (ed.). Grouping in Education. New York: John Wiley and Sons, 1966.

Yates, Alfred. The Organization of Schooling. London: Routledge and Kegan Paul, 1971.

2. PERIODICALS

Adkinson, Marion R. "A Comparative Study of Pupil Attitudes Under Conditions of Ability and Heterogeneous Grouping", Dissertation Abstracts, XXVIII (April, 1968), 3869-A.

Barthelmess, Harriet M., and Boyer, Philip A. "An Evaluation of Ability Grouping", Journal of Educational Research, XXVI (1932-33), pp. 284-294.

Borg, Walter R., and Pepich, Tony. "Grouping of Slow Learning High School Pupils." Journal of Secondary Education, XLI (May, 1966), pp. 231-238.

Byers, Loretta. "Ability Grouping-Help or Hindrance to Social and Emotional Growth?" The School Review, LXIX (Winter, 1969), pp. 449-456.

Coleman, Alvin B. "Class Structure: A Comparison of Lower Working and Upper Middle Family Characteristics." Clearing House, XLIII (April, 1968), pp. 468-473.

Eash, Maurice J. "Grouping: What Have We Learned?" Educational Leadership, XVIII (April, 1961), pp. 429-434.

Ekstrom, Ruth B. "Experimental Studies of Homogeneous Grouping." School Review, LXIX (Summer, 1969), pp. 216-226.

Harker, P. K. "Social Class Factors in a New Zealand Comprehensive School." Educational Research, XIII (February, 1971), pp. 155-160.

Harnalaimen, Arthur E. "Methods of Grouping Pupils Should Provide Normal Social Situations," The Nation's Schools, XLV (June, 1950), pp. 34-35.

Maleson, Ross W. "Educational Experiences, Academic Interests, and Curriculum Choices", Personnel and Guidance Journal, XXXIX (May, 1961), pp. 717-720.

Miller, W. S., and Otto, Henry J. "Analysis of Experimental Studies in Homogeneous Grouping." Journal of Educational Research, XXI, Vol 2 (1930), pp. 95-102.

Newfoundland Department of Education Newsletter, XVI (December, 1964).

Ogletree, Earl. "Homogeneous Ability Grouping-British Style", Peabody Journal of Education, XLVII (July, 1969), pp. 20-25.

3. OTHER PUBLICATIONS

The Canada and Newfoundland Education Association, Educational Policies Committee of Trends in Education, A Survey of Current Educational Developments in the Nine Provinces of Canada and in Newfoundland. Published October 13, 1944 during the 22nd. Convention of the Association, Toronto, Canada.

4. UNPUBLISHED MATERIAL

Bishop, B. Lloyd. "The Development of Education in the Province of Newfoundland with Special Emphasis on Current Trends." Unpublished B.Ed. thesis, Mount Allison University, April, 1950.

Coish, E. Calvin. "A Comparison of Students Enrolled in Academic and General Programs on Attitude Toward School, Attitude Towards Self, Participation in Extra-Curricular Activities and Ratings of Students by Teachers." Unpublished M.Ed. thesis, Memorial University of Newfoundland, August, 1973.

Frecker, G. A. Educational Survey: Interim Report (1946-47-48). St. John's: 1948.

Hunter, A. C. "Brief. Submitted to the Royal Commission on Education and Youth, St. John's: 1966."

Memorial University of Newfoundland. "Draft of a Brief to be presented to the Royal Commission on Education and Youth by the Memorial University of Newfoundland, Memorial University of Newfoundland, December, 1966."

Memorial University of Newfoundland. Career Decisions of Newfoundland Youth. Report No. 3 of The Committee on 1973 Enrollment, May, 1974.

Parsons, Llewellyn, "Social Class, Academic Aptitude, and Selection of High School Courses." Unpublished paper, St. John's: Memorial University of Newfoundland, 1968.

APPENDIX A

Career Decisions of Newfoundland Youth Questionnaire

CAREER DECISIONS OF NEWFOUNDLAND YOUTH

072020

Post-secondary schools, such as universities, institutes of technology, trade schools, and the like, need to plan ahead to be able to provide for the needs of the students who go there. What we are trying to do here is help them in their planning for the 1974-75 year. To do this we need to know what this year's grade eleven students intend to do in 1974-75. Please answer the questions set out below to the best of your knowledge. By so doing, you will help the post-secondary schools in Newfoundland plan for the best education of the students who arrive in 1974-75.

* * * * * * * * *

ALL THE INFORMATION YOU PROVIDE HERE WILL BE COMPLETLY CONFIDENTIAL. THE ANSWERS YOU GIVE WILL BE USED FOR RESEARCH PURPOSES ONLY. NO INDIVIDUAL WILL EVER BE IDENTIFIED BY NAME. YOUR NAME WILL NEVER BE REVEALED.

The value of this research could be increased ten-fold if the information you provide here could be added to some time in the future. For example, in addition to knowing what all grade eleven students in Newfoundland plan to do in 1974-75, it would be very valuable to know what they **actually did** when the time came. We could get this information a year from now, and even more information in subsequent years. Research of this sort provides a factual basis on which to formulate policy concerning the educational and occupational careers of this Province's youth.

You need not give your name and birthdate. But, to be able to add to the information you provide here we need to have your name and birthdate in order to match this information with subsequent data. Unless you have any strong objections would you please give us this information in the space provided below. **Your name and birthdate would remain completely confidential information, and would be used only to add data to what you have already provided.**

To keep this questionnaire confidential seal it in the envelope provided when it is completed. No one, other than the research personnel on this project, will ever see it.

NAME: _____ _____ _____
SURNAME FIRST NAME SECOND NAME

DATE OF BIRTH: _____ _____ _____
DAY MONTH YEAR

1. SEX

male	☐ 1
female	☐ 2

2. WHAT ARE YOUR PARENTS' OCCUPATIONS? (Please read all classifications before answering. Check the occupational group that best describes his/her job.)

	father	mother
Owner/manager of a large business (e.g. employs three or more people)	☐ 1	☐ 1
Owner/manager of a small business (e.g. employs less than three people)	☐ 2	☐ 2
Professional/technical (e.g., lawyer, doctor, teacher, etc.)	☐ 3	☐ 3
Clerical (e.g., clerk, bookkeeper, office worker, etc.)	☐ 4	☐ 4
Home duties (housewife)	☐ 5	☐ 5
Sales (e.g., insurance, real estate salesman, etc.)	☐ 6	☐ 6
Service and recreation (e.g., policeman, cook, barber, etc.)	☐ 7	☐ 7
Transport and communication (e.g., bus driver, radio announcer)	☐ 8	☐ 8
Fishing	☐ 9	☐ 9
Farmers and farm workers (e.g., farmer, farm laborer, etc.)	☐ 10	☐ 10
Logging and mining (e.g., lumberman, miner etc.)	☐ 11	☐ 11
Craftsman (e.g., carpenter, plumber, electrician, machinist, etc.)	☐ 12	☐ 12
Laborer (e.g., construction laborer, etc.)	☐ 13	☐ 13
Unemployed	☐ 14	☐ 14
Other (Please specify): father _____	☐ 15	☐ 15
mother _____	☐ 16	☐ 16
Deceased	☐ 17	☐ 17

3. HOW MUCH UNEMPLOYMENT, IF ANY, HAVE YOUR PARENTS EXPERIENCED OVER THE PAST TWO OR THREE YEARS?

	father	mother
none at all	☐ 1	☐ 1
once or twice for short periods	☐ 2	☐ 2
frequently for short periods	☐ 3	☐ 3
for long periods of time	☐ 4	☐ 4
most of the time	☐ 5	☐ 5
not applicable	☐ 6	☐ 6

4. HOW FAR DID YOUR PARENTS GO IN SCHOOL?

	father	mother
grade five or less	☐ 1	☐ 1
grade six	☐ 2	☐ 2
grade seven	☐ 3	☐ 3
grade eight	☐ 4	☐ 4
grade nine	☐ 5	☐ 5
grade ten	☐ 6	☐ 6
grade eleven	☐ 7	☐ 7
some university	☐ 8	☐ 8
graduated from university	☐ 9	☐ 9
other post-secondary school (e.g., college of fisheries, etc.)	☐ 10	☐ 10
post-secondary technical training (e.g., armed forces training, apprenticeship training, etc.)	☐ 11	☐ 11
nursing school	☐ 12	☐ 12
other (please specify: father _____	☐ 13	☐ 13
mother _____	☐ 14	☐ 14

5. WHICH OF THE FOLLOWING STATEMENTS DESCRIBES YOUR FAMILY SITUATION?

I live with both my parents	☐ 1
I live with my mother only	☐ 2
I live with my father only	☐ 3
I live with foster parents	☐ 4
Other	☐ 5

11. HOW MUCH DO YOU KNOW ABOUT THE COSTS INVOLVED IN ATTENDING EACH OF THE VARIOUS POST-SECONDARY SCHOOLS IN THE PROVINCE? (Circle the appropriate number to indicate your response in each case.)

	nothing				a lot
College of Trades and Technology	1	2	3	4	5
College of Fisheries	1	2	3	4	5
Vocational Schools	1	2	3	4	5
Memorial University	1	2	3	4	5
Other Universities (outside the Province)	1	2	3	4	5
Nursing School	1	2	3	4	5
Other (please specify) _____	1	2	3	4	5

12. HOW MUCH DO YOU KNOW ABOUT THE ENTRANCE REQUIREMENTS OF EACH OF THE VARIOUS POST-SECONDARY SCHOOLS IN THE PROVINCE? (Circle the appropriate number to indicate your response in each case.)

	nothing				a lot
College of Trades and Technology	1	2	3	4	5
College of Fisheries	1	2	3	4	5
Vocational Schools	1	2	3	4	5
Memorial University	1	2	3	4	5
Other Universities (outside the Province)	1	2	3	4	5
Nursing School	1	2	3	4	5
Other (please specify) _____	1	2	3	4	5

13. DURING THE NEXT FEW YEARS, HOW EASY DO YOU THINK IT WILL BE FOR GRADUATES OF EACH OF THE SCHOOLS LISTED BELOW TO GET JOBS? (Circle the appropriate number to indicate your response in each case.)

	difficult				easy
College of Trades and Technology	1	2	3	4	5
College of Fisheries	1	2	3	4	5
Vocational Schools	1	2	3	4	5
Memorial University	1	2	3	4	5
Other universities (outside the Province)	1	2	3	4	5
Nursing School	1	2	3	4	5
Other (please specify) _____	1	2	3	4	5

14. DURING THE NEXT FEW YEARS, HOW EASY DO YOU THINK IT WILL BE FOR GRADUATES OF EACH OF THE FOLLOWING UNIVERSITY DEGREE PROGRAMS TO GET JOBS? (Circle the appropriate number to indicate your response in each case.)

	difficult				easy
Bachelor of Arts	1	2	3	4	5
Bachelor of Science	1	2	3	4	5
Bachelor of Commerce	1	2	3	4	5
Bachelor of Nursing	1	2	3	4	5
Bachelor of Physical Education	1	2	3	4	5
Bachelor of Arts (Education) – Primary	1	2	3	4	5
Bachelor of Arts (Education) – Elementary	1	2	3	4	5
Bachelor of Education/Bachelor of Arts	1	2	3	4	5
Bachelor of Education/Bachelor of Physical Education	1	2	3	4	5
Bachelor of Education/Bachelor of Science	1	2	3	4	5
Bachelor of Engineering	1	2	3	4	5
Pre-Forestry	1	2	3	4	5
Bachelor of Medical Science	1	2	3	4	5

6. HOW MANY BROTHERS AND SISTERS DO YOU HAVE?

none	☐ 1
one	☐ 2
two	☐ 3
three	☐ 4
four	☐ 5
five	☐ 6
six	☐ 7
seven	☐ 8
eight or more	☐ 9

7. HOW MANY OF YOUR BROTHERS AND SISTERS ARE OLDER THAN YOU?

none	☐ 1
one	☐ 2
two	☐ 3
three	☐ 4
four	☐ 5
five	☐ 6
six	☐ 7
seven	☐ 8
eight or more	☐ 9

8. HOW MANY OF YOUR BROTHERS AND SISTERS GO TO POST-SECONDARY SCHOOLS (E.G., UNIVERSITY, COLLEGE OF FISHERIES, VOCATIONAL SCHOOLS, ETC.), AND HOW MANY HAVE JOBS?

	university	other post-secondary schools	job
none	☐ 1	☐ 1	☐ 1
one	☐ 2	☐ 2	☐ 2
two	☐ 3	☐ 3	☐ 3
three	☐ 4	☐ 4	☐ 4
four	☐ 5	☐ 5	☐ 5
five	☐ 6	☐ 6	☐ 6
six	☐ 7	☐ 7	☐ 7
seven	☐ 8	☐ 8	☐ 8
eight or more	☐ 9	☐ 9	☐ 9

9. WHICH PROGRAM OF STUDIES ARE YOU ENROLLED IN THIS YEAR?

Academic	☐ 1
General	☐ 2

10. HOW MUCH DO YOU KNOW ABOUT THE COURSES OF STUDY AVAILABLE AT EACH OF THE VARIOUS POST-SECONDARY SCHOOLS IN THE PROVINCE? (Circle the appropriate number to indicate your response in each case.)

	nothing				a lot
College of Trades and Technology	1	2	3	4	5
College of Fisheries	1	2	3	4	5
Vocational Schools	1	2	3	4	5
Memorial University	1	2	3	4	5
Other universities (outside the Province)	1	2	3	4	5
Nursing School	1	2	3	4	5
Other (Please specify) _____	1	2	3	4	5

15. You have probably heard by now something about the type of environment that exists in the various post-secondary schools in this Province. Consider one aspect of this environment, the ACADEMIC ENVIRONMENT. By this we mean the set of experiences that one would get from participating in the school's educational program. PLEASE RATE THE QUALITY OF THE ACADEMIC ENVIRONMENT OFFERED BY EACH OF THE POST-SECONDARY SCHOOLS LISTED BELOW. (Circle the appropriate number to indicate your response in each case.)

	not so good				very good
College of Trades and Technology	1	2	3	4	5
College of Fisheries	1	2	3	4	5
Vocational Schools	1	2	3	4	5
Memorial University	1	2	3	4	5
Other Universities (outside the Province)	1	2	3	4	5
Nursing School	1	2	3	4	5
Other (please specify) _____	1	2	3	4	5

16. One other major aspect of the school environment is the SOCIAL ENVIRONMENT. By this we mean the set of experiences that one would get from participating in the social life that exists among students at the school. PLEASE RATE THE QUALITY OF THE SOCIAL ENVIRONMENT OFFERED BY EACH OF THE POST-SECONDARY SCHOOLS LISTED BELOW. (Circle the appropriate number to indicate your response in each case.)

	not so good				very good
College of Trades and Technology	1	2	3	4	5
College of Fisheries	1	2	3	4	5
Vocational Schools	1	2	3	4	5
Memorial University	1	2	3	4	5
Other Universities (outside the Province)	1	2	3	4	5
Nursing School	1	2	3	4	5
Other (please specify) _____	1	2	3	4	5

17. Please think about your academic abilities and performances; for example, how well you did in school last year. Then, RATE YOURSELF ALONG EACH OF THE DIMENSIONS LISTED BELOW. (Circle the appropriate number to indicate your response in each case.)

	low				high
Your ability compared with that of your close friends	1	2	3	4	5
Your ability compared with other members of your school class	1	2	3	4	5
Your ability to complete a university degree	1	2	3	4	5
Your ability to complete a post-graduate university degree like an M.A.	1	2	3	4	5
The quality of your own work at present	1	2	3	4	5
The kind of grades (marks) you are capable of getting	1	2	3	4	5

18. PLEASE INDICATE THE EXTENT TO WHICH YOU AGREE WITH EACH OF THE FOLLOWING STATEMENTS. (Circle the appropriate number to indicate your response in each case.)

	strongly agree				strongly disagree
Knowing the right people is important in deciding whether a person will get ahead	1	2	3	4	5
When I make plans I am almost certain that I can make them work	1	2	3	4	5
Becoming a success is a matter of hard work, luck has little or nothing to do with it	1	2	3	4	5
As far as world affairs are concerned, most of us are victims of forces we can neither understand nor control	1	2	3	4	5
There will always be wars, no matter how hard people try to prevent them	1	2	3	4	5
This world is run by the few people in power and there is not much the little guy can do about it	1	2	3	4	5

19. The following question concerns the occupation you would LIKE to have when you complete your schooling and, considering the opportunities for jobs today, the occupation you EXPECT to have when you graduate.

PLEASE INDICATE THE CATEGORY OF OCCUPATIONS YOU WOULD LIKE TO HAVE—AND THE CATEGORY YOU EXPECT TO HAVE—WHEN YOU FINISH YOUR SCHOOLING. (Check the appropriate box to indicate your answer in each case.)

ALSO, IN THE SPACE PROVIDED BESIDE EACH OCCUPATIONAL CATEGORY, PLEASE WRITE IN THE SPECIFIC OCCUPATION YOU WOULD LIKE TO HAVE, AND THE ONE YOU EXPECT TO HAVE. (e.g., teacher, plumber, fisherman, real estate salesman, etc.). If the occupation you would like to have and the one you expect to have are the same, write in only one name.

	LIKE	EXPECT
Owner/manager of a large business	☐ 1	☐ 1
Owner/manager of a small business	☐ 2	☐ 2
Professional/technical	☐ 3	☐ 3
Clerical	☐ 4	☐ 4
Sales	☐ 5	☐ 5
Service and recreation	☐ 6	☐ 6
Transport and communication	☐ 7	☐ 7
Fishing	☐ 8	☐ 8
Farmers and farm workers	☐ 9	☐ 9
Logging and mining	☐ 10	☐ 10
Craftsman	☐ 11	☐ 11
Laborer	☐ 12	☐ 12
Other	☐ 13	☐ 13
Home Duties	☐ 14	☐ 14

20. DO YOU PLAN TO ATTEND A POST-SECONDARY SCHOOL NEXT YEAR (1974-75)?

NO ☐ PLEASE TURN TO PAGE AND CONTINUE ON 1

YES ☐ PLEASE CONTINUE ON AND ANSWER THE QUESTIONS IMMEDIATELY BELOW 2

**** ANSWER QUESTIONS 21 TO 25 ONLY IF YOU PLAN TO ATTEND ****
A POST-SECONDARY SCHOOL IN 1974-75.

21. WHICH POST-SECONDARY SCHOOL DO YOU EXPECT TO ATTEND IN 1974-75? (Please indicate your first choice and your second choice of school.)

	first choice	second choice
College of Trades and Technology	☐ 1	☐ 1
College of Fisheries	☐ 2	☐ 3
Vocational School (which one? _____)	☐ 3	☐ 3
Memorial University	☐ 4	☐ 4
Other university (which one? _____)	☐ 5	☐ 5
Nursing School	☐ 6	☐ 6
Other (please specify) _____	☐ 7	☐ 7

22. IF YOU PLAN TO ATTEND MEMORIAL UNIVERSITY, WHICH DEGREE PROGRAM WILL YOU ENROL IN?

Bachelor of Arts	☐ 1
Bachelor of Science	☐ 2
Bachelor of Commerce	☐ 3
Bachelor of Nursing	☐ 4
Bachelor of Physical Education	☐ 5
Bachelor of Arts (Education) — Primary	☐ 6
Bachelor of Arts (Education) — Elementary	☐ 7
Bachelor of Education/Bachelor of Arts	☐ 8
Bachelor of Education/Bachelor of Physical Education	☐ 9
Bachelor of Education/Bachelor of Science	☐ 10
Bachelor of Engineering	☐ 11
Pre-Forestry	☐ 12
Bachelor of Medical Science	☐ 13
I do not plan to attend Memorial University	☐ 14

23. HOW IMPORTANT WAS EACH OF THE FOLLOWING IN HELPING YOU DECIDE ON WHICH POST-SECONDARY SCHOOL YOU WILL ATTEND IN 1974-75? (Circle the appropriate number to show how important each influence was.)

	not important				very important
The school is close to my home	1	2	3	4	5
My parents advised me to go there	1	2	3	4	5
The school offers courses that interest me	1	2	3	4	5
Most of my friends will be going there	1	2	3	4	5
Financial considerations	1	2	3	4	5
The school will give me the job qualifications I need	1	2	3	4	5
I can get paid to attend that school	1	2	3	4	5
Teachers and/or guidance counsellors advised me to go there	1	2	3	4	5
Graduates from that school can get jobs easily	1	2	3	4	5
Advice from friends at university	1	2	3	4	5
Advice from friends at other post-secondary schools	1	2	3	4	5
The job market for university graduates	1	2	3	4	5
The shorter period of training	1	2	3	4	5
The money I will earn when I graduate	1	2	3	4	5
I can find accommodation with relatives or family friends	1	2	3	4	5
Other family members or relatives attended that school	1	2	3	4	5
Information provided by the mass media (e.g., T.V., radio, newspapers, etc.)	1	2	3	4	5
Information provided by personnel from post-secondary schools	1	2	3	4	5
Other (please specify) _____	1	2	3	4	5
Other (please specify) _____	1	2	3	4	5
Other (please specify) _____	1	2	3	4	5

24. PLEASE INDICATE APPROXIMATELY HOW MUCH OF YOUR TOTAL FINANCIAL SUPPORT FOR NEXT YEAR (1974-75) WILL COME FROM EACH OF THE SOURCES LISTED BELOW. (Circle the appropriate number to indicate your response in each case.)

	nothing				all
Parents	1	2	3	4	5
Other family members or relatives	1	2	3	4	5
Summer job or part-time job during year	1	2	3	4	5
Scholarship or bursary	1	2	3	4	5
Canada Student Loan	1	2	3	4	5
Other (please specify) _____	1	2	3	4	5

25. IF THERE ARE ANY REMARKS YOU WOULD CARE TO MAKE—REMARKS RELEVANT TO THE MATTER OF CAREER DECISIONS—PLEASE NOTE THESE DOWN IN THE SPACE BELOW.

THANK YOU. THAT'S ALL. PLEASE CHECK YOUR ANSWERS, THEN SEAL THE QUESTIONNAIRE IN THE ENVELOPE PROVIDED.

****** ANSWER QUESTIONS 26 TO 29 ONLY IF YOU DO NOT PLAN ******
TO ATTEND A POST-SECONDARY SCHOOL IN 1974-75.

26. DO YOU EXPECT TO ATTEND A POST-SECONDARY SCHOOL AT A LATER DATE?

- Yes, after six months or so ☐ 1
- Yes, after one year ☐ 2
- Yes, after two years ☐ 3
- Yes, after three years ☐ 4
- Yes, after four years or so ☐ 5

- No, I do not plan on attending a post-secondary school ever ☐ 6

27. WHAT DO YOU PLAN TO DO IN 1974-75?

- Get a job (what type? _____) ☐ 1
- Travel ☐ 2
- Get married ☐ 3
- Help out at home ☐ 4
- Nothing ☐ 5
- Other (please specify) _____ ☐ 6
- Complete grade eleven ☐ 7

28. IF YOU EXPECT TO CONTINUE YOUR EDUCATION, HOW IMPORTANT WAS EACH OF THE FOLLOWING IN YOUR DECISION TO DELAY THE BEGINNING OF YOUR POST-SECONDARY EDUCATION? (Circle the appropriate number to show how important each influence was.)

	not important				very important
Undecided about the type of occupation I want	1	2	3	4	5
Waiting to see what happens to the job market	1	2	3	4	5
Want to broaden my experiences through travel	1	2	3	4	5
Need to get a job to save money for more education	1	2	3	4	5
Need to help out at home for a while	1	2	3	4	5
Disillusioned with school	1	2	3	4	5
Need to be independent for a while	1	2	3	4	5
Unwilling to borrow money (e.g., Canada Student Loan)	1	2	3	4	5
Want to broaden my experiences by working for a while	1	2	3	4	5

- I do not plan on continuing my education ☐ 6
- I have not yet completed grade eleven ☐ 7

29. IF THERE ARE ANY REMARKS YOU WOULD CARE TO MAKE—REMARKS RELEVANT TO THE MATTER OF CAREER DECISIONS—PLEASE NOTE THESE DOWN IN THE SPACE BELOW.

THANK YOU. THAT'S ALL. PLEASE CHECK YOUR ANSWERS, THEN SEAL THE QUESTIONNAIRE IN THE ENVELOPE PROVIDED.

APPENDIX B

Letter of Permission to use Committee on 1973 Enrollment Data

MEMORIAL UNIVERSITY OF NEWFOUNDLAND
St. John's, Newfoundland, Canada

Department of Educational Administration

July 23, 1974

Mr. Larry Feltham
Computer Services

Dear Mr. Feltham:

This certifies that graduate student, Mr. Gordon Day has permission to have access to the data on Grade XI students (1973-74).

Yours sincerely,

Llewellyn Parsons
Associate Professor

/mbl