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This study of dropouts from New Brunswick (Canada) schools presents a description of dropout characteristics and makes a comparison with findings of the dropout profile from the preceding year. Six variables were found to be stable factors--sex, original language (French or English), end result of leaving school (work, school, or other), grade age, and school curriculum (academic or non-academic). The degree of data stability is said to be relevant to planning long-term prevention programs. (NH)

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A Research Report
On
New Brunswick School Drop-Outs
In The
Academic Year 1963-1964

by

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New Brunswick

Department of Youth and Welfare

Fredericton, N. B.

1965

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FOREWORD

It had been recognized that many individuals and agencies, not only in New Brunswick but in Canada, are deeply concerned with the problem of students prematurely leaving the school system. Even though the Department was aware of this largely unformulated public concern, the exceptionally enthusiastic response to the author's original report was highly gratifying. For this reason, the Youth Division, on behalf of the Department of Youth and Welfare, is pleased to present the author's second research report on New Brunswick school drop-outs.

This report, in addition to replicating the previous research, offers an abundance of new data, thereby yielding a larger and even more definitive study of drop-outs than was contained in the original report. Since this new data is particularly applicable to the area of drop-out prevention, it is hoped that the reader will utilize this information in developing remedies for the drop-out problem. In other words, this report is intended to serve not only as a basis for study, but also, as a basis for action.

JOHN T. MURRANT,
Director, Youth Division.

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TABLE OF CONTENTS

CHAPTER	PAGE
PREFACE	ix
I. DESCRIPTION OF DROP-OUT CHARACTERISTICS	1
A. Description of the 1963-1964 Drop-Out Sample ..	1
Statement of the Problem	1
Data	2
Results	4
Conclusion	14
B. Comparison with the 1962-1963 Drop-Out Characteristics	18
Statement of the Problem	18
Data	18
Results	19
Conclusion	22
II. RELATIONSHIPS BETWEEN DROP-OUT CHARACTERISTICS	24
A. Relationships between Drop-Out Characteristics in the 1963-1964 Sample	24
Statement of the Problem	24
Data	24
Results	26
Conclusion	36
B. Comparison with the 1962-1963 Drop-Out Relationships	39
Statement of the Problem	39
Data	39
Results	40
Conclusion	45
III. IMPLICATIONS FOR THE FUTURE	46
APPENDIX A. Descriptive Data	47
APPENDIX B. Relationship Data	61

LIST OF FIGURES AND TABLES

FIGURE	PAGE
I. Department of Youth and Welfare District Boundaries	xi
TABLE	
I. Number and Per Cent of Male and Female Drop-Outs per District and Province	5
II. Drop-Out Age Data per District and Province	5
III. Number and Per Cent of English and French Drop-Outs per District and Province	6
IV. Number and Per Cent of Drop-Outs in Grades 3-8 and in Grades 9-12 per District and Province	7
V. Number and Per Cent of First Term and Second Term Drop-Outs per District and Province	8
VI. Number and Per Cent of Academic and Non-Academic Drop-Outs per Dis- trict and Province	8
VII. Number and Per Cent of Rural and Urban Drop-Outs per District and Province	9
VIII. Academic Standing of Drop-Outs per District and Province	9
IX. Drop-Out Problem Data per District and Province	10
X. Source of Drop-Out Problem Data per District and Province	12
XI. Drop-Out End Result Data per District and Province ..	13
XII. Comparison of New Brunswick Drop-Out Characteristics from 1962-1963 to 1963-1964	22
XIII. Summary of Annual Changes in the Relationships Between Drop-Out Variables	44

PREFACE

In March 1964, the New Brunswick Department of Youth and Welfare published its first report concerning New Brunswick school drop-out cases — "A Research Report on New Brunswick School Drop-outs In The Academic Year 1962-1963." Since that report was intended to be the first of an annual series of such reports, it contained a lengthy introductory chapter which reviewed the history, policy and procedure of the Youth Division drop-out program. Because an understanding of the drop-out program itself is requisite to an understanding of the data taken from it and of the subsequent research, and since the first report is no longer in supply, excerpts from the original introductory chapter are reprinted below. These excerpts mainly discuss the Youth Division's policy and procedure with regard to its drop-out program and are intended to help the reader toward a fuller comprehension of the main body of this, the second, report on New Brunswick school drop-outs.

"PROCEDURE OF THE DROP-OUT PROGRAM

A "drop-out" has been defined as — a student who, prior to his graduation, has withdrawn from the school system during the present academic year. It is these individuals which the principals are requested to report to the Youth Division. Once a principal's drop-out report is received at the head office, it is acknowledged, indexed and then forwarded to the office in the district where the drop-out resides. (For map of Youth Division district boundaries see page viii).

Upon receipt of the drop-out report at the district office, a file is opened on the case and the Youth Services Representative for that district begins making inquiries. In many cases, the Youth Services Representative visits the school principal, the teacher, or the student's religious counselor before making the initial contact with the drop-out. Seeing the drop-out personally, however, is done as soon as possible after receiving the report. At times, this meeting may be difficult to arrange because the person may have moved away from home, left the province, gone to work in the woods, or for some other reason is unavailable.

Once the initial contact is made with the drop-out, the Youth Services Representative performs two main functions. In the first stage of the interview, he is primarily concerned with obtaining information about the drop-out. He notes the personal statistics of the individual (age, sex, etc.), attempts to ascertain the student's reasons for leaving school and explores possible remedies to the problem. All of this information is then recorded on a standard preliminary interview form.

In the second stage of the interview, the Youth Services Representative reverses ground and becomes an information dispenser. He explains the complete services of the Division which are available to drop-outs. Involved in this discussion would be the specific introduction of the topic of guidance by briefly explaining the benefits of testing and counseling. In addition, the Youth Services Representative may give out information concerning various educational and occupational fields. At the conclusion of the interview, the address and telephone number of the office is always left with the drop-out. Following the preliminary interview, the Youth Services Representative discusses the case with the Guidance Counselor. If testing and/or counseling are indicated, appointments are set up for the student with the Guidance Counselor.

The Guidance Counselor's contact with the drop-out follows the same pattern as that of the Youth Services Representative. During the first interview, the Guidance Counselor acts as an inquisitor in order to substantiate the Youth Services Representative's impression and to determine what line of counseling to adopt or which tests to administer. In later interviews, the Guidance Counselor is more concerned with dispensing information. He gives a complete interpretation of the student's test results and engages in active counseling. It must be emphasized, however, that the Guidance Counselor does *not* dictate to the student as to what he should do; rather, he advises the student as to his capabilities and, with this in mind, suggests appropriate endeavors open to him. The final decision is, therefore, completely left to the individual.

In order to arrive at his final decision, the drop-out is offered as many opportunities to consult the Guidance Counselor as he requests. The Guidance Counselor is also willing to grant interviews to parents or anyone else with whom the drop-out would like to have the problem discussed. Finally, to further assist the drop-out, the Division maintains a complete up-to-date occupational information library where he may browse, study or borrow.

The final step in the drop-out program is the follow-up procedure. Many drop-outs voluntarily inform the Guidance Counselor or Youth Services Representative of their future plans, but the end results of the unknown cases are ascertained through the efforts of the Youth Services Representative. If letters or telephone calls do not elicit the information, the Youth Services Representative contacts the school, neighbors, etc. so that the drop-out's final status can be established and recorded in his file. In a few cases, the follow-up procedure induces the drop-out to reconsider his plans and, as a result, his file is reopened and he proceeds with further counseling.

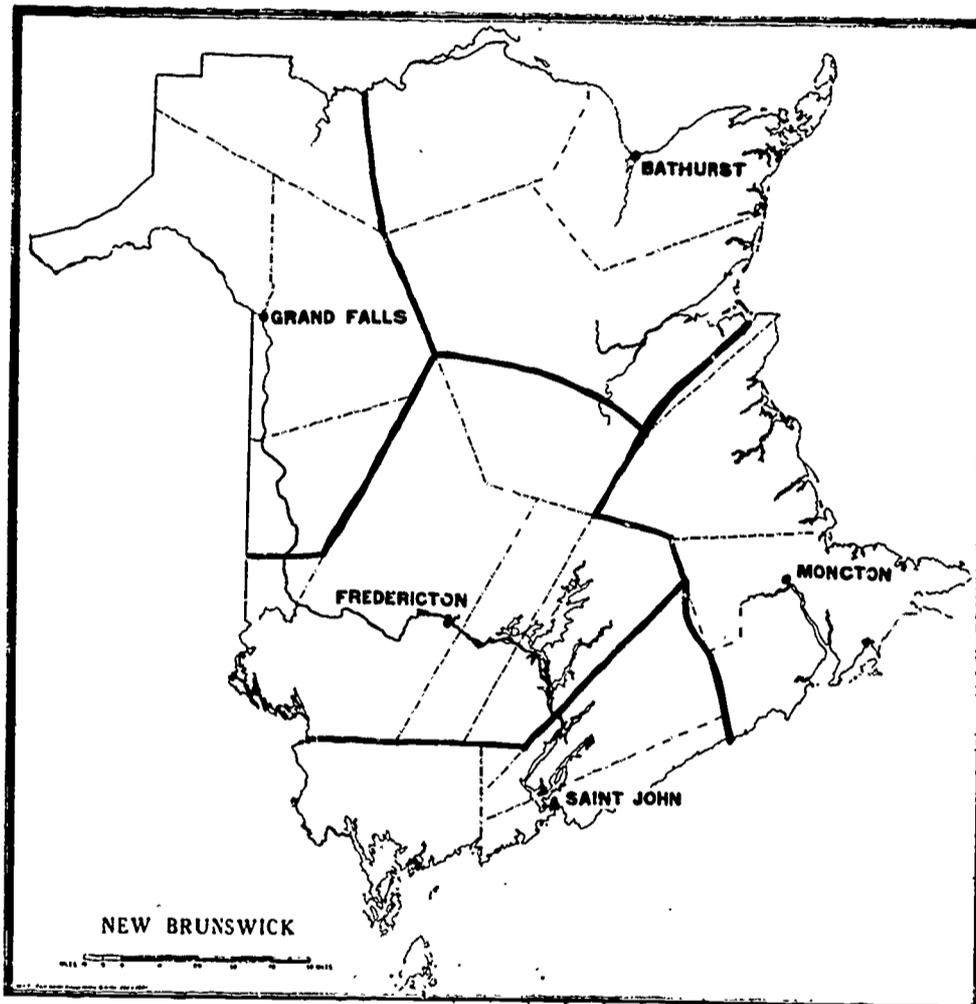


FIGURE I
DEPARTMENT OF YOUTH AND WELFARE
DISTRICT BOUNDARIES

POLICY OF THE DROP-OUT PROGRAM

The ideal guiding policy for the Department would be to assist *all* the students who have withdrawn from the school system. Unfortunately however, this ideal is unattainable at the present time, mainly because it would create an unmanageable caseload. For the academic year 1962-63*, only the names of pupils who dropped out of grades 10, 11 and 12 were requested. These requests went to every New Brunswick school that has any or all the grades between 10 and 12, even though the school had lower grades in addition to these. This procedure resulted in the Department receiving many reports on children who had dropped out of grades 9, 8, 7, etc. Despite the added strain on the staff, those drop-outs reported from the lower grades were not excluded from the services. It became evident, however, that any major policy expansion to include drop-outs from the lower grades would greatly overtax the Division's present personnel and, therefore, is unfeasible.

Another reason for the Department's inability to assist the entire drop-out population is that the school authorities, for various and usually legitimate reasons, have not informed the Department of every drop-out that has occurred. The Department, therefore, has no way of knowing who these neglected drop-outs are, so obviously, it is unable to assist them.

Although the services of the Youth Division are available to various other agencies besides New Brunswick schools, departmental policy considers assistance to school drop-outs to rank first in the order of importance. Furthermore, the policy with regard to school drop-outs views their rehabilitation as the sole function of the drop-out program. In other words, there is a curative orientation towards drop-outs because the Division is trying to re-establish them *after* their withdrawal from school.

One final aspect of the Youth Division's policy is that it has recently been expanded to include a research orientation which, when implemented, leads to an emphasis on prevention rather than treatment. In the process of attempting to "cure" drop-outs, a mass of data has been collected which the Department realized could be used for research purposes. This data, taken on every drop-out over the last year, could answer such questions as: What are the characteristics of the typical drop-out? What are the reasons for students dropping out of school? What are the differences between French and English drop-outs? etc. The solution to these problems would be the first step toward deterring children from dropping out of school, because this information could provide the basis for preventative action.

*And for the academic year 1963-64.

For a preventative program to be effective, however, the information on which the actions are based must be indisputable. This quality of accuracy cannot be achieved simply by logically surveying the data; precision is only obtainable by the rigorous use of the scientific method. The following research, therefore, involves a combination of the scientific method plus substantial use of statistical analysis, and as a result, the suggestions for preventative action have an experimental base."

CHAPTER I

DESCRIPTION OF DROP-OUT CHARACTERISTICS

The purpose of this chapter is to present the descriptive data which has been collected by the Youth Division on the 1963-1964 New Brunswick school drop-outs. This descriptive research was undertaken in order to make a contribution to two different problem areas:

1. To provide a characterization of the 1963-64 drop-out sample, and
2. To estimate the degree of annual change in drop-out characteristics by comparing the present sample to the preceding 1962-63 sample.

Since these problems are somewhat distinct, they shall be dealt with in separate sections within this chapter.

A. DESCRIPTION OF THE 1963-1964 DROP-OUT SAMPLE

Statement of the Problem. It is a common truism that before a circumstance can be effectively prevented, the nature of the circumstance itself must be completely understood. Similarly, before effective preventative drop-out measures can be devised, an analysis must be made of existing drop-out characteristics. If such an analysis could establish a profile of the characteristics of the average drop-out, this profile would be instrumental in predicting who is likely to become a future drop-out. By identifying probable potential drop-outs in this way, then the effectiveness of preventive drop-out measures would certainly be enhanced.

Definitive research on past drop-outs can, therefore, be applied to the future development of effective preventative measures. For this reason, the primary objective of the research reported in this section was to statistically analyze all the data collected on each case and then to produce a paradigm of the "typical" 1963-1964 drop-out.

In order for the resulting definition to have as much specificity as possible, all research was conducted on two different geographical levels. The first level considered was the district unit. Each branch office is responsible for covering a designated district; these districts being labelled according to the city in which the office is located. The province is, thus, comprised of five autonomous districts: Bathurst, Moncton, Saint John, Fredericton and Grand Falls. Each of these districts was separately researched. (See Preface for a map illustrating the district boundaries).

The second geographical level was evolved by combining the data from all the districts, thereby providing the basis for a complete provincial analysis. This dual-level procedure provides a provincial overview and yet, does not ignore the district differences in drop-out characteristics.

Data. The information received from the principal's report on the drop-out and the Department's subsequent interviews with the individual constitute the major sources of data. From these two sources, twelve pieces of information or "variables" were extracted to be specifically studied for every drop-out. These variables are:

1. Sex.
2. Age. The individual's age in terms of years and months at the time he left school.
3. Language. The original or easiest speaking language of the drop-out, i.e. French or English.
4. County. The county in which the drop-out resided at the time of leaving school.
5. Grade. The grade in which the individual was enrolled at the time of departure.
6. Month. The month the drop-out left school.
7. Department. The school curriculum — academic or non-academic — in which the drop-out was enrolled.
8. School. The type of school the drop-out had been attending, either rural or urban — depending on the incorporated status of the locality.
9. Academic Standing. A drop-out was recorded as a scholastic failure if he was failing his present grade, otherwise he was considered a non-failure.
10. Problem. By means of an interview with the drop-out, the Youth Services Representative and/or the Guidance Counselor attempt to determine the problem or problems that are causing the student to drop out. The problem is then recorded on a standard interview sheet in one of twelve categories:
 1. Mentally incapable of school work generally.
 2. Mentally incapable of present course only.
 3. Uninterested in school work in general.
 4. Uninterested in his present course only.
 5. Emotional/personality problem.
 6. Physically ill/handicapped.
 7. Unable to attend school regularly/at all.

8. Wants employment.
 9. Wants to leave home/community.
 10. Uncertain about future plans.
 11. Unknown.
 12. Other.
11. Source of Problem. At the same time that the Youth Division employee is attempting to determine the above problem, he is also trying to identify the possible source of the problem. The possible source is also recorded on the interview sheet in one of twenty-two categories:
1. Unknown.

Family

2. Lack of proper parental direction concern and motivation in general. (e.g. Neglect, abuse, excessive pressures, overindulgence).
3. Incompatible with siblings.
4. Lack of parental/community direction, concern and motivation toward higher education.
5. Poor financial situation.
6. Inconvenient geographical location.
7. Needs/wants child at home.
8. Other.

Individual

9. Marital status.
10. Constitutionally unfit.
11. Low intelligence.
12. Adolescent adjustment problems (e.g. sexual, feels "too big and too old").
13. Social adjustment problem (e.g. does not get along, isolate).
14. Unrealistic/irregular/childish expectations or attitudes.
15. Other.

School

16. Lacks a curriculum for specialized talents.
17. Lack of scholastic guidance/misguided.
18. Prejudice in school environment.
19. Student incompatible with teachers.
20. Previous school/course has inadequately prepared him for present school/course.
21. Problem of student-school language difference.
22. Other.

12. End Result. Through follow-up procedures, the Division ascertains and records the drop-out's present activity. The categories for this variable are as follows:

Return to School.
 Same Course
 New Course
 New School
Vocational Training.

Seeking Work.
Employed.
Helping at home.
Military.
Housewife.
Left Province.
Referred On.
Idle.
Other.
Unknown.

The information on these twelve variables was only taken for those individuals who dropped out during the last academic year (September 1963 - June 1964). The number of drop-outs who met this condition per district is as follows:

<i>District</i>	<i>Number</i>	<i>Per Cent of Total Sample</i>
Bathurst	436	33%
Saint John	261	20%
Fredericton	239	18%
Grand Falls	205	15%
Moncton	191	14%

These district samples were then combined to yield the total New Brunswick sample of 1332 drop-outs for the past academic year.

In summary, the following research involves a detailed study of twelve variables in order to produce a "typical" drop-out profile for the total sample of New Brunswick drop-outs (1332) and for five district sub-samples.

Results. Each variable was reduced to its component categories. The frequency of occurrence and corresponding per cent for each category was computed for every district and then for the province as a whole.

1. Sex. There were more boys who dropped out of New Brunswick schools than girls. Males constituted 59% of the provincial sample and females only 41%. Each of the five districts had similar results.

TABLE I
NUMBER AND PER CENT OF MALE AND FEMALE
DROP-OUTS PER DISTRICT AND PROVINCE

District	Male		Female	
	N	%	N	%
Bathurst	232	53%	204	47%
Saint John	149	57%	112	43%
Grand Falls	122	60%	83	40%
Fredericton	150	63%	89	37%
Moncton	127	66%	64	34%
Province	780	59%	552	41%

2. Age. The total sample of drop-outs had an average age of 17 years with almost half the cases being 17 or older. With minor variations, each district had similar results.

TABLE II
DROP-OUT AGE DATA PER DISTRICT AND PROVINCE

District	Average Age	Below 16		At 16		Above 16	
		N	%	N	%	N	%
Fredericton	17.15	42	18%	75	31%	122	51%
Saint John	17.13	28	11%	98	37%	135	52%
Moncton	16.99	34	18%	57	30%	99	52%
Grand Falls	16.98	41	20%	63	31%	101	49%
Bathurst	16.78	125	29%	125	29%	186	43%
Province	16.98	270	20%	418	31%	643	48%

3. Language. For the province as a whole, there were more English drop-outs (57%) than French drop-outs (45%). These percentages, however, were not replicated in any of the district samples. The Fredericton and Saint John districts were almost completely English, whereas, the Bathurst, Moncton and Grand Falls districts were predominantly French.

TABLE III
NUMBER AND PER CENT OF ENGLISH AND FRENCH
DROP-OUTS PER DISTRICT AND PROVINCE

District	English		French	
	N	%	N	%
Saint John	261	100%	—	—
Fredericton	238	99%	1	1%
Moncton	87	46%	104	54%
Grand Falls	58	28%	147	72%
Bathurst	118	27%	318	73%
Province	762	57%	570	43%

4. **County.** As would be expected, the highly populated counties contributed the majority of drop-out cases, whereas, the sparsely populated counties had very few cases. In fact, New Brunswick's five largest counties (Westmorland, Saint John, Gloucester, York, Northumberland) produced 60% of the drop-outs, while the five smallest counties (Charlotte, Sunbury, Victoria, Albert, Queens) produced only 11% of the drop-outs. (See Appendix A1).

A more meaningful statistic is one that shows the county drop-out rate as a percentage of the county's population. This method eliminates the bias against the populous counties. By controlling the percentages in this manner, the statistics show that the five counties with the highest drop-out rate are: Gloucester, York, Kent, Madawaska and Victoria. The five counties with the lowest drop-out rate are: Albert, Northumberland, Queens, Westmorland, and Sunbury. (see Appendix A1).

5. **Grade.** In each sample, there were many more drop-outs from grades 9 to 12 than from the lower grades. This result is partially explained by the Youth Division's policy of requesting principals to report only the grade 10, 11 and 12 drop-outs, thereby eliminating reporting of junior and primary grade drop-outs.

TABLE IV
NUMBER AND PER CENT OF DROP-OUTS IN
GRADES 3 - 8 AND IN GRADES 9 - 12
PER DISTRICT AND PROVINCE

District	Grades 3 - 8		Grades 9 - 12	
	N	%	N	%
Bathurst	125	29%	311	71%
Moncton	55	29%	136	71%
Fredericton	53	22%	186	78%
Grand Falls	40	20%	165	80%
Saint John	36	14%	225	86%
Province	309	23%	1023	77%

As for individual grade levels, grade 10 had the highest incidence of drop-outs in the province. The second highest grade of drop-outs was grade 9 followed by grade 11 then by grade 8. The remaining grades yielded a combined total of only 19% of the cases. These figures are also true of most districts. (See Appendix A II).

6. Month. The most active months of drop-out in the province were September and April followed by October and November. The districts, however, show some variation on the months of drop-out and do not fully support the provincial results. (See Appendix A III).

Furthermore, the districts are not unanimous on which term has the highest drop-out rate. Bathurst and Saint John have more cases dropping out in the second term, while Fredericton, Grand Falls and Moncton have more drop-outs from first term. The provincial totals, however, show that slightly more students drop out first term than second term.

TABLE V
NUMBER AND PER CENT OF FIRST TERM
AND SECOND TERM DROP-OUTS
PER DISTRICT AND PROVINCE

District	First Term		Second Term	
	N	%	N	%
Saint John	101	39%	160	61%
Bathurst	217	50%	219	50%
Fredericton	124	52%	115	48%
Grand Falls	121	59%	84	41%
Moncton	142	74%	49	26%
Province	705	53%	627	47%

7. Department. The number of drop-outs from an academic curriculum greatly exceeds the number from a non-academic curriculum. The predominance of academic cases was evident on the provincial level and in every district but Saint John. Since the Saint John office handles a number of cases from the Saint John Vocational School, there are many more non-academic drop-outs in that district than in any other district.

TABLE VI
NUMBER AND PER CENT OF ACADEMIC
AND NON-ACADEMIC DROP-OUTS
PER DISTRICT AND PROVINCE

District	Academic		Non-Academic	
	N	%	N	%
Saint John	104	40%	157	60%
Grand Falls	140	68%	65	32%
Fredericton	184	77%	55	23%
Bathurst	340	78%	96	22%
Moncton	170	89%	21	11%
Province	938	70%	394	30%

8. School. For the total provincial sample there are approximately as many drop-outs from rural schools as from urban schools. As would be expected, however, there are major district differences on this variable. Fredericton and Saint John report a majority of urban school drop-outs, whereas the remaining districts show a majority of rural drop-outs.

TABLE VII
NUMBER AND PER CENT OF RURAL AND URBAN
DROP-OUTS PER DISTRICT AND PROVINCE

District	Rural		Urban	
	N	%	N	%
Saint John	41	16%	220	84%
Fredericton	116	49%	123	51%
Bathurst	240	55%	196	45%
Grand Falls	121	59%	84	41%
Moncton	151	79%	40	21%
Province	669	50%	663	50%

9. **Academic Standing.** Over half of New Brunswick drop-outs are in good academic standing in so far as they have been recorded as non-failures. The scholastic failures, however, still represent a large per cent of the sample — 47%. Furthermore, two of the five districts, Grand Falls and Saint John, have more failures than non-failures.

TABLE VIII
ACADEMIC STANDING OF DROP-OUTS
PER DISTRICT AND PROVINCE

District	Scholastic Failures		Non-Failures	
	N	%	N	%
Grand Falls	135	66%	70	34%
Saint John	135	52%	126	48%
Moncton	85	45%	106	55%
Fredericton	105	44%	134	56%
Bathurst	166	38%	270	62%
Province	626	47%	706	53%

10. **Problem.** As mentioned before, the Youth Division Officers, by means of interviews, attempt to establish the major problems which precipitate the student's drop-out behavior. These problems, being numerous and varied, are then recorded on the student's preliminary interview sheets.

Of all the possible problems which could be judged as the main reason a student drops out of school, "uninterested in school in general" was the one most often

checked in every district. In the provincial sample, this one reason alone accounted for 30% of the cases. The second problem most often checked in the province was "uninterested in present course only" and was applicable to 15% of the cases. The combination of these two problems shows that 45%, or almost half of the total drop-outs, have a major interest deficiency which, presumably, is causing them to leave school.

The next two problems most often recorded as causes of drop-out behavior were "mentally incapable of present course" (13%) and "mentally incapable of school work in general" (9%). By combining these two problems, it is seen that the main difficulty in 22% of the total sample is an intellectual deficiency.

The remaining problems all concern various specific deficiencies such as: travel, financial, emotional, physical, etc. The combined total of all the remaining problems accounts for 33% of the drop-outs. The most prominent of these problems (though none is greater than 8%) are the four listed above. An itemized listing of the numbers and percentages for each of the specific problems, for all the districts and the province, can be found in Appendix A IV. A condensed version, however, appears below showing the numbers and percentages for the three categories of problems: Interest, Intellectual and Other.

TABLE IX
DROP-OUT PROBLEM DATA PER DISTRICT
AND PROVINCE

District	Interest		Intellectual		Other	
	N	%	N	%	N	%
Bathurst	186	42%	121	28%	129	30%
Fredericton	105	44%	38	16%	96	40%
Saint John	115	44%	32	13%	114	43%
Grand Falls	93	45%	49	24%	63	31%
Moncton	87	46%	53	28%	51	26%
Province	586	45%	293	22%	453	33%

11. Source of Problem. As was indicated previously, the Youth Division also attempts to identify the source of the specific problem which has been recorded as the reason for dropping out. Of course it is possible, or even probable, that several sources interact to produce

the problems, however, the interviewer tries to isolate the primary source, albeit there be secondary or tertiary sources.

This source must lie in one of two directions — either in the individual himself or in his environment. The student's environment can be further delineated by assuming that it is primarily composed of his family and his school. The interviewer, therefore, attempts to attribute the source of the problem to various circumstances occurring in one of three possible source areas: the individual, the family or the school.

The analysis of interviewers' reports on this variable indicates that for 60% of the cases, the individual himself is the major source of the problem. The two factors most frequently reported in this area were: "low intelligence" (25%) and "unrealistic, irregular or childish expectations and attitudes" (15%).

The family as a source of the problem was reported for 25% of the drop-outs. The most important item in this category was "lack of proper parental direction, concern and motivation in general". This item was closely followed by the related one of "lack of proper parental direction, concern and motivation toward higher education". Two other family factors frequently mentioned were "poor financial situation" and "needs or wants child at home".

The five districts, however, show a great deal of variation on the percentage of cases with a family source of problem. The Bathurst district has the highest number in this category with one-third of the cases. The Saint John district, on the other hand, has only 13% of their cases in the family category.

The last category under source of the problem was the school. The factors in this area, however, were judged as relevant to only 12% of the cases. Nevertheless, it should be noted that over half of these cases are accounted for by one factor alone — "lack of scholastic guidance". Two other items, which when combined contributed a third of the cases in this area, were "lacks a curriculum for specialized talents" and "teacher-student incompatibility".

The numbers and percentages for every item per district and province can be found in Appendix A V. The table below shows the numbers and percentages for the three main source areas only. The percentages do not always total to 100, since some districts have a few "source unknown" cases.

TABLE X
SOURCE OF DROP-OUT PROBLEM DATA
PER DISTRICT AND PROVINCE

District	Individual		Family		School	
	N	%	N	%	N	%
Bathurst	225	52%	148	34%	45	10%
Moncton	99	52%	35	18%	57	30%
Grand Falls	119	58%	58	28%	24	12%
Fredericton	153	64%	52	22%	30	13%
Saint John	209	80%	35	13%	5	2%
Province	805	60%	328	25%	161	12%

12. End Result. The activity the drop-out engages in when he leaves the Youth Division guidance and counseling services is recorded and then classified in one of three categories of end results: school, work or other.

Of the total drop-out sample, 56% or just over half are involved in a work end result. In addition to being actually employed this also includes seeking work, helping at home, enlisting in the military forces, and being a housewife. School end results, however, has a very low percentage of cases — only 12% of the New Brunswick drop-outs were involved in a school end result. If a student does return to school though, his most popular choice is returning to his same course. The second most popular choice is entrance into vocational training.

The remaining cases (32%) have been classified in other end results. This category covers two types of cases. One type concerns those who are neither involved in school nor work and are therefore, idle or other. This group constitutes 18% of the sample. The second type, which is 14% of the sample, are those cases whose end results are not available for such reasons as: left the province, referred to another agency or are simply unknown.

In summary then, at least 68% of the provincial sample of drop-outs are involved in a constructive end result. This 68%, however, should be considered the minimum number since some of the unavailable end result cases could also be in school or at work. The level of constructive end results could, therefore, be as high as 82%. It should also be noted that there is a large district variation on this percentage — Bathurst has the lowest

percentage (50%) in school or at work and Fredericton has the highest percentage (90%) in these categories. Appendix A VI shows the percentages for each separate activity per district and province. The table below shows the percentages for the three major categories per district and province.

TABLE XI
DROP-OUT END RESULT DATA PER DISTRICT
AND PROVINCE

District	Work		School		Other	
	N	%	N	%	N	%
Fredericton	182	76%	34	14%	23	10%
Moncton	112	59%	37	19%	42	22%
Saint John	175	67%	18	7%	68	26%
Grand Falls	109	53%	20	10%	76	37%
Bathurst	169	39%	46	11%	221	51%
Province	747	56%	155	12%	430	32%

Summary. As stated previously, the purpose of this section was to present a profile of the "typical" New Brunswick drop-out. A review of the statistics presented above shows that the profile of the typical 1963-1964 New Brunswick drop-out as seen in the Youth Division sample is as follows:

Personal characteristics —

- Male.
- 17 years old.
- French or English depending on the district.
- More likely to reside in Gloucester, York, Kent, Madawaska, or Victoria counties than any other county.
- Major problem is most likely to be an interest deficiency or secondly an intellectual deficiency.
- The major source of these problems is more likely to be within the individual himself, rather than in his environment.

Academic characteristics —

- From grades 9 - 12, and primarily from grade 10.
- More likely to drop out in the first term.
- In an academic curriculum.
- From a rural or urban school depending on the district.
- Less likely to be a scholastic failure than a non-failure.

And finally, the New Brunswick drop-out is most likely to be involved in a work end result. (Similar profiles for each district can be found in Appendix A VII).

CONCLUSION

The development of this kind of profile is interesting in two respects. First of all, the data is of academic interest in so far as concerned parties want to know what kind of person a drop-out is. Secondly, the data is of practical value. In addition to simply being knowledgeable in this area, genuinely concerned parties can proceed to make useful applications of such a drop-out profile.

The most obvious application, and the most needed at the present time, is in the area of drop-out prevention. With this use in mind, the data provides suggestions for several possible preventative programs plus a description of the type of students who should be the recipients of such programs. These programs are of two general types: those designed to optimize the students' environment so there will be a minimum of negative external influences, and; those designed to produce positive attitudes and constructive action on the part of the student himself.

Since possibilities for programs such as these are virtually unlimited, the following list contains only some examples of the types of plans which could emerge from a careful examination of the data. Furthermore, they are intended to exemplify the numerous areas in which preventative measures could be undertaken.

I. Environmental Programs.

A. Family. Since a student's family is a pervasive factor in his environment, several programs could be initiated to maximize the positive influence of the family on the student.

1. Since the data shows that the family may effect drop-out behavior because of its poor financial situation or because the student is needed at home, one preventive measure would be to undertake social work with the families of potential drop-outs who have these problems. Presumably, if the family received professional aid and advice on its financial and other problems, then the family would not have to rely completely on the student's help. In this way, the family's demands on the student could be significantly lessened to the extent that he would be free to remain in school.

2. A deeper family problem, which occurs in 15% of the cases, concerns the lack of proper parental direction either toward education or simply in general. This situation is particularly distressing because an immature youngster cannot be expected to carry the full load of educational motivation. Even if the family is not exerting a negative influence on the child, being totally apathetic to the student's academic future is being equally irresponsible.

Developing a program to combat these attitudes, however, would be difficult to conceive. Nevertheless, if successful adult re-education of attitudes was achieved in both the family and the community, the effects of the change would be immediately visible. Not only would parents and other senior citizens of the community urge their children to stay in school, hopefully, if the motivation was sufficiently strong, they would also attempt to remove any barriers to their children continuing in school.

B. School. Since the school is also a major part of the student's environment, a number of preventative measures can be initiated at this level with the aim of optimizing the schools' holding power on its students.

1. One method of strengthening a school's holding power would be to redesign the curriculum and teaching methods to be compatible with the students' existing interests, aptitudes and general ability. Since a number of the drop-outs were mentally incapable of their specific course, and since 70% of the sample were in an academic curriculum, it seems one direction of this redesign should be toward a greater diversification of non-academic options.

Furthermore, since 30% of the drop-outs were uninterested in school in general, another suggestion for curriculum modification would involve the development of work-study programs. This kind of program would require the student to attend school only part of the day, the remainder being comprised of work in a suitable job situation. The advantage to this procedure is that the student's already low interest threshold is not over-taxed by a full day of school work.

Both of these programs, increased non-academic options and work-study plans, plus variations on these and others not mentioned here, are based on the principle of tailoring the course to the student.

2. A second method of increasing a school's holding power would be for the school to assume responsibility for tailoring the student to the course. This method involves giving the students specialized preparation so they become capable of the existing curriculum. Reference to the data suggests that two areas of special preparation could be in special aptitudes, such as mathematics or reading, and in language orientation. The object of these preparatory classes would be to make the student sufficiently conversant in the language of the school plus giving him basic learning skills in the aptitude areas where he is deficient. The student would then be better equipped to maintain an adequate proficiency level in the regular curriculum, thereby maintaining his interest in the regular curriculum.

3. Logically, it would seem that the most advantageous school environment would be one that embraced both these principles; that is, realistic design of curriculum in relation to the students' present ability plus specialized preparation for the students who are deficient in the aptitudes required by the present curriculum. It is for the professional educators, however, who are specialists in this field, to research both the relative and absolute effectiveness of these principles and then to develop the appropriate programs.

II. Individual Programs.

Assuming that the student is living in an optimum environment, there still remains a large area for preventative work — the individual himself.

1. Since the lack of guidance was often stated as being contributory to drop-out behavior, one obvious preventative measure would be to increase the guidance facilities available to New Brunswick students.

Furthermore, since the need for guidance facilities is so acute, they not only need to be increased within the school system, but private professionals, private agencies, and other government departments should also be encouraged to undertake such functions. Indeed, any contribution by qualified people in this area, regardless of the sponsoring agency, would be a great service to the students of the province.

2. The specific individual data also shows a high incidence of emotional problems, social adjustment problems, adolescent adjustment problems and unrealistic attitudes on the part of many drop-outs. In addition to guidance services therefore, the data indicates that psychological and psychiatric services are also needed. In other words, a complete counseling program as a preventative drop-out measure would include not only vocational and educational guidance but also clinical and therapeutic treatment.

3. It is unrealistic, however, to assume that there are sufficient professional personnel readily available to serve the entire student population. For this reason, a more practical program would be to define the specific groups which are in the greatest need of counseling and thus make the most effective use of the limited personnel now available.

The data presented in this chapter serves this purpose in so far as it outlines the characteristics of the typical New Brunswick drop-out; for example, boys rather than girls, academic students rather than non-academic, etc. Therefore, rather than develop-

ing a guidance program to be thinly spread over all students, a program intensively presented to these particular students would have a greater probability of reducing the New Brunswick drop-out rate.

4. By using only the total provincial data, however, the resultant program would ignore the district differences in drop-out characteristics. A more effective program could be developed if it was tailor-made to the typical *district* drop-out. This procedure would, in effect, produce five drop-out programs, each specifically designed for a particular district and, therefore, would further increase the probability of reducing the New Brunswick drop-out rate because of the added relevance of the specific program to that district's drop-outs.

As is evident from the brief sketches presented above, drop-out prevention can be taken in a number of areas, e.g. family, school, or individual, and on various aspects within these areas. In other words, drop-out prevention is an inter-disciplinary problem — trained professionals in any field of social science can make relevant contributions. These contributions may be of two types: providing the basic research, or designing and directing the programs suggested by the results of the research. However, it must be emphasized, that regardless of the type of contribution, the discipline represented, or the area studied, these contributions to drop-out prevention must be made and made now.

B. COMPARISON WITH THE 1962 - 1963 DROP-OUT CHARACTERISTICS

Statement of the Problem. Since a profile of the typical New Brunswick drop-out has been established for two successive years (1962 - 1963 and 1963 - 1964), it is possible to compare one profile with the other. The purpose of these comparisons would be to identify any changes in drop-out characteristics that may have occurred from one year to the next. Furthermore, if such changes do exist, the comparisons will also illustrate the direction of these changes.

A transition analysis of this sort is necessary primarily because it produces an estimate of profile stability. If the drop-out population remains characteristically stable from year to year, then there is little need for annual repetition of definitive research. Instead, once one set of characteristics has been established, the research the next year can explore new and different areas. In addition, the drop-out programs developed from research done in a given year would remain relevant and applicable in future years.

If, on the other hand, annual research shows that drop-out characteristics are unstable, the drop-out profile for any given year becomes limited in its use. These limitations arise because the profile must of necessity be verified every year and, secondly, the resultant drop-out programs would require annual redesign in order to retain their relevancy.

For these reasons then, the purpose of the research presented in this section is to assess the degree of annual variation in drop-out characteristics. Once this information is obtained, statements can then be made concerning the long term applicability of the data.

Data. Of the twelve variables analyzed for the 1963 - 64 drop-outs, four of them have no corresponding counterpart in the 1962 - 63 study. Either the variable itself was newly introduced to the present study (e.g. source of problem) or the variable was redefined for 1963 - 64 and is therefore not similar to that studied the year before (e.g. school). The remaining variables which are common to both studies and thus comprise the basis for comparison are as follows: Sex, Age, Language, Academic Standing, Math, Department, Grade, and End Results.

The data on the 1962 - 63 drop-outs was taken from the author's 1962 - 63 drop-out research report.* The data on the 1963 - 64 drop-outs is presented in section A of this chapter. A

*Mary A. Drummie, *A Research Report on New Brunswick School Drop-Outs in the Academic Year 1962 - 1963*, New Brunswick Department of Youth and Welfare, March 1964.

comparison was made between these two sets of data on each of the eight variables. Furthermore, these comparisons were made on the total provincial sample and on each district sample.

All comparisons were done by means of chi squares under the null hypothesis. The significant comparisons discussed in the following text are beyond the .001 level of probability unless otherwise noted.

Results.

1. Sex.

Province — The comparison of the 1962 - 63 drop-outs to the 1963 - 64 drop-outs on this characteristic showed no significant changes.

Districts — Each of the districts also showed no significant change on this variable.

2. Language.

Province — The comparison shows a significant decrease in the number of French drop-outs in 1963 - 64, with a corresponding increase in English drop-outs. (p. less than .01).

Districts — Moncton supports the provincial comparison. (p. less than .02).

Bathurst and Grand Falls show the reverse result, that is, a significant increase in French drop-outs and decrease in English drop-outs (.01 and .05 respectively).

Comparisons are not possible for the Saint John and Fredericton districts since they never handle French cases.

3. Term.

Province — The statistics on this characteristic indicate a significant increase in first term drop-outs with fewer second term drop-outs for the year 1963 - 64.

Districts — Grand Falls and Moncton have significant results similar to those of the province. There are no significant changes, however, for Bathurst, Fredericton or Saint John.

4. End Results.

Province — From 1962 - 63 to 1963 - 64, the comparisons show a significant increase in other end results, a significant decrease in school end results, but no change in work end results.

Districts — Bathurst and Saint John have significant results in support of the provincial comparison. Fredericton, Grand Falls and Moncton show no significant changes on this variable.

5. Academic Standing.

Province — This comparison shows that there has been a significant decrease in scholastic failures with more drop-outs as non-failures.

Districts — Bathurst, Fredericton and Saint John all significantly support the provincial result. The Grand Falls comparison is not significant. The Moncton comparison is significant in the opposite direction — increase in scholastic failures.

6. Grade.

Province — The result of this comparison shows that over the last year there has been a significant decrease in lower grade drop-outs (under grade 9) with an increase in upper grade drop-outs.

Districts — Bathurst and Grand Falls have significant results in support of the provincial comparison.

The Fredericton, Moncton and Saint John comparisons are not significant, thereby showing no change on this variable.

It is more likely that this change in grade level is due to a greater stringency of Youth Division policy in taking only high school cases rather than to a real change in the characteristics of the New Brunswick drop-out population. By trying to restrict the caseload to high school drop-outs, there would also be changes in age and department. But again, these are felt to be sample changes rather than population changes.

7. Age.

Province — This comparison indicates that the 1963 - 64 drop-outs are significantly older than the 1962 - 63 drop-outs.

Districts — The Moncton district also shows a significant increase in age.

Fredericton and Grand Falls each show a trend toward an increase in age (each .10). The Bathurst and Saint John comparisons are not significant.

8. Department.

Province — The provincial comparison shows that there has been a significant increase in non-academic drop-outs with a corresponding decrease in academic drop-outs.

Districts — The provincial comparison is supported by significant comparisons in Grand Falls, Bathurst (.01), Moncton (.01), and Saint John (.05).

The Fredericton comparison is not significant.

With the exception of the sex variable, there have been significant changes in all the drop-out characteristics. These changes, however, are of two types: nominal change — reversal of the original characteristic, and interval change — variation in the strength of the original characteristic. In other words, some characteristics may be altered in strength but have not become reversed.

Further analysis of the data shows that most of the changes are of the interval type. For example, on the language variable, the majority of 1962 - 1963 drop-outs are English. In 1963 - 1964 the majority of drop-outs are still English, but the majority is significantly increased. So then, the characteristic of the typical drop-out being English not only remains true, but is even stronger in the 1963 - 64 sample. Reference to Table XII indicates that, in addition to the language variable, an increase in the majority also occurs on the end result, grade and age variables.

TABLE XII*
COMPARISON ON NEW BRUNSWICK DROP-OUT
CHARACTERISTICS FROM 1962 - 63 TO 1963 - 64

Variable	Typical Drop-Out		Nominal	Changes Interval
	1962 - 63	1963 - 64		
1. Language	English	English	None	Increased Majority
2. End Result	1. Work 2. Other 3. School	1. Work 2. Other 3. School	None	None — Work Increase — Other
3. Grade	Upper	Upper	None	Increased Majority
4. Age	Above 16	Above 16	None	Increased Majority
5. Sex	Male	Male	None	None
6. Department	Academic	Academic	None	Decreased Majority
7. Term	2nd	1st	Reversed	Lost Majority
8. Academic Standing	SF	NSF	Reversed	Lost Majority

(*For similar tables showing 1962 - 63 — 1963 - 64 comparisons at the district level see Appendix A VIII a - e.)

There are no changes of either type on the sex variable. The department variable also remains nominally the same, but has decreased in strength in the 1963 - 64 sample.

On these six variables then, the research indicates that the characteristics of the typical drop-out are unaltered. For both samples, the typical drop-out is male, English, in a work end result, upper grade drop-out, above 16 years old, and was in an academic curriculum.

The two remaining variables, term and academic standing, are the only ones which show nominal changes or reversals. In 1962 - 63, the majority of cases were second term drop-outs, whereas this year, the majority of cases are first term drop-outs. Similarly, on academic standing the majority of drop-outs have changed from being scholastic failures to being non-failures. On these two characteristics, then, the two samples are significantly different.

Conclusion. Of the eight variables common to both the 1962 - 63 sample and the 1963 - 64 sample, two of the variables (term of drop-out and academic standing) were lacking in stability over the two years. Since these characteristics tend toward annual fluctuation, any programs based on these variables

in a given year would not necessarily be relevant the next year. In other words, such inconsistencies in the data render it useless for establishing applied programs.

Information on these variables could be used, however, if it were shown that the annual fluctuations were orderly instead of random. That is, if a longitudinal study shows that the changes in the data are patterned, then according to this pattern, predictions for the next year can be made from the data of the present year. In this way, even though the data and the applied programs are subject to annual change, there is the slight advantage of at least knowing which direction the change will take. Future research on these two variables will, therefore, involve finding out how and why such changes occur with the hope that a pattern of change can be identified.

The six other drop-out variables included in the comparative research were, on the other hand, shown to be basically stable over the two years. By remaining consistent, these six characteristics of sex, language, end result, grade, age and department will most likely continue to be the drop-out parameters in the coming years. For this reason then, any programs devised on the basis of these six variables are also likely to continue to be relevant in the future.

In conclusion, since the degree of data stability determines the degree of its applicability, the research in this section indicates that at least six factors are capable of being effectively applied. By virtue of their stability, these six factors can serve as a workable basis for relevant long-term preventative drop-out programs. In view of these considerations, it can be seen once again, that drop-out research, even on an annual comparison basis, is not only of academic interest but is also of practical value.

CHAPTER II

RELATIONSHIPS BETWEEN DROP-OUT CHARACTERISTICS

The results of the descriptive research presented in Chapter I serve to define the characteristics of the typical drop-out. The knowledge of these characteristics allows preventative measures to achieve maximum effectiveness with minimum effort by concentrating on these specific groups of likely drop-outs (e.g. males rather than females).

A preventative program could be further refined, however, if the specific groups were even more explicitly described. This additional information can be acquired by studying the relationships between drop-out characteristics. The results of these comparisons would make it possible for a likely drop-out to be defined — instead of in terms of just one characteristic (e.g. male) — in terms of two characteristics (e.g. males who are scholastic failures).

The purpose of the research presented in this chapter is, therefore, with the aid of more sophisticated statistical procedures, to produce a more sophisticated description of the typical drop-out. Furthermore, it was felt that these more complex descriptions should also be subjected to an analysis of annual change. Again, these two problems, being somewhat distinct, are treated in separate sections of this chapter.

A. RELATIONSHIPS BETWEEN DROP-OUT CHARACTERISTICS IN THE 1963 - 64 SAMPLE

Statement of the Problem. The next objective of the research was to establish the degree of association between pairs of drop-out variables; for example, is the drop-out's language correlated with his school department? Since the drop-out variables represent types of drop-outs (e.g. language variable is comprised of French drop-outs and English drop-outs, and the department variable is comprised of academic drop-outs and non-academic drop-outs), the problem can be restated as an attempt to identify relationships between types of drop-outs. For example, are French drop-outs also likely to be academic drop-outs? If this were the case, particular emphasis should be given to French academic students instead of generally attending to all academic students. In other words, the identification of these relationships provides additional information which serves to further define the specific groups in need of a preventative drop-out program.

Data. All of the variables previously discussed were included in this stage of the research with one exception. The

information concerning the counties in which the drop-outs reside was excluded because the data on this variable does not lend itself to statistical manipulation.

The eleven remaining variables were reduced to as few nominal categories as was meaningfully possible. Subsequently, the variables were viewed only in terms of these specified categories with each category representing a particular type of drop-out. The categorization is as follows:

1. Sex: male drop-outs
female drop-outs
2. Language: French drop-outs
English drop-outs
3. Academic Standing: scholastic failure drop-outs
non-failure drop-outs
4. Month: first term drop-outs
second term drop-outs
5. Department: academic drop-outs
non-academic drop-outs
6. Grade: lower grade (3 - 8) drop-outs
upper grade (9 - 12) drop-outs
7. End Results: school end result drop-outs
work end result drop-outs
other end result drop-outs
8. School: urban school drop-outs
rural school drop-outs
9. Age: below 16 (younger drop-outs)
16
above 16 (older drop-outs)
10. Problem: drop-outs with interest problems
drop-outs with intellectual problems
drop-outs with other problems
11. Source of Problem: drop-outs with family sources
drop-outs with school sources
drop-outs with individual sources

The data on these eleven variables was taken on all the cases which were involved in the previous descriptive study. The samples in Chapter I, Section A are, therefore, identical to the samples in this study. Dual-level analysis was again used so as not to obscure the district differences on the one hand, and still, to maintain a provincial overview on the other hand.

Every possible relationship between types of drop-outs was examined by comparing the data on each variable to the data on every other variable. Since there are eleven variables, this involves an examination of 110 possible relationships. Furthermore, since each relationship was studied separately for every district and then for the province as a whole, the complete analysis yields 660 comparisons.

Obviously then, a discussion of every possible comparison would be beyond the scope of this paper and the perseverance of its readers. For these reasons, the following text presents only the *significant provincial* comparisons. The remaining provincial comparisons are ipso facto not significant and are not discussed. The individual district results are also not considered here, but are completely summarized in Appendix B (I through XI).

Before examining the provincial results, it is imperative that the reader realize that these conclusions are *not* always wholly supported by the individual districts. In fact, some provincial comparisons are partially negated by certain districts. To illustrate this point, charts showing the degree of support lent to the provincial results by the district results are included in Appendix B.

All comparisons were done by means of chi squares under the null hypothesis. For statistical reasons, a relationship was only considered significant if it reached a probability of .01 or less for the province and .05 or less for a district. All significant provincial relationships are beyond the .001 level unless otherwise noted.

Results.

I. Sex Relationships. Five significant relationships were shown in the New Brunswick comparisons of the sex variable to every other variable — the remaining five comparisons are not significant. (See Appendix B I).

- a. Age. A significantly higher per cent of the male drop-outs are above sixteen, whereas, a significantly higher per cent of female drop-outs are below sixteen. The conclusion being that male drop-outs are more likely to be the older drop-outs while the female drop-outs are more likely to be the younger drop-outs.
- b. Grade (.01). The results of this comparison show that a significantly higher per cent of males are from the lower grades, whereas, a significantly higher per cent of females are from the upper grades.

- c. Academic Standing. The apparent discrepancy between the above conclusions, in that males are both older and yet from the lower grades, is explained in this comparison. The analysis shows that the majority of male drop-outs are scholastic failures whereas, a large majority of female drop-outs are non-failures.
- d. Term (.01). This comparison shows that more male cases drop out second term, whereas, more of the females have dropped out first term.
- e. Source of Problem (.01). Although there is no significant difference between males and females concerning the nature of the problem, they do differ on the source of the problem. A school source of problem is reported for more males, whereas, family and individual sources are reported for more females.

SUMMARY OF SIGNIFICANT SEX COMPARISONS

	Male Drop-Outs	Female Drop-Outs
Age	Older	Younger
Grade	Lower	Upper
Academic Standing	SF	NSF
Term	2nd	1st
Source	School	Family-Individual

2. Language Relationships. Of the ten possible language comparisons on the provincial data, eight show significant relationships, thereby, leaving only two non-significant comparisons. (See Appendix B II).

- a. Department. This significant comparison between language and department shows that only 19% of the French drop-outs were in a non-academic curriculum as opposed to 38% of the English drop-outs. Conversely then, there were many more French than English students dropping out of an academic curriculum.
- b. Grade. Since there are more English than French dropping out of non-academic courses, it would be expected that there are more English than French dropping out of grades 9 to 12 because it is only in these grades that non-academic courses are offered. This expectation is verified in the language-grade comparison. A significantly higher per cent of English drop-outs are from the upper grades, whereas, a significantly higher per cent of French drop-outs are from the lower grades.

- c. Age. The grade comparison leads to another expectation. Since the English drop-outs tend to achieve a higher grade level than the French, it would be logical to assume that the English are older than the French. The language-age comparison substantiates this assumption by showing that a significantly higher per cent of English drop-outs are above 16, whereas a significantly higher per cent of French drop-outs are below 16.
- d. End Results. The language-end result comparison indicates that the English drop-outs are more likely to be in a "work end result", while French drop-outs tend toward "other end results". Since fifty-four per cent of all the "other end result" drop-outs are idle cases, the above conclusion suggests that many of the French drop-outs involved in an "other end result" are actually being idle.

This situation could be partially explained by referring to the previous evidence. The former comparisons indicate that the typical French drop-out is younger, of a lower grade level and has little technical training. These factors probably militate against his chances for employment, whereas, the English drop-out, having the opposite characteristic, is not as handicapped in achieving a work end result.

- e. Term. The result of this comparison indicates that the majority of English cases drop out in second term, whereas, the majority of French cases drop out during the first term. The English drop-out, therefore, not only remains in school longer in terms of age and grade level, but also remains longer during a given academic year.
- f. School. As would be expected given the geographical distribution of the French and English populations, two-thirds of the French drop-outs are from rural schools, whereas, nearly two-thirds of the English drop-outs are from urban schools.
- g. Problem. The results of this comparison yield several relationships. Firstly, there are significantly more French drop-outs with intellectual problems than there are English drop-outs (29% - 17%). The English drop-outs on the other hand, exceed the French drop-outs in having interest problems and "other" problems.
- h. Source of Problems. In considering all of the possible problems contributing to drop-out behavior, the French drop-out is much more likely to have a family source to these problems than an English drop-out is. The English drop-outs, however, exceed the French drop-outs in having an individual source to their problems.

SUMMARY OF SIGNIFICANT LANGUAGE COMPARISONS

	English Drop-Outs	French Drop-Outs
Department	Non-Academic	Academic
Grade	Upper	Lower
Age	Older	Younger
End Result	Work	Other
Term	2nd	1st
School	Urban	Rural
Problem	Interest & Other	Intellectual
Source	Individual	Family

3. **Academic Standing Relationships.** Of the ten possible comparisons with academic standing, four produced significant relationships. (See Appendix B III). One of these significant relationships was the comparison of academic standing with sex. Since this result has already been reported under "Sex comparisons", it will not be repeated here.

- a. **Term.** Significantly more cases which were scholastic failures dropped out during the second term, whereas, significantly more of the non-failures dropped out first term. This result is according to expectation since it would not be until second term that a student would become fully aware of the fact that he was failing his year. If failure is an impetus for dropping out, then these cases are more likely to drop out second term rather than first term.
- b. **Problem.** Again as would be expected, a significantly higher per cent of scholastic failures have mental incapability as their major problem. The non-failures on the other hand, have very few intellectual problems and instead show a significantly higher per cent of "other" problems.
- c. **Source.** Since scholastic failures have a higher per cent of intellectual problems, it is not surprising that they also have a significantly higher per cent of individual sources to these problems. The non-failures have fewer individual sources and instead show a significantly higher percentage of family sources to their problems.

SUMMARY OF SIGNIFICANT ACADEMIC STANDING COMPARISONS

	Scholastic Failures	Non-Failures
Sex	Males	Female
Term	2nd	1st
Problem	Intellectual	Other
Source	Individual	Family

4. Term Relationships. The comparisons of the term variable to every other variable rendered six significant relationships. (See Appendix B IV). Three of the significant relationships have already been presented under the heading of "Sex", "Language", and "Academic Standing".

- a. School. The fourth term comparison indicates that the majority of first term drop-outs are from rural schools, while the majority of second term drop-outs are from urban schools.
- b. Source (.01). There is a significantly higher per cent of family source of problems for first term drop-outs with a significantly higher per cent of individual sources for second term drop-outs. There is no difference between the two groups as to the per cent of school source of problem.
- c. End Result (.01). This comparison shows that first term drop-outs are more likely to return to school than second term drop-outs. The second term cases are instead more likely to be in a work or other end result.

SUMMARY OF SIGNIFICANT TERM COMPARISONS

	First Term Drop-Outs	Second Term Drop-Outs
Sex	Female	Male
Language	French	English
Academic Standing	NSF	SF
School	Rural	Urban
Source	Family	Individual
End Result	School	Work & Other

5. Department Relationships. The statistics on the department comparisons reveal that half of the possible relationships are significant. (See Appendix B V). One of these significant comparisons has already been presented under "Language".

- a. Grade. As would be expected, the vast majority (98%) of the non-academic drop-outs are from grades 9 - 12. The academic cases, on the other hand, split one third - two thirds between the two grade levels.
- b. Age. Another obvious result is that the non-academic drop-outs tend to be older (above 16), whereas the academic drop-outs are apt to be sixteen or less.
- c. School. Again as would be expected, a significantly higher per cent of non-academic drop-outs are from urban schools, while a higher per cent of academic drop-outs are from rural schools.

- d. **Problem** Finally, a less obvious relationship is shown in the department-problem comparison. The academic drop-outs significantly exceed the non-academic drop-outs in the percentage of cases with problems of mental ability. The non-academic drop-outs, however, have a higher percentage of "other" problems. There is literally no difference between the two groups on interest problems.

SUMMARY OF SIGNIFICANT DEPARTMENT COMPARISONS

	Academic Drop-Outs	Non-Academic Drop-Outs
Language	French	English
Grade	Lower	Upper
Age	Younger	Older
School	Rural	Urban
Problem	Intellectual	Other

6. **Grade Relationships.** In comparing the grade variable to every other variable, all but two of the comparisons yielded significant results. (See Appendix B VI). Of the eight significant relationships, three were presented under "Sex", "Language" and "Department".

- a. **Age.** The grade-age comparison yields the expected result that lower grade drop-outs are significantly younger than upper grade drop-outs. In fact 86% of the lower grade drop-outs are sixteen or less, whereas, only 41% of the upper grade drop-outs are this young.
- b. **School.** This comparison shows that nearly three-quarters of the lower grade drop-outs are from rural schools, whereas, the majority of upper grade drop-outs are from urban schools.
- c. **End Results (.01).** It is interesting to note that the high school drop-outs surpass the lower grade drop-outs in achieving a constructive end result. A significantly higher per cent of grade 9 - 12 drop-outs are involved in both "school end results" and "work end results". The lower grade drop-outs, on the other hand, exceed the high school drop-outs in "other end results" (as indicated previously, this category is mainly comprised of idle cases). This is probably a function of the lower grade drop-out being deficient in both education and age, and is therefore handicapped in getting employment or technical training.

- d. **Problem.** With reference to the problems underlying drop-out behavior, the lower grade drop-outs have a higher per cent of cases who are mentally incapable. The upper grade drop-outs have few cases with this problem, but more cases with interest and other problems. These results suggest that a sort of natural selection occurs between these two grade levels, in that those who are mentally incapable of high school courses will have withdrawn prior to entering that level. If this were the case, the major problem for a drop-out who has proceeded into the upper grades will most likely be something other than an intellectual deficiency.
- e. **Source.** There is no difference between grade levels as to the number of cases with an individual source to their problems. The family as a source of the drop-out's problem, however, is more frequent for lower grade drop-outs, whereas, the school as the source of the problem occurs in twice as many upper grade cases than lower grade cases. This would seem to suggest that the family is a more influential factor in the environment of lower grade cases. Then, when a student proceeds to the upper grades, the emphasis shifts to the school as the more influential environment factor. Since later data indicates that a similar relationship occurs between age and source, it could be further implied that the difference between upper and lower grade sources of problems is actually a function of the drop-out's age.

SUMMARY OF SIGNIFICANT GRADE COMPARISONS

	Lower Grade Drop-Outs	Upper Grade Drop-Outs
Sex	Male	Female
Language	French	English
Department	Academic	Non-Academic
Age	Younger	Older
School	Rural	Urban
End Results	Other	School & Work
Problem	Intellectual	Interest & Other
Source	Family	School

7. **School Relationships.** Seven of the ten possible school comparisons produced significant relationships. (See Appendix B VII). Four of these significant relationships have already been mentioned under "Language", "Term", "Department" and "Grade".

- a. **Age.** Since the rural drop-outs are more likely to come from the lower grades than the urban school drop-outs are (shown in the grade-school comparison), it is logical to assume that rural school drop-outs are younger than those from urban schools. The data substantiates this assumption by showing that the rural drop-outs have a significantly higher percentage of cases under 16, whereas, the urban drop-outs have a significantly higher percentage of cases over sixteen. The results of these two comparisons (school-grade and school-age) plus the school-term comparison suggest that, in terms of length of stay, the urban schools have more holding power than the rural schools have.
- b. **Problem.** There is absolutely no difference between rural and urban drop-outs on the frequency of interest problems. Mental incapability, however, is reported significantly more often for rural drop-outs, and other problems are reported significantly more often for urban drop-outs.
- c. **Source.** The rural school drop-outs exceed the urban cases in the number of times the family and the school are the source of their problems. In other words, the environmental sources are more frequent in rural school cases. The urban drop-outs, on the other hand, have a greater frequency of individual sources to their problems.

SUMMARY OF SIGNIFICANT SCHOOL COMPARISONS

	Rural Drop-Outs	Urban Drop-Outs
Language	French	English
Term	1st	2nd
Department	Academic	Non-Academic
Grade	Lower	Upper
Age	Younger	Older
Problem	Intellectual	Other
Source	Family & School	Individual

8. **Age Relationships.** In comparing the age variable to every other variable, seven of the comparisons produced significant relationships. (See Appendix B VIII). Five of these have been discussed previously under "Sex", "Language", "Department", "Grade" and "School".

- a. **End Results (.01).** The results of this comparison show that the younger drop-outs are more likely to be involved in other end results than the older drop-outs.

The latter group is more likely to be involved in either school or work end results. The same reasons apply to this lack of constructive end results by younger drop-outs as were applied to the similar lack on the part of lower grade drop-outs. That is, both groups are even more deficient in education and age than their older, upper grade counterparts. It is to be expected, therefore, that these cases will be even further handicapped in their attempts to enter either suitable employment or special training courses.

- b. Source. As indicated previously in discussing the grade-source comparison, the age-source comparison shows that the younger cases far exceed the older cases in having family sources to their problems. The older cases have a greater frequency of school sources and individual sources.

SUMMARY OF SIGNIFICANT AGE COMPARISONS

	Younger Drop-Outs	Older Drop-Outs
Sex	Female	Male
Language	French	English
Department	Academic	Non-Academic
Grade	Lower	Upper
School	Rural	Urban
End Result	Other	School & Work
Source	Family	Individual & School

9. End Results Relationships. Only half of the end result comparisons were significant (See Appendix IX) and four of them have been previously presented under "Language", "Term", "Grade" and "Age".

- a. Source. This comparison yields the rather interesting relationship that drop-outs in a school end result are the group most likely to have a school source of problem. The drop-outs in other end results have the greatest frequency of family and individual sources. The drop-outs in work end results show no significant relationship with any particular source.

SUMMARY OF SIGNIFICANT END RESULT COMPARISONS

	School	Work	Other
Language	English	English	French
Term	1st	2nd	2nd
Grade	Upper	Upper	Lower
Age	Older	Older	Younger
Source	School	---	Fam. & Individual

10. Problem Relationships. In this area of comparisons, six were shown to be significant. (See Appendix B X). All but one of these significant relationships have been presented — "Language", "Academic Standing", "Department", "Grade" and "School".

- a. Source. As would be expected, there is a very strong relationship between a drop-out's problem and the source of that problem. More specifically, the cases recorded as being mentally incapable are also shown to have the highest frequency (96%) of individual sources. Drop-outs with an interest problem have the highest per cent of school source of problem. And finally, drop-outs with other problems have the most family sources of problem.

SUMMARY OF SIGNIFICANT PROBLEM COMPARISONS

	Mentally Incapable	Uninterested	Other
Language	French	English	English
Academic Standing	SFs	-----	NSFs
Department	Academic	-----	Non-Academic
Grade	Lower	Upper	Upper
School	Rural	-----	Urban
Source	Individual	School	Family

11. Source Relationships. In comparing the source variable to all the other variables, every comparison is significant with one exception — Department. (See Appendix B XI). Since all of these relationships have been discussed under their alternate headings, the following summary will serve to consolidate these results.

SUMMARY OF THE SIGNIFICANT SOURCE COMPARISONS

	Individual	Family	School
Sex	Female	Female	Male
Language	English	French	-----
Academic Standing	SF	NSF	-----
Term	2nd	1st	-----
Grade	-----	Lower	Upper
School	Urban	Rural	Rural
Age	Older	Younger	Older
End Result	Other	Other	School
Problem	Intellectual	Other	Interest

Conclusion. By identifying these relationships between drop-out characteristics, the specific groups which are most likely to produce drop-outs are more explicitly defined. For example, it was found in the first chapter that a drop-out is most likely to be a male student. In addition, we now know that of the male students, a drop-out is most likely to be a scholastic failure. As a result, the potential drop-out is defined in terms of, not just one, but two characteristics — e.g. his sex and his academic standing.

The primary application of this additional knowledge concerning drop-out characteristics is the use of the information in determining which students would be the most appropriate recipients of preventative drop-out programs. Applying the data in this way involves a three-step process:

1. Outlining the objectives of the proposed preventative program.
2. Referring to the particular set of drop-out data which is the most relevant to the objectives of the program.
3. Finally, interpreting the data for the purpose of recommending which students would be the most appropriate recipients of the program.

To illustrate, several programs with the appropriate recipients are presented below. These proposals exemplify the ease of applying such data, plus the diversity of programs to which the data may be applied.

A. For the first example, assume that a general anti-drop-out campaign has been developed which consisted of such things as pamphlets, panel discussions, etc. illustrating the value of a high school education. Furthermore, the authorities wish to reach all those who would most benefit by it, yet it is neither practical nor feasible for the campaign to be conducted on a province-wide basis.

Proceeding to Step 2, reference to the first chapter indicates some of the specific groups toward whom such a program should be directed, e.g. males, etc. Within these groups, the particular people who would most benefit from the program are identified by referring to the data in Chapter II.

The final step in the process of applying the data involves the interpretation. The interpretation, of course, depends on which set of data was chosen in the second step to serve as the frame of reference. The following discussion focuses on two separate sets of data, thereby, giving two examples of the interpretative step.

1. If the program was arranged on a sex basis, for example, the data in Chapter I suggests that the most appropriate group would be the male students rather than the females. The data in this chapter indicates that within this group of male students, the program should concentrate on the individuals with the following characteristics:
 - the older students.
 - should not ignore the students in the lower grades, since the lower grade drop-outs are most likely to be male.
 - the scholastic failures.
 - the program should be presented first term, since male students are most likely to drop second term.

2. One might wish, however, to arrange a preventative program on a school basis. Since the descriptive data indicates that the number of drop-outs from rural schools approximately equals the number from urban schools, either a rural or an urban program will encounter similar numbers of potential drop-outs. As indicated in Chapter II, however, the two programs will have different areas of emphasis. A program presented in rural schools should concentrate on the following students:
 - French students.
 - academic students.
 - should include lower grade and younger students, since both these groups are most likely to drop out of rural schools.
 - students with intellectual deficiencies.
 - students with environmental sources to their problems (i.e. family and school).
 - finally, the program should be presented during the second term, since rural school students are most likely to drop out first term.

An urban school project, however, would concentrate on the opposite types of students:

- English students.
- should include non-academic students, since the non-academic drop-out is most likely to come from an urban school.
- upper grade students.
- older students.
- should include students with problems other than intellectual and interest deficiencies, since drop-outs with "other" problems are most likely to come from urban schools.
- students with individual sources to their problems.

- finally, the program should be presented first term, since urban drop-outs are most frequent in second term.

B. For the second example, the nature of the proposed preventative program is more specific. In this case, the authorities plan to concentrate on the sources of the problems which precipitate premature withdrawal. By doing remedial work on the sources of drop-out problems, it is hoped that the problems themselves will be alleviated to the extent that the student will no longer consider withdrawing from school.

Since the most frequent source of drop-out problems is the individual himself (seen in Chapter I), the remedial source program which would be the most relevant to the greatest number of potential drop-outs would be one that concentrated on the individual factor. Possibilities for such programs would include intensive individual counseling sessions, psychological evaluation services, etc.

Once the type of program has been determined, the program can be made more effective by presenting it to the particular students who would most benefit from it, that is, it should be presented to the students who are most likely to have individual sources. Reference to the data in Chapter II indicates that students with the following characteristics are most likely to have individual sources and, therefore, would be the most appropriate candidates for the proposed program:

- female students.
- English students.
- scholastic failures.
- students in urban schools.
- older students.
- and students with intellectual deficiencies.

In a similar manner, the appropriate candidates for any preventative program can be easily identified, thereby, producing greater effectiveness in the results. In other words, by avoiding a random selection of candidates and instead, using the research as a basis for selection, the programs have achieved an added measure of relevancy. In turn, the additional relevancy of the program to the student means that the program will have a greater likelihood of success in terms of effectively preventing these students from dropping out.

In general then, the three-fold process is the method whereby the research proposals are translated into practical programs. The data in Chapter I suggests appropriate types of programs, whereas, the data in Chapter II serves to identify the most appropriate recipients of the programs. Since the research illustrates the kinds of programs that are needed plus the types of students who need them, thorough application of the research via the three-fold process would result in the evolution of preventative measures which are both imaginative and effective.

B. COMPARISON WITH THE 1962 - 1963 DROP-OUT RELATIONSHIPS

Statement of the Problem. Since comparisons such as the ones just presented were also conducted on the 1962 - 63 drop-out sample, an analysis can be made between the results of 1962 - 63 comparisons and the results of 1963 - 64 comparisons. The object of this analysis is to discover whether the relationships between drop-out characteristics which were found in the first sample are replicated in the second sample. Since the two samples are from successive academic years, the analysis will in effect indicate whether the relationships have been occurred in a given year are likely to reoccur in succeeding years.

This study of annual change was done for the same reasons that a similar study was done on the descriptive data in Chapter I. That is, the results will serve to clarify two problems. Firstly, the analysis will indicate whether it is necessary to work out the relationships on an annual basis. If the relationships tend to remain stable, then annual replication is unnecessary; however, if the comparisons produce different results each year, then annual verification would be necessary. The second problem concerns the applicability of the programs developed on the basis of these comparisons. If the relationships remain stable, then the programs will remain relevant in the coming year; however, if the relationships are not stable from year to year, the programs based on the comparisons from one year will have to be redesigned for the coming year.

For these reasons then, the purpose of the research presented in this section is to ascertain the stability of the relationships between drop-out characteristics over a period of one year. The results of this analysis can then be applied to the problems of the long term relevancy of the data and the direction of future research.

Data. Of the eleven variables used in the 1963 - 64 comparisons, three (school, problem and source) have no corresponding counterpart in the 1962 - 63 study. Either the variable was newly introduced to the present study or the variable was re-defined for 1963 - 64 and is therefore not similar to that studied the year before. The remaining variables which are common to both studies and, thus, comprise the basis for an annual comparison are: Sex, Age, Language, Academic Standing, Term, Department, Grade and End Results.

The data on the 1962 - 63 relationships was taken from the author's 1962 - 1963 drop-out research report.* The data on the 1963 - 64 relationships is presented in Section A of this Chapter. The following comparisons were made between these two sets

of data. The comparisons discussed below are for the provincial sample only, however, summaries of the district comparisons are contained in Appendix B XII.

Results.

1. Age. Reference to the chart below shows that four of the age relationships which were significant in 1963 - 1964 were also significant in the same direction in 1962 - 1963. Both of the non-significant relationships remained stable. In fact, the only change between the two samples is in the age-end result relationship. These two characteristics, after showing no association in 1962 - 1963, were significantly associated in 1963 - 1964.

COMPARISON OF THE 1962 - 63 AND 1963 - 64
AGE RELATIONSHIPS

Age with:	1962 - 63	1963 - 64
Department	Sig.	Same
Grade	Sig.	Same
Sex	Sig.	Same
Language	Sig.	Same
Term	N.S.	Same
Academic Standing	N.S.	Same
End Result	N.S.	Reversed (Sig.)

2. Department. As with the age relationships, all the department relationships remained the same from 1962 - 1963 to 1963 - 1964 with one exception. The department-term comparison was reduced from being significant in 1962 - 1963 to being non-significant in 1963 - 1964.

COMPARISON OF THE 1962 - 63 AND 1963 - 64
DEPARTMENT RELATIONSHIPS

Department with:	1962 - 63	1963 - 64
Age	Sig.	Same
Grade	Sig.	Same
Language	Sig.	Same
Sex	N.S.	Same
End Result	N.S.	Same
Academic Standing	N.S.	Same
Term	Sig.	Reversed (N.S.)

•*Ibid.*

3. Sex. Of the seven possible sex relationships, two have changed over the year. The sex-term and sex-grade relationships were not significant in the previous sample and are significant in the present sample. The other five sex relationships have remained stable.

COMPARISON OF THE 1962 - 63 AND 1963 - 64
SEX RELATIONSHIPS

Sex with:	1962 - 63	1963 - 64
Academic Standing	Sig.	Same
Age	Sig.	Same
Department	N.S.	Same
Language	N.S.	Same
End Result	N.S.	Same
Term	N.S.	Reversed (Sig.)
Grade	N.S.	Reversed (Sig.)

4. Grade. As with the sex relationships, only two showed annual change. The grade-sex relationship was not significant in the first study and is significant in this study. The grade-term relationship, on the other hand, was significant in 1962 - 63 and is no longer significant in 1963 - 64. The other five grade relationships have remained stable.

COMPARISON OF THE 1962 - 63 AND 1963 - 64
GRADE RELATIONSHIPS

Grade with:	1962 - 63	1963 - 64
Language	Sig.	Same
Department	Sig.	Same
Age	Sig.	Same
End Result	Sig.	Same
Academic Standing	N.S.	Same
Term	Sig.	Reversed (N.S.)
Sex	N.S.	Reversed (Sig.)

5. Language. Again, of the seven possible relationships, only two have showed variation. The language-term relationship was not significant in 1962 - 63 and is significant in 1963 - 64, whereas, the language-academic standing relationship was significant and is not now. The remaining relationships do not show any such changes.

COMPARISON OF THE 1962 - 63 AND 1963 - 64
LANGUAGE RELATIONSHIPS

Language with:	1962 - 63	1963 - 64
Age	Sig.	Same
Grade	Sig.	Same
Department	Sig.	Same
End Results	Sig.	Same
Sex	N.S.	Same
Term	N.S.	Reversed (Sig.)
Academic Standing	Sig.	Reversed (N.S.)

6. Academic Standing. In this set of relationships, four have remained the same and three have reversed. Of those which have changed, the academic standing-term relationship has reversed from being not significant to being significant. Both the academic standing relationships with language and end results were significant and changed to being non-significant.

COMPARISON OF THE 1962 - 63 AND 1963 - 64
ACADEMIC STANDING RELATIONSHIPS

Academic Standing with:	1962 - 63	1963 - 64
Sex	Sig.	Same
Age	N.S.	Same
Department	N.S.	Same
Grade	N.S.	Same
Term	N.S.	Reversed (Sig.)
Language	Sig.	Reversed (N.S.)
End Results	Sig.	Reversed (N.S.)

7. End Results. Four, or over half, of these relationships have changed during the year. The end result relationships with term and age have reversed from not significant to significant, whereas, those with academic standing and department have reversed in the opposite direction. The three remaining relationships show no changes.

COMPARISON OF THE 1962 - 63 AND 1963 - 64
END RESULT RELATIONSHIPS

End Result with:	1962 - 63	1963 - 64
Language	Sig.	Same
Grade	Sig.	Same
Sex	N.S.	Same
Term	N.S.	Reversed (Sig.)
Age	N.S.	Reversed (Sig.)
Academic Standing	Sig.	Reversed (N.S.)
Department	Sig.	Reversed (N.S.)

8. Term. In this last set of comparisons, only one relationship (term - age) has remained stable over the year. Of the other term relationships, those with academic standing, language, sex and end results have become significant, while those with department and grade have become non-significant.

COMPARISON OF THE 1962 - 63 AND 1963 - 64
TERM RELATIONSHIPS

Term with:	1962 - 63	1963 - 64
Age	N.S.	Same
Academic Standing	N.S.	Reversed (Sig.)
Language	N.S.	Reversed (Sig.)
Sex	N.S.	Reversed (Sig.)
End Results	N.S.	Reversed (Sig.)
Department	Sig.	Reversed (N.S.)
Grade	Sig.	Reversed (N.S.)

In making these annual comparisons on relationships between drop-out characteristics, there are five possible results.

- A. The relationship could remain the same.
 - 1. Non-significant relationships remain non-significant.
 - 2. Significant relationships remain significant in the same direction.
- B. The relationship could change over the year.
 - 1. Non-significant relationships become significant.
 - 2. Significant relationships become non-significant.
 - 3. Significant relationships become significant in the opposite direction.

Of these five possibilities, the first two, which are the stable possibilities, occur in 62.5 per cent of the annual comparisons. In other words, almost two-thirds of the relationships are stable from one year to the next. The remaining 37.5 per cent of the relationships are unstable in so far as they showed the first two types of changes. None of the relationships showed the third possible change.

It should also be noted that some variables produce a greater number of stable relationships than other variables do. Reference to the following table indicates that the age and department relationships are the most stable. These are closely followed by the grade, language and sex relationships.

The academic standing, end result, and particularly the term relationships, however, have a greater tendency to be changeable. The fluctuations in these latter relationships are partially explained by the analysis of annual change reported in Chapter I. Since that research showed that the term and academic standing variables were lacking in descriptive stability, it would be expected that the relationships with these variables would also be lacking in stability.

TABLE XIII
SUMMARY OF ANNUAL CHANGES IN THE
RELATIONSHIPS BETWEEN DROP-OUT VARIABLES

Set of Relationships	Number of Stable Relationships	Number of Reversed Relationships	
		Change to Sig.	Change to N.S.
Age	6	1	—
Department	6	—	1
Grade	5	1	1
Language	5	1	1
Sex	5	2	—
Academic Standing	4	1	2
End Results	3	2	2
Term	1	4	2
Totals	35	12	9
Percentages	62.5%	37.5%	

Conclusion. Of the eight sets of relationships available for annual comparison, five sets are relatively stable: age, department, grade, language and sex. Since these sets of relationships show little annual fluctuation, it is likely that these relationships will remain consistent in future years. For this reason, preventative measures based on these particular relationships will retain most of their relevancy in future years.

Three sets of relationships, however, have been shown to be inconsistent: academic standing, end results and term. Since these relationships have changed over the past year, there is no basis for assuming that they will not change again over the next year. For this reason, any preventative plans based on these several relationships will not necessarily be thoroughly relevant in the coming year.

The future research in this area will, in addition to verifying the stable relationships, be directed toward examining the unstable relationships. Before the unstable relationships can be fully understood, however, research must be done on the descriptive changes in the variable itself. In other words, the research must analyze the simple instabilities before proceeding to the more complex instabilities.

CHAPTER III

IMPLICATIONS FOR THE FUTURE

In considering the future with regard to drop-outs, two questions come to mind. The first question concerns the directions to be taken in conducting future drop-out research. In other words, "What are we going to do?"

Given the research conditions that exist within the Department, it is expected that future research will proceed along three lines. Primarily, future research will replicate the research reported here. The purpose of this will be to verify the degrees of stability which were established over the past year. Presumably, a three year replication would produce a relatively reliable final statement as to which variables will remain consistent and which ones will not. Secondly, future research will investigate the problems which have arisen from the present study; such as, investigation of the reasons for certain variables being unstable. And finally, future research will explore new variables in order to further expand the characterization of the typical New Brunswick drop-out.

The overall objective in all these lines of research is to develop a thorough and definitive collection of drop-out data which can be utilized in both the areas of drop-out rehabilitation and drop-out prevention. That is, it is hoped that over the years, we can build a solid core of drop-out research which can serve as the basis for formulating applied programs — be they rehabilitative or preventative.

Since the reason for doing this research is so that it can be of practical benefit, this purpose would not be fulfilled if no action was taken. The application of these results to the design and administration of drop-out programs, however, is outside the domain of this Department. These tasks are your responsibility. It is the responsibility of the professionals in education and the social sciences to initiate such projects, and it is the responsibility of the layman to promote public awareness and interest in these projects.

In the final analysis then, the information provided here can only be considered useful if it becomes instrumental in effecting actions which will forestall students from dropping out of school. Furthermore, if such actions were taken, it would provide added impetus and direction to the future research. For these reasons, it is necessary that the reader carefully consider the second question — "What are you going to do?"

APPENDIX A

Descriptive Data

APPENDIX	PAGE
I. Data on Drop-Outs' County of Residence	49
II. Drop-Out Grade Data per District and Province	50
III. Data on Month of Drop Out per District and Province	51
IV. Drop-Out Problem Data per District and Province	52
V. Source of Drop-Out Problem Data per District and Province	53
VI. Drop-Out End Result Data per District and Province	54
VII. District Profiles of the Typical 1963-1964 Drop-Out	55
VIII. Comparisons of District Drop-Out Characteristics from 1962-1963 to 1963-1964.	
a. Bathurst	56
b. Fredericton	57
c. Grand Falls	58
d. Moncton	59
e. Saint John	60

APPENDIX A - I
DATA ON DROP-OUTS' COUNTY OF RESIDENCE

County	Number	Per Cent of Total Sample	County	Per Cent of 1961 County Population
Gloucester	300	23%	Gloucester	.45%
York	185	14%	York	.35%
Saint John	168	13%	Kent	.29%
Madawaska	111	8%	Madawaska	.28%
Restigouche	105	8%	Victoria	.27%
Westmorland	84	6%	Restigouche	.26%
Kent	76	6%	Kings	.20%
Northumberland	64	5%	Charlotte	.20%
Victoria	53	4%	Saint John	.19%
Kings	52	4%	Carleton	.17%
Charlotte	46	3%	Albert	.16%
Carleton	41	3%	Northumberland	.13%
Albert	20	2%	Queens	.10%
Sunbury	15	1%	Westmorland	.09%
Queens	12	1%	Sunbury	.07%

49

2

APPENDIX A - II
DROP-OUT GRADE DATA PER DISTRICT AND PROVINCE

Grade	Bathurst			Fredericton			Grand Falls			Moncton			Saint John			Province		
	N	%	Rank	N	%	Rank	N	%	Rank	N	%	Rank	N	%	Rank	N	%	Rank
Below	10	2%	8	—	—	8	5	2%	8	4	2%	8	1	½%	8	20	2%	8
6	16	4%	7	4	2%	7	13	6%	5	7	4%	7	2	1%	7	42	3%	7
7	31	7%	5	18	8%	6	6	3%	7	25	13%	3	8	3%	6	88	7%	6
8	68	16%	4	31	13%	4	16	8%	4	19	10%	4	25	10%	5	159	12%	4
9	94	22%	2	60	25%	1	51	25%	1	36	19%	2	44	17%	3	285	21%	2
10	128	29%	1	59	25%	2	70	34%	2	67	35%	1	107	41%	1	431	32%	1
11	70	16%	3	44	18%	3	37	18%	3	17	9%	5	45	17%	2	213	16%	3
12	19	4%	6	23	10%	5	7	3%	6	16	8%	6	29	11%	4	94	7%	5

(50)

APPENDIX A - III
DATA ON MONTH OF DROP-OUT PER DISTRICT AND PROVINCE

Month	Bathurst			Fredericton			Grand Falls			Moncton			Saint John			Province		
	N	%	Rank	N	%	Rank	N	%	Rank	N	%	Rank	N	%	Rank	N	%	Rank
September	121	28%	1	59	25%	1	12	6%	7	96	50%	1	25	10%	7	313	23%	1
October	42	10%	4	30	13%	2	35	17%	2	17	9%	3	27	10%	6	151	11%	4
November	28	6%	7	17	7%	9	52	25%	1	19	10%	2	36	14%	1	152	11%	3
December	26	6%	8	18	8%	6-7-8	22	11%	4	10	5%	6-7	13	5%	9	89	7%	9
January	23	5%	9	21	9%	5	16	8%	6	14	7%	4-5	33	13%	3-4	107	8%	6
February	34	8%	5	18	8%	6-7-8	6	3%	8-9-10	10	5%	6-7	31	12%	5	99	7%	7-8
March	29	7%	6	28	12%	3-4	17	8%	5	3	2%	9	22	8%	8	99	7%	7-8
April	62	14%	2	28	12%	3-4	33	16%	3	14	7%	4-5	33	13%	3-4	170	13%	2
May	59	13%	3	18	8%	6-7-8	6	3%	8-9-10	6	3%	8	36	14%	2	125	9%	5
June	12	3%	10	2	1%	10	6	3%	8-9-10	2	1%	10	5	2%	10	27	2%	10

(51)

APPENDIX A - IV
DROP-OUT PROBLEM DATA PER DISTRICT AND PROVINCE

Problem	Bathurst			Fredericton			Grand Falls			Moncton			Saint John			Province		
	N	%	Rank	N	%	Rank	N	%	Rank	N	%	Rank	N	%	Rank	N	%	Rank
Uninterested in School Work in General	128	29%	1	60	25%	1	58	28%	1	65	34%	1	81	31%	1	392	30%	1
Uninterested in Present Course Only	58	13%	3	45	19%	2	35	17%	2	22	12%	3	34	13%	3	194	15%	2
Mentally Incapable of Present Course Only	77	18%	2	19	8%	5	32	16%	3	15	8%	4	28	11%	5	171	13%	3
(52) Mentally Incapable of School Work Generally	44	10%	4	19	8%	6	17	8%	5-6	38	20%	2	4	2%	9-10	122	9%	4
Wants Employment	24	6%	6	16	7%	7	7	3%	8	13	7%	5	41	16%	2	101	8%	5
Unable to Attend School Regularly/at all	34	8%	5	9	4%	8	19	9%	4	12	6%	6	19	7%	6	93	7%	6
Emotional/Personality Problem	15	3%	8	22	9%	4	4	2%	9	10	5%	7	31	12%	4	82	6%	7
Other	16	4%	7	30	13%	3	17	8%	5-6	5	3%	9	4	2%	9-10	72	5%	8
Physically Ill/Handicapped	12	3%	9	6	3%	9-10	9	4%	7	9	5%	8	9	3%	7	45	3%	9
Wants to Leave Home/Community	11	3%	10	2	1%	12	3	2%	10-11	1	½%	10-11	9	3%	8	26	2%	10
Unknown	10	2%	11	6	2%	9-10	1	1%	11	—	—	12	1	½%	11	18	1%	11
Uncertain About Future Plans	7	2%	12	5	2%	11	3	2%	10-11	1	½%	10-11	—	—	12	16	1%	12

APPENDIX A - V
SOURCE OF DROP-OUT PROBLEM DATA PER DISTRICT AND PROVINCE

Source of Problem	Bathurst		Fredericton		Grand Falls		Moncton		Saint John		Province	
	N	%	N	%	N	%	N	%	N	%	N	%
Unknown	18	4%	4	2%	4	2%	—	—	12	5%	38	3%
Lack of Parental Direction in General	94	22%	7	3%	7	3%	11	6%	12	5%	131	10%
Lack of Parental Direction Toward Education	11	3%	28	12%	24	12%	1	½%	4	2%	68	5%
Poor Financial Situation	30	7%	8	3%	11	5%	11	6%	8	3%	68	5%
Needs/Wants Child at Home	10	2%	6	3%	10	5%	9	5%	7	3%	42	3%
Other Family Sources	—	—	3	1%	4	2%	1	½%	2	1%	10	1%
Inconvenient Geographical Location	3	1%	—	—	—	—	2	1%	2	1%	7	½%
Incompatible With Siblings	—	—	—	—	2	1%	—	—	—	—	2	1/5%
Low Intelligence	125	29%	37	15%	49	24%	76	40%	42	16%	329	25%
Unrealistic/Childish/Irregular Attitudes	51	12%	47	20%	31	15%	2	1%	74	28%	205	15%
Adolescent Adjustment Problems	8	2%	29	12%	7	3%	—	—	29	11%	73	5%
Other Individual Sources	13	3%	12	5%	22	11%	2	1%	14	5%	63	5%
Social Adjustment Problems	6	1%	10	4%	3	1%	5	3%	26	10%	50	4%
Constitutionally Unfit	18	4%	6	3%	6	3%	9	5%	11	4%	50	4%
Marital Status	4	1%	12	5%	1	½%	5	3%	13	5%	35	3%
Lack of Scholastic Guidance	25	6%	14	6%	8	4%	37	19%	1	½%	85	6%
Lacks Curriculum for Special Talents	2	½%	4	2%	5	2%	11	6%	1	½%	23	2%
Student - Teacher Incompatibility	5	1%	6	3%	7	3%	3	2%	2	1%	23	2%
Inadequately Prepared for Present Course	9	2%	2	1%	2	1%	5	3%	—	—	18	1%
Other School Sources	1	¼%	3	1%	1	½%	1	½%	1	½%	7	½%
Prejudice in School Environment	2	½%	—	—	1	½%	—	—	—	—	3	¼%
Student - School Language Difference	1	¼%	1	½%	—	—	—	—	—	—	2	1/5%

(53)

APPENDIX A — VI
DROP-OUT END RESULT DATA PER DISTRICT AND PROVINCE

End Result	Bathurst		Fredericton		Grand Falls		Moncton		Saint John		Province	
	N	%	N	%	N	%	N	%	N	%	N	%
Same Course	21	5%	9	4%	9	4%	17	9%	4	2%	60	5%
Vocational Training	20	4%	19	8%	2	1%	8	4%	2	1%	51	4%
New School	4	1%	3	1%	8	4%	6	3%	12	5%	33	2%
New Course	1	¼%	3	1%	1	½%	6	3%	—	—	11	1%
Employed	110	25%	113	47%	73	36%	78	41%	109	42%	483	36%
Helping at Home	36	8%	23	10%	25	12%	15	8%	19	7%	118	9%
Seeking Work	6	1%	30	13%	5	2%	7	4%	31	12%	79	6%
Military Service	12	3%	4	2%	3	1%	7	4%	8	3%	34	2%
Housewife	5	1%	12	5%	3	1%	5	3%	8	3%	33	2%
Idle	133	30%	2	1%	42	20%	16	8%	40	15%	233	17%
Left Province	69	16%	13	5%	30	15%	20	10%	12	5%	144	11%
Unknown	11	3%	3	1%	—	—	1	½%	12	5%	27	2%
Other	3	1%	3	1%	4	2%	3	2%	2	1%	15	1%
Referred On	5	1%	2	1%	—	—	2	1%	2	1%	11	1%

(54)

APPENDIX A – VII
DISTRICT PROFILES OF THE TYPICAL 1963-1964 DROP-OUT

Characteristic	Bathurst	Fredericton	Grand Falls	Moncton	Saint John
Sex	Male	Male	Male	Male	Male
Age	16¾	17	17	17	17
Language	French	English	French	French	English
County	Gloucester	York	Madawaska	Restigouche	Saint John
Problem	Interest	Interest	Interest	Interest	Interest
Source of Problem	Individual	Individual	Individual	Individual	Individual
Grade	Upper-10	Upper-9 or 10	Upper-10	Upper-10	Upper-10
Term	1st or 2nd	1st or 2nd	1st	1st	2nd
Department	Academic	Academic	Academic	Academic	Non-Academic
School	Rural	Rural or Urban	Rural	Rural	Urban
Academic Standing	Non-Failure	Non-Failure	Failure	Non-Failure	Failure
End Result	Other	Work	Work	Work	Work

(55)

APPENDIX A – VIII
 COMPARISON OF DISTRICT DROP-OUT CHARACTERISTICS FROM 1962-1963 TO 1963-1964
 a. Bathurst District

Variable	Typical Drop-Out		Change	
	1962-1963	1963-1964	Nominal	Interval
Grade	Upper	Upper	None	Increased Majority *
Language	French	French	None	Increased Majority *
Age	Older	Older	None	None
Sex	Male	Male	None	None
Term	1st or 2nd	1st or 2nd	None	None
Department	Academic	Academic	None	Decreased Majority *
End Results	Work	Other	Reversed	Lost Majority **
Academic Standing	SF	NSF	Reversed	Lost Majority **

* $p < .01$
 ** $p < .001$

(56)

APPENDIX A – VIII
 b. Fredericton District

Variable	Typical Drop-Out		Change	
	1962-1963	1963-1964	Nominal	Interval
Age	Older	Older	None	None
Sex	Male	Male	None	None
Term	1st or 2nd	1st or 2nd	None	None
Department	Academic	Academic	None	None
Grade	Upper	Upper	None	None
End Results	Work	Work	None	None
Language	English	English	None	None
Academic Standing	SF	NSF	Reversed	Lost Majority *

* $p < .001$

(57)

APPENDIX A - VIII
c. Grand Falls District

Variable	Typical Drop-Out		Change	
	1962-1963	1963-1964	Nominal	Interval
Grade	Upper	Upper	None	Increased Majority **
Language	French	French	None	Increased Majority *
End Results	Work	Work	None	None
Age	Older	Older	None	None
Sex	Male	Male	None	None
Academic Standing	SF	SF	None	None
Department	Academic	Academic	None	Decreased Majority **
Term	2nd	1st	Reversed	Lost Majority **

* $p < .05$
** $p < .001$

(58)

APPENDIX A – VIII

d. Moncton District

Variable	Typical Drop-Cut		Change	
	1962-1963	1963-1964	Nominal	Interval
Age	Older	Older	None	Increased Majority ***
Term	1st	1st	None	Increased Majority ***
End Results	Work	Work	None	None
Grade	Upper	Upper	None	None
Sex	Male	Male	None	None
Language	French	French	None	Decreased Majority *
Department	Academic	Academic	None	Decreased Majority **
Academic Standing	NSF	NSF	None	Decreased Majority ***

* $p < .02$
 ** $p < .01$
 *** $p < .001$

APPENDIX A – VIII
e. Saint John District

Variable	Typical Drop-Out		Change	
	1962-1963	1963-1964	Nominal	Interval
Language	English	English	None	None
End Results	Work	Work	None	None
Age	Older	Older	None	None
Sex	Male	Male	None	None
Term	2nd	2nd	None	None
Grade	Upper	Upper	None	None
Academic Standing	SF	SF	None	Decreased Majority **
Department	Academic or Non-Academic	Non-Academic	Yes	Produced Majority *

* $p < .05$
** $p < .001$

(60)

APPENDIX B.
Relationship Data

APPENDIX	PAGE
I. Summary of Provincial and District Sex Relationships	62
II. Summary of Provincial and District Language Relationships	63
III. Summary of Provincial and District Academic Standing Relationships	64
IV. Summary of Provincial and District Term Relationships	66
V. Summary of Provincial and District Department Relationships	67
VI. Summary of Provincial and District Grade Relationships	69
VII. Summary of Provincial and District School Relationships	71
VIII. Summary of Provincial and District Age Relationships	73
IX. Summary of Provincial and District End Result Relationships	75
X. Summary of Provincial and District Problem Relationships	77
XI. Summary of Provincial and District Source of Problem Relationships	78
XII. District Summaries of the Annual Changes in the Relationships Between Drop-Out Variables (1962-1963 — 1963-1964).	
a. Bathurst	79
b. Fredericton	80
c. Grand Falls	81
d. Moncton	82
e. Saint John	83

APPENDIX B - I
SUMMARY OF PROVINCIAL AND DISTRICT SEX RELATIONSHIPS

Relationship	Provincial Results		Degree Of Support By District Results	
	Significance	Supported By	Supported By	Unsupported By
1. Academic Standing	p < .001	Saint John Fredericton Bathurst	Saint John Fredericton	Moncton — NS
2. Age	p < .001	Grand Falls Bathurst	Grand Falls Bathurst	Saint John — NS Fredericton — NS
3. Term	p < .01	Moncton Fredericton	Moncton Fredericton	Saint John — NS Moncton — NS
4. Grade	p < .01	Grand Falls Bathurst	Grand Falls Bathurst	Moncton — NS Saint John — NS Grand Falls — NS Bathurst — NS Fredericton — NS Saint John — NS
5. Source	p < .01	Grand Falls Moncton	Grand Falls Moncton	Fredericton — NS Saint John — NS Fredericton — NS
6. Department	NS	Bathurst Grand Falls Moncton	Bathurst Grand Falls Moncton	Fredericton — NS Saint John — NS Grand Falls — NS Bathurst — NS Fredericton — NS Saint John — NS
7. Problem	NS	Saint John	Saint John	Fredericton — NS
8. End Results	NS	All Districts	All Districts	Fredericton — NS
9. Language	NS	All Districts	All Districts	Fredericton — NS
10. School	NS	Grand Falls Moncton	Grand Falls Moncton	Fredericton — NS Bathurst — NS Saint John — NS

APPENDIX B - II
SUMMARY OF PROVINCIAL AND DISTRICT LANGUAGE RELATIONSHIPS

Provincial Results		Degree Of Support By District Results*			
Relationship	Significance	Supported By		Unsupported By	
1. Age	p < .001	Bathurst	— p < .01	Grand Falls	— NS
				Moncton	— NS
2. Term	p < .001	Bathurst	— p < .01	Grand Falls	— NS
		Moncton	— p < .01		
3. Grade	p < .001	Bathurst	— p < .001	Grand Falls	— NS
		Moncton	— p < .01		
4. Department	p < .001	Bathurst	— p < .001	Grand Falls	— NS
		Moncton	— p < .01		
5. School	p < .001	Bathurst	— p < .001	Grand Falls	— p < .001 (E=R; F=U)
		Moncton	— p < .02		
6. Problem	p < .001	Moncton	— p < .01	Bathurst	— NS
				Grand Falls	— NS
7. Source	p < .001	Bathurst	— p < .10	Grand Falls	— NS
				Moncton	— NS
8. End Results	p < .001	Bathurst	— p < .001	Grand Falls	— NS
		Moncton	— p < .10		
9. Sex	NS	All Districts	— NS		
10. Academic Standing	NS	Grand Falls	— NS	Bathurst	— p < .001 (E=SF; F=NSF)
				Moncton	— p < .001 (E=NSF; F=SF)

* The Fredericton and Saint John Districts do not have Language Comparisons since they have no French cases. For this reason, these two districts are not represented in this table.

APPENDIX B – III
SUMMARY OF PROVINCIAL AND DISTRICT ACADEMIC STANDING RELATIONSHIPS

Provincial Results		Degree Of Support By District Results			
Relationship	Significance	Supported By		Unsupported By	
1. Sex	p < .001	Saint John	— p < .01	Moncton	— NS
		Fredericton	— p < .05		
		Bathurst	— p < .05		
		Grand Falls	— p < .10		
2. Term	p < .001	Saint John	— p < .001	Bathurst	— NS
		Fredericton	— p < .01	Moncton	— NS
		Grand Falls	— p < .01		
3. Problem	p < .001	All Districts	— p < .001		
4. Source	p < .001	Bathurst	— p < .001		
		Moncton	— p < .001		
		Saint John	— p < .01		
		Grand Falls	— p < .01		
		Fredericton	— p < .05		
5. Age	NS	Saint John	— NS	Bathurst	— p < .05 (SF=Old; NSF=Young)
		Fredericton	— NS	Grand Falls	— p < .05 (SF=Old; NSF=Young)
		Moncton	— NS		
6. Grade	NS	Saint John	— NS	Bathurst	— p < .05 (SF=Up; NSF=Low)
		Fredericton	— NS	Moncton	— p < .02 (SF=Low; NSF=Up)
		Grand Falls	— NS		
7. Department	NS	Fredericton	— NS	Saint John	— p < .001 (SF=A; NSF=NA)
		Bathurst	— NS		
		Grand Falls	— NS		
		Moncton	— NS		

8. School	NS	Fredericton — NS	Saint John — p<.001 (SF=R; NSF=U)
		Bathurst — NS	
		Grand Falls — NS	
		Moncton — NS	
9. Language	NS	Grand Falls — NS	Bathurst — p<.001 (SF=E; NSF=F)
		Fredericton — No French	Moncton — p<.001 (SF=F; NSF=E)
		Saint John — No French	
10. End Results	NS	Saint John — NS	Grand Falls — p<.001 (SF=Oth; NSF=Sch)
		Fredericton — NS	
		Bathurst — NS	
		Moncton — NS	

APPENDIX B – IV
SUMMARY OF PROVINCIAL AND DISTRICT TERM RELATIONSHIPS

Provincial Results		Degree Of Support By District Results			
Relationship	Significance	Supported By		Unsupported By	
1. Academic Standing	p < .001	Saint John — p < .001	Fredericton — p < .01	Moncton — NS	
		Grand Falls — p < .01	Bathurst — p < .10		
2. Language	p < .001	Bathurst — p < .01	Moncton — p < .01	Grand Falls — NS	
				Fredericton — No French	
				Saint John — No French	
3. School	p < .001	Bathurst — p < .01		Fredericton — NS	
				Moncton — NS	
				Saint John — NS	
(99) 4. Sex	p < .01	Fredericton — p < .01	Grand Falls — p < .05	Grand Falls — p < .05 (1st=U; 2nd=R)	
		Bathurst — p < .10	Bathurst — p < .01	Moncton — NS	
		Bathurst — p < .01	Grand Falls — p < .02	Saint John — NS	
5. Source	p < .01	Saint John — p < .10	Grand Falls — p < .01	Fredericton — NS	
		Grand Falls — p < .05	Fredericton — p < .05	Moncton — NS	
6. End Results	p < .01	Fredericton — p < .05		Saint John — NS	
				Bathurst — NS	
				Moncton — NS	
7. Age	NS	All Districts — NS			
8. Grade	NS	Saint John — NS		Moncton — p < .05 (1st=Low; 2nd=Up)	
		Fredericton — NS			
		Bathurst — NS			
		Grand Falls — NS			
9. Department	NS	Saint John — NS		Fredericton — p < .01 (1st=NA; 2nd=A)	
		Bathurst — NS			
		Moncton — NS			
10. Problem	NS	All Districts — NS		Grand Falls — p < .05 (1st=NA; 2nd=A)	

APPENDIX B - V
SUMMARY OF PROVINCIAL AND DISTRICT DEPARTMENT RELATIONSHIPS

Provincial Results		Degree Of Support By District Results	
Relationship	Significance	Supported By	Unsupported By
1. Age	p < .001	Saint John — p < .001 Bathurst — p < .001 Moncton — p < .01 Fredericton — p < .02 Grand Falls — p < .05	
2. Grade	p < .001	All Districts — p < .001	
3. School	p < .001	Saint John — p < .001 Bathurst — p < .001 Moncton — p < .001 Grand Falls — p < .001 Fredericton — p < .02	
4. Language	p < .001	Bathurst — p < .001 Moncton — p < .01	Grand Falls — NS Fredericton — No French Saint John — No French
5. Problem	p < .001	Saint John — p < .001 Fredericton — p < .10	Moncton — NS Bathurst — NS Grand Falls — NS
6. Sex	NS	Saint John — NS Bathurst — NS Grand Falls — NS Moncton — NS	Fredericton — p < .01 (A=M; NA=F)
7. Source	NS	All Districts — NS	
8. End Results	NS	Fredericton — NS Bathurst — NS Grand Falls — NS Moncton — NS	Saint John — p < .001 (A=Sch; NA=W+O)

9. Term	NS	Saint John — NS	Fredericton — $p < .01$ (A=2nd; NA=1st)
		Bathurst — NS	Grand Falls — $p < .05$ (A=2nd; NA=1st)
		Moncton — NS	
10. Academic Standing	NS	Fredericton — NS	Saint John — $p < .001$ (A=SF; NA=NSF)
		Bathurst — NS	
		Grand Falls — NS	
		Moncton — NS	

APPENDIX B - VI
SUMMARY OF PROVINCIAL AND DISTRICT GRADE RELATIONSHIPS

Provincial Results		Degree Of Support By District Results			
Relationship	Significance	Supported By		Unsupported By	
1. Source	p < .001	Bathurst	— p < .001	Fredericton	— NS
		Moncton	— p < .05	Grand Falls	— NS
				Saint John	— NS
2. Problem	p < .001	Fredericton	— p < .01	Bathurst	— NS
		Grand Falls	— p < .05		
		Moncton	— p < .05		
		Saint John	— p < .10		
3. Language	p < .001	Bathurst	— p < .001	Grand Falls	— NS
		Moncton	— p < .01	Saint John	— No French
				Fredericton	— No French
4. School	p < .001	Saint John	— p < .001		
		Fredericton	— p < .001		
		Grand Falls	— p < .001		
		Bathurst	— p < .01		
		Moncton	— p < .01		
5. Department	p < .001	All Districts	— p < .001		
6. Age	p < .001	All Districts	— p < .001		
7. Sex	p < .01	Fredericton	— p < .01	Saint John	— NS
		Bathurst	— p < .05	Grand Falls	— NS
				Moncton	— NS
8. End Results	p < .01	Bathurst	— p < .05	Saint John	— NS
				Fredericton	— NS
				Moncton	— NS
				Grand Falls	— NS

(69)

9. Term	NS	Saint John — NS	Fredericton — NS	Bathurst — NS	Grand Falls — NS	Moncton — $p < .05$ (Low=1st; Up=2nd)
10. Academic Standing	NS	Saint John — NS	Fredericton — NS	Grand Falls — NS	Bathurst — $p < .05$ (Low=NSF; Up=SF)	Moncton — $p < .02$ (Low=SF; Up=NSF)

(70)

APPENDIX B – VII
SUMMARY OF PROVINCIAL AND DISTRICT SCHOOL RELATIONSHIPS

Provincial Results		Degree Of Support By District Results	
Relationship	Significance	Supported By	Unsupported By
1. Grade	p < .001	Saint John — p < .001 Fredericton — p < .001 Grand Falls — p < .001 Bathurst — p < .01 Moncton — p < .01	
2. Term	p < .001	Bathurst — p < .01	Fredericton — NS Moncton — NS Saint John — NS Grand Falls — p < .05 (R=2nd; U=1st)
3. Age	p < .001	Fredericton — p < .001 Bathurst — p < .001 Saint John — p < .01 Moncton — p < .02 Grand Falls — p < .10	
4. Department	p < .001	Saint John — p < .001 Bathurst — p < .001 Grand Falls — p < .001 Moncton — p < .001 Fredericton — p < .02	
5. Source	p < .001	Bathurst — p < .10	Fredericton — NS Moncton — NS Saint John — NS Grand Falls — NS
6. Problem	p < .001	Saint John — p < .001 Grand Falls — p < .10	Fredericton — NS Bathurst — NS Moncton — NS

7. Language	p < .001	Moncton	— p < .02	Grand Falls	— p < .001 (R=E; U=F)
		Bathurst	— p < .001	Fredericton	— No French
				Saint John	— No French
8. End Results	NS	Saint John	— NS	Fredericton	— p < .05 (R=W; U=S)
		Grand Falls	— NS	Bathurst	— p < .01 (R=O; U=S+W)
		Moncton	— NS		
9. Sex	NS	Grand Falls	— NS	Saint John	— p < .001 (R=M; U=F)
		Moncton	— NS	Fredericton	— p < .001 (R=M; U=F)
				Bathurst	— p < .05 (R=F; U=M)
10. Academic Standing	NS	Fredericton	— NS	Saint John	— p < .001 (R=SF; U=NSF)
		Moncton	— NS		
		Grand Falls	— NS		
		Bathurst	— NS		

(71)(72)

APPENDIX B – VIII
SUMMARY OF PROVINCIAL AND DISTRICT AGE RELATIONSHIPS

Provincial Results		Degree Of Support By District Results	
Relationship	Significance	Supported By	Unsupported By
1. School	p < .001	Fredericton — p < .001 Bathurst — p < .001 Saint John — p < .01 Moncton — p < .02 Grand Falls — p < .10	
2. Department	p < .001	Saint John — p < .001 Bathurst — p < .001 Moncton — p < .01 Fredericton — p < .02 Grand Falls — p < .05	
3. Grade	p < .001	All Districts — p < .001	
4. Sex	p < .001	Grand Falls — p < .001 Bathurst — p < .02 Moncton — p < .10	Saint John — NS Fredericton — NS
5. Language	p < .001	Bathurst — p < .01	Grand Falls — NS Moncton — NS Fredericton — No French Saint John — No French
6. Source	p < .001	Bathurst — p < .001 Fredericton — p < .01 Grand Falls — p < .05	Saint John — NS Moncton — NS
7. End Results	p < .01	Bathurst — p < .01	Saint John — NS Moncton — NS Fredericton — NS Grand Falls — NS

(3)

8. Problem	NS	Fredericton	— NS	Saint John	— $p < .01$ (Young=Int; Old=M.Inc)
		Grand Falls	— NS	Bathurst	— $p < .02$ (Young=Int; Old=M.Inc)
		Moncton	— NS		
9. Term	NS	All Districts	— NS	Bathurst	— $p < .05$ (Young=NSF; Old=SF)
10. Academic Standing	NS	Saint John	— NS		
		Fredericton	— NS		
		Moncton	— NS	Grand Falls	— $p < .05$ (Young=NSF; Old=SF)

APPENDIX B - IX
SUMMARY OF PROVINCIAL AND DISTRICT END RESULT RELATIONSHIPS

Provincial Results		Degree Of Support By District Results			
Relationship	Significance	Supported By		Unsupported By	
1. Source	p < .001	Fredericton	— p < .01	Saint John	— NS
		Bathurst	— p < .001	Grand Falls	— NS
				Moncton	— NS
2. Language	p < .001	Bathurst	— p < .001	Grand Falls	— NS
		Moncton	— p < .10	Saint John	— No French
				Fredericton	— No French
3. Grade	p < .01	Bathurst	— p < .05	Saint John	— NS
				Fredericton	— NS
				Grand Falls	— NS
				Moncton	— NS
4. Term	p < .01	Grand Falls	— p < .01	Saint John	— NS
		Fredericton	— p < .05	Bathurst	— NS
				Moncton	— NS
5. Age	p < .01	Bathurst	— p < .01	Moncton	— NS
				Saint John	— NS
				Fredericton	— NS
				Grand Falls	— NS
6. Department	NS	Fredericton	— NS	Saint John	— p < .001
		Moncton	— NS		(Sch=Ac; W+O=NonAc)
		Bathurst	— NS		
		Grand Falls	— NS		
7. School	NS	Saint John	— NS	Fredericton	— p < .05 (S=U; W+O=R)
		Grand Falls	— NS	Bathurst	— p < .01 (S=U; O=R)
		Moncton	— NS		

8. Problem	NS	Bathurst	— NS	Saint John	— $p < .05$ (Sch=M.Inc; W=UnI; O=C)
		Grand Falls	— NS	Fredericton	— $p < .05$ (Sch=UnI+O; W=UnI+MI; O=O)
		Moncton	— NS		
9. Sex	NS	All Districts	— NS		
10. Academic Standing	NS	Saint John	— NS	Grand Falls	— $p < .001$ (Sch=NSF; W+O=SF)
		Fredericton	— NS		
		Bathurst	— NS		
		Moncton	— NS		

APPENDIX B - X
SUMMARY OF PROVINCIAL AND DISTRICT PROBLEM RELATIONSHIP

Provincial Results		Degree Of Support By District Results	
Relationship	Significance	Supported By	Unsupported By
1. Department	p<.001	Saint John — p<.001 Fredericton — p<.10	Grand Falls — NS Moncton — NS Bathurst — NS
2. Grade	p<.001	Fredericton — p<.01 Grand Falls — p<.05 Moncton — p<.05 Saint John — p<.10	Bathurst — NS
3. School	p<.001	Saint John — p<.001	Fredericton — NS Grand Falls — NS Bathurst — NS Moncton — NS
4. Language	p<.001	Moncton — p<.01	Bathurst — NS Grand Falls — NS Saint John — No French Fredericton — No French
5. Academic Standing	p<.001	All Districts — p<.001	
6. Source	p<.001	All Districts — p<.001	
7. Sex	NS	All Districts — NS	
8. Age	NS	Fredericton — NS Grand Falls — NS Moncton — NS	Saint John — p<.01 (MI=Old; UnI+O=Young) Bathurst — p<.02 (MI=Old; UnI+O=Young)
9. End Results	NS	Bathurst — NS Grand Falls — NS Moncton — NS	Saint John — p<.05 (MI=S; UnI=W; O=O) Fredericton — p<.05 (MI=W; UnI+O=S+O)
10. Term	NS	All Districts — NS	

APPENDIX B - XI
SUMMARY OF PROVINCIAL AND DISTRICT SOURCE OF PROBLEM RELATIONSHIPS

Provincial Results		Degree Of Support By District Results			
Relationship	Significance	Supported By		Unsupported By	
1. Age	p < .001	Bathurst	— p < .001	Saint John	— NS
		Fredericton	— p < .01	Moncton	— NS
		Grand Falls	— p < .05		
2. Grade	p < .001	Bathurst	— p < .001	Fredericton	— NS
		Moncton	— p < .05	Grand Falls	— NS
		Saint John	— p < .10		
3. School	p < .001	Bathurst	— p < .10	Saint John	— NS
				Fredericton	— NS
				Grand Falls	— NS
				Moncton	— NS
4. Language	p < .001	Bathurst	— p < .10	Grand Falls	— NS
				Moncton	— NS
				Saint John	— No French
				Fredericton	— No French
5. Academic Standing	p < .001	Bathurst	— p < .001		
		Moncton	— p < .001		
		Saint John	— p < .01		
		Grand Falls	— p < .01		
		Fredericton	— p < .05		
6. Problem	p < .001	All Districts	— p < .001	Saint John	— NS
7. End Results	p < .001	Bathurst	— p < .001	Grand Falls	— NS
		Fredericton	— p < .01	Moncton	— NS
				Fredericton	— NS
8. Term	p < .01	Bathurst	— p < .01	Moncton	— NS
		Grand Falls	— p < .02		
		Saint John	— p < .10		
9. Sex	p < .01	Grand Falls	— p < .05	Saint John	— NS
		Moncton	— p < .10	Fredericton	— NS
				Bathurst	— NS
10. Department	NS	All Districts	— NS		

(78)

APPENDIX B - XII

DISTRICT SUMMARIES OF THE ANNUAL CHANGES
IN THE RELATIONSHIPS BETWEEN DROP-OUT
VARIABLES (1962-1963 - 1963-1964)

a. Bathurst

Set Of Relationships	Number Of Stable Relationships	Number Of Reversed Relationships	
		Change To Sig.	Change To N.S.
1. Language	7	—	—
2. End Results	6	—	1
3. Department	6	—	1
4. Age	6	1	—
5. Term	5	—	2
6. Sex	5	2	—
7. Grade	4	2	1
8. Academic Standing	3	3	1
Totals	42	8	6
Percentages	75%	25%	

APPENDIX B - XII

b. Fredericton

Set Of Relationships*	Number Of Stable Relationships	Number Of Reversed Relationships	
		Change To Sig.	Change To N.S.
1. Age	6	—	—
2. Grade	3	2	1
3. Department	3	3	—
4. Academic Standing	3	2	1
5. End Results	3	1	2
6. Sex	1	4	1
7. Term	1	4	1
Totals	20	16	6
Percentages	48%	52%	

*Since the Fredericton District does not handle French cases, there are no language relationships for this district.

APPENDIX B - XII

c. Grand Falls

Set Of Relationships	Number Of Stable Relationships	Number Of Reversed Relationships	
		Change To Sig.	Change To N.S.
1. Age	6	—	1
2. Grade	6	—	1
3. Language	5	—	2
4. Department	5	1	1
5. Sex	4	1	2
6. End Results	4	2	1
7. Academic Standing	4	2	1
8. Term	2	4	1
Total	36	10	10
Percentages	64%	36%	

APPENDIX B - XII

d. Moncton

Set Of Relationships*	Number Of Stable Relationships	Number Of Reversed Relationships	
		Change To Sig.	Change To N.S.
1. Language	5	1	—
2. Age	5	—	1
3. End Results	4	—	2
4. Sex	4	—	2
5. Term	3	2	1
6. Grade	3	2	1
7. Academic Standing	2	1	3
Totals	26	6	10
Percentages	62%	38%	

*Since the Moncton District had so few non-academic cases in 1962-63, there were no department relationships established for that year. Lacking the 1962-63 data, there is no basis for an annual comparison, therefore, department relationships do not appear in the above table.

APPENDIX B – XII

e. Saint John

Set Of Relationships*	Number Of Stable Relationships	Number Of Reversed Relationships	
		Change To Sig.	Change To N.S.
1. Age	6	—	—
2. End Results	6	—	—
3. Grade	5	—	1
4. Sex	5	—	1
5. Department	5	—	1
6. Academic Standing	5	1	—
7. Term	2	1	3
Totals	34	2	6
Percentages	81%	19%	

*Since the Saint John District does not handle French cases, there are no language relationships for this district.