A COMPARISON OF BIOGRAPHICAL VARIABLES OF DROPOUTS, GRADUATES AND NO-SHOWS, AT THE STEPHENVILLE ADULT CENTRE

DORMAN GEORGE CHIPP

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Dorman George Chipp

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ABSTRACT

The purpose of this study was to examine the relationship between ten biographical variables and three categories of students at the Stephenville Adult Centre: those who successfully completed their programs, those who dropped out of their programs before completion and those who were selected to attend but did not report to start. These comparisons were made during two different time periods when two different types of academic programs were in effect.

The sample used consisted of 531 students randomly selected from a total population of 4361 who attended the Centre from January 1968 to April 1972.

Data for the present study came from Canada Manpower Forms which contained all the biographical information necessary for the study. The data was analyzed by means of descriptive statistics as well as distributions and appropriate inferential procedures, such as the chi square and analysis of variance.

All three student categories were very similar in both programs. Most were married males between the ages of 20 and 25, having a grade VII or VIII prior to entering up-grading and needing two grade levels of up-grading in order to enter the occupation of their choice.

However, some important differences were as follows: 1) dropouts tended to be a little younger than graduates or no-shows;

2) most of the dropouts and no-shows were from outside the Stephenville area; 3) a large percentage of all students elected to work toward only a few of the many occupational goals that were available; also, there was a sizable number of dropouts who had no occupational goal; 4) the higher a student's entering grade level the greater seemed his chances of success; and 5) the more dependents a student had the greater seemed his chances of success.

Further research was recommended into the reasons why so many students aspired to only a few courses when there were so many available. Also,further research was recommended into reasons why the dropouts and no-shows appeared similar to each other but different from the graduates.

Major recommendations resulting from this study were as follows: 1) consideration be given to the establishment of adults centres in other areas of the province of Newfoundland and Labrador; 2) comprehensive vocational counselling and career information centre be set up; 3) study to be set up to investigate reasons as to why so many no-shows, who are unemployed, do not report for up-grading.

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INTRODUCTION

I. STATEMENT OF PURPOSE

The purpose of this study was to investigate differences between three groups of students at the Stephenville Adult Centre: Those who successfully completed their program, those who dropped out of their programs before completion, and those who selected to attend the Centre but who did not report to start. These groups were compared on the following variables:

(a) Age

(b) Proximity of student's home town from the Adult Centre

(c) Sex

(d) Employment status, if unemployed before starting up-grading total number of weeks

(e) Occupational goal of each student

(f) Educational goal of each student

(g) Marital status

(h) Number of dependents

(i) Previous educational background

(j) Amount of allowance that each student received

II. BACKGROUND INFORMATION

While there is a restricted literature on the problem of adolescent dropouts from the public school system, there is very little published on adult dropouts, and what exists so far is apparently entirely written from a psychological standpoint.[1] Much of the research on adult dropouts has been done on evening school or university students. This lack of sufficient research has led to an unsystematic approach to the problem, to fragmentation or incomparable results.[2]

The adult dropout problem, although not adequately researched, is not a new problem. Thomas Pole as early as 1814 urged adult teachers to visit those students who were absent in order to "exhort them to attend regularly".[3] Verner and Davis reported that 90 per cent of the students following a course of study in an evening college failed to reach their goal.[4]

Other writers using results from other studies done between 1964 and 1966 reported varying percentages. For example,

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[1]W. E. Mann, "Adult Dropouts", Continuous Learning, V (March-April, 1966), pp. 55-65.

[2]C. Verner and S. Davis, "Completions and Dropouts: A Review of Research", Adult Education, XIV (Spring, 1964), pp. 157-176.

[3]Dorothy Lee Hawkins, "A Study of Dropouts in an Adult Basic Education Program and a General Education Development Program and Suggestions for Improving the Holding Power of these Programs", (Unpublished Doctoral Dissertation, Indiana University, 1968), p. 2.

[4]Verner and Davis, op. cit., p. 176.

Michael reports 84 per cent,[5] Mann, 69 per cent,[6] Forsyth and Nininger, 61 per cent,[7] and Verner and Naylan, 48 per cent.[8] Thus, the high dropout rate has been a problem of concern for some time.

The Stephenville Adult Centre is located in the town of Stephenville on the West Coast of Newfoundland on the site of the former Ernest Harmon United States Air Force Base. It was begun in January of 1967 and officially opened in February of the same year. The enrollment has grown from two hundred and forty-five students at its beginning to approximately fifteen hundred in January of 1972.

The program offered at the Adult Centre has the following objectives: 1) gives the opportunity to persons who wish to upgrade their present academic background so that they may gain entrance to vocational, technical, or higher educational courses, by offering a course in the basic disciplines of English, Mathematics and Science, to meet as far as possible the individual's requirements. 2) gives the opportunity to persons already employed who may wish to improve their academic standing to avail of promotional or new employment opportunities. 3) to give

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[5]D. N. Michael, "Cybernation and Tomorrow's World of Work", Education and Productive Society, edited by H. R. Ziel, Toronto: W. J. Gage, 1965, pp. 10-30.

[6]Mann, op. cit. p. 56.

[7]G. R. Forsyth and J. R. Nininger, "Expanding Employability in Ontario", (Toronto: Ontario Economic Council, 1966).

[8]C. Verner and Margaret S. Neylan, "Patterns of Attendance in Adult Night School Courses", Canadian Education and Research Digest, VI (1966), pp. 230-240.

the opportunity to persons unemployed or unemployable because of insufficient academic qualifications to improve their standing with a view of employment opportunity. 4) gives an opportunity through environmental influences, curricular and extra-curricular activities, for a person to develop (a) cultural awareness, (b) social responsibility, (c) recreational and leisure time pursuits, and (d) insight into his human potential.

Students attending the Adult Centre are selected completely by Canada Manpower which pays the Newfoundland Government for each "place" and gives the student a living allowance of from forty dollars to $102 per week according to marital status and dependents.[9] In addition a small number of students attend as "Provincial Students" and receive an allowance of from seven dollars and fifty cents to thirty dollars per week according to their marital status, paid by the Newfoundland Provincial Government. These are students who for various reasons do not qualify for Manpower allowances. Some handicapped students in both categories are recommended for up-grading by the Rehabilitation Division.

The educational backgrounds and abilities of these students vary greatly: therefore, an effort is made to place them in the program at a point where they can benefit most. The functional academic level of an adult can vary greatly, both above or below his stated academic level.[10] Consequently, he is initially placed in a program

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[9]Teachers Handbook, Stephenville Adult Centre, 1971, p. 25.

[10]Ibid.

on the basis of his present functional level and the grade equivalency or occupational goal he has selected becomes the terminal point of his course.[11]

III. SIGNIFICANCE OF THE STUDY

While numerous institutions and agencies are co-ordinating and intensifying their efforts to judiciously structure programs which seem to more effectively implement the goals of Adult Education, administrators are concerned about the increasing number of adult participants who drop out of classes and forfeit the opportunity to enhance their personal growth and development. Society can ill afford to stand the wastage of human resources as well as the economic losses.[12] Very little research has been done in this area and what has been done most teachers of adults do not know about.[13]

Dropouts from Adult Basic Education programs of the type in Stephenville are an unnecessary economic loss to the Federal Government (Canada Manpower), as well as a personal loss to the student who forfeits another chance for an education. Canada Manpower as well as Adult Education officials are becoming very concerned about the dropout rate as well as the high cost of training programs carried out in Newfoundland. In 1970-71 there were 3,117 enrolled by

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[11] Ibid.

[12] Carver, loc. cit.

[13] Dorothy Lee Hawkins, "A Study of Dropouts in an Adult Basic Education Program and a General Education Development Program and Suggestions for Improving the Holding Power of these Programs", (Unpublished Doctoral Dissertation, Indiana University, 1968), pp. 20-23.

Canada Manpower in basic educational up-grading.[14] Between April and December of 1971, 17.3 per cent dropped out; unofficial reports are even higher for the same period in 1972.[15] In 1970-71 Newfoundland received $6,323,220 for training of all types as well as $5,891,874 in allowances paid to students, to make a total of $12,215,094.[16] Information as to the exact amount of this total that was spent on Basic Educational up-grading was unobtainable; however, it is worth noting that 40.14 per cent of all training days purchased by Manpower in 1970-71 was for Basic Training for Skill Development (BTSD) programs.[17]

The findings and recommendations of this study could assist Canada Manpower in their selection procedures. It could also have benefits for both the Centre in Stephenville and the Department of Education. For example, findings could reveal valuable predictive information on the kind of person who is likely to succeed in a BTSD program. Consequently, for others the type of program or the Centre's placement procedures could be changed or modified.

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[14] Canada Manpower, Annual Report to Parliament, 1970-71, Department of Manpower and Immigration, Ottawa: Canada, p. 23.

[15] Statement by Official at Stephenville Adult Centre, personal interview, May, 1972.

[16] Canada Manpower, op. cit. p. 24.

[17] Ibid., pp. 7-24.

Findings could be of benefit to Adult Education authorities when making decisions regarding the establishment of more Centres of the type in Stephenville in other areas of Newfoundland.

Adult Education is a field where guidance activities are almost non-existent. However, according to the literature this is an area where there is a tremendous need if the holding rate is to be increased.[18] The finding of this study may be of benefit in identifying potential areas of guidance activities within the Adult Education field.

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[18]Hawkins, loc. cit.. Francis McElaney, "Counselling in Adult Basic Education programs", Adult Leadership, XV (September, 1966), pp.78,102. Richard Mitchell, "The ABE Counsellor - A New Guidance Role", Adult Leadership, XV (March, 1971), pp. 289-291. Harold A. Savides, "An identification of some characteristics of students who complete and students who drop out of an evening technical curriculum", (Unpublished Doctoral Dissertation, University of Wisconsin, 1960), pp. 68-71. Jan Zahn, "Dropouts and Academic Ability in University Extension Courses", Adult Education, XV (Spring, 1965), pp. 35-46.

IV. DEFINITION OF TERMS

Adult. Refers to an individual who is fifteen years of age or older who has not attended a regular school for a period of at least one year.

Dropout. Refers to any person who had been formally accepted by Canada Manpower and the Adult Centre and had started classes but did not finish his program of studies.

No-show. Refers to any person who had been formally accepted by Canada Manpower and the Adult Centre but did not begin classes.

Graduate. Refers to any person who started a program of studies in academic up-grading and finished.

BTSD. Refers to Basic Training for Skill Development, Manpower terminology for academic up-grading: Because many adults lack the basic preparation for entry to skill training, it is necessary to give them preparatory training in key academic subjects, such as mathematics, science, reading and communicative skills.

Old Program. Refers to the time period from January, 1968 to June, 1970, when the school year at the Adult Education Centre was divided into two semesters from September to January and from January to June. Courses were offered in English, mathematics and science.

New Program. Refers to the time period from September, 1970 to April, 1972. Courses offered were the same as those in the old program. The academic year was divided into six week modules, making for flexibility in the overall program and thereby giving the student an opportunity to progress at a pace compatible with his ability.

Employment Status. Refers to whether a person was employed or unemployed, but did not voluntarily leave his job in order to begin his academic up-grading. If unemployed the number of weeks he was

unemployed prior to beginning his course was noted.

Student's Hometown - Adult Centre Proximity. Refers to the area of the province of Newfoundland and Labrador that the student came from as defined by the provincial electoral districts. It was stipulated whether the hometown in each district was accessible by road or was water isolated.

Occupational Goal. Refers to the occupation that the student wished to enter when his academic up-grading was completed.

Dependent. Refers to any person who entirely depended on the student for a living.

Educational Goal. Refers to the grade level that the student will have finished when his program was completed.

Previous Education. Refers to the last grade that the student completed prior to beginning his up-grading course.

Manpower Allowance. Refers to the weekly allowance paid to students by the Federal Government (Canada Manpower) while attending the Adult Centre. This allowance ranged on the average from forty-seven dollars to one hundred and two dollars per week.

Provincial Allowance. Refers to the weekly allowance paid to students by the Provincial Government. This allowance consisted of seven dollars per week plus room and board for a single person and twenty-two dollars per week plus room and board for a married person.

Federal Student. Refers to those who were out of the regular school system for a period of at least three years and were paid by the Federal Government while attending the Adult Centre.

Provincial Student. Refers to those who were out of the regular school system for less than three years and were paid by the Provincial Government while attending the Adult Centre.

Biographical Variables. Included sex, age, marital status and number of dependents, and other readily available information on students referring to the circumstances of their lives rather than information about their psychological characteristics.

V. RESEARCH QUESTIONS

1. Is there any difference between the mean age of graduates, dropouts and no-shows for both programs?

2. What is the relationship between the area of residence of the students and graduates, dropouts, and no-shows in both programs?

3. Is there any relationship between the sex of the student and graduates, dropouts and no-shows for both programs?

4. a) Is there any relationship between a student's employment status prior to up-grading and graduates, dropouts, and no-shows in both programs?

b) Is there any relationship between the number of weeks that a student was unemployed prior to up-grading for graduates, dropouts and no-shows in both programs?

5. What is the relationship between a student's occupational goal and graduates, dropouts and no-shows in both programs?

6. What is the relationship between a student's educational goal and graduates, dropouts, and no-shows in both programs?

7. Is there any relationship between the number of grade levels that a student takes to up-grade himself and graduates, dropouts and no-shows in both programs.

8. Is there any relationship between marital status and graduates, dropouts and no-shows in both programs?

9. Is there any relationship between number of dependents and graduates, dropouts and no-shows in both programs?

10. Is there any relationship between allowance received and graduates, dropouts and no-shows in both programs?

11. What is the relationship between government status and graduates, dropouts and no-shows in both programs?

12. What is the relationship between educational status and graduates, dropouts and no-shows in both programs?

13. What is the relationship between age and sex in all three groups for both programs?

14. What is the relationship between age and educational status for all three groups in both programs?

15. What is the relationship between the number of grade levels it takes a person to up-grade and the number of dependents in all three groups in both programs?

16. What is the relationship between age and occupational goal for all three groups in both programs?

17. What is the relationship between the number of grade levels it takes a student to up-grade and amount of allowance received in all three groups in both programs?

VI. LIMITATIONS

The variables selected for this study were limited to biographical factors, and do not include other potentially useful discriminators relating to the psychological and sociological aspects of the student.

The findings of this study are limited to the up-grading Centre at Stephenville, unless it is assumed that other Centres have similar programs and draw their students from a similar population as those who attend the Centre at Stephenville.

CHAPTER II

REVIEW OF RELATED LITERATURE

This chapter is divided into four major sections, as follows:

1. This section provides a basis for understanding the nature of adult education and the adult student at Stephenville.

2. This section presents literature on some of the factors that are related to dropping out and a summary of three studies that have been done on this topic.

3. A summary of literature presented will conclude the chapter.

1. WHAT IS ADULT EDUCATION?

Adult Education Defined

Coolie Verner defined adult education as:

> . . . a relationship between an educational agent and a learner in which the agent selects, arranges and continuously directs a sequence of progressive tasks that provide systematic experiences to achieve learning for those whose participation in such activities is subsidiary and supplemental to a primary productive role in society.[1]

This statement is true regardless of whether the adult is a student in an evening college program or in a full time basic education program.

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[1] Adult Education, edited by Gale Jenson, A.A. Liveright and Wilbur Hallenbeck, Adult Education Association of the U.S.A., 1964, p. 32.

Another writer defines adult basic education as an opportunity given to those who need it, to obtain those minimal skills that are needed if an individual is to function by himself with little assistance from others.[2] Still other writers contend that the main objective of basic adult education is to prepare undereducated and unqualified students for admission to vocational schools and institutes of trades and technology.[3]

Havinghurst lists three major goals of adult education: 1) education for personal competence; 2) education for civic competence; and 3) education for joy in living.[4]

The Adult Student

The adult student who participates in basic education is usually a person who is striving to become economically self-supporting and realizes that a prerequisite is to get at least an equivalent high school diploma. Carver, in 1967, reported that thirteen million persons in the United States between the ages of twenty and twenty-five confront life without the benefit of a high school diploma.[5] The census reports of 1961 cites 1,024,789 Canadian

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[2]Anglica W. Cass, Basic Education for Adults, Association Press, New York, 1972, p. 11.

[3]Pater Baltensperger, "The Challenge of Basic Adult Education", Monday Morning, IV No. 6 (March, 1970), pp.21-22.

[4]R. J. Havinghurst, "Adult Education for our Times", The Educational Digest, XXIV (March, 1959), p.6.

[5]Fred D. Carver, "A Re-entry Route for Yesterday's Dropouts", Adult Leadership, XV (April, 1967), p. 358.

men and women with fewer than five years of formal education, 57,610 of these were Newfoundlanders.[6] In 1971, at a conference for developing further education for Newfoundland, it was reported that there were still 80,000 Newfoundland adults under fifty years of age with grade eight education or less, 25,000 had less than grade five and 5,000 had never been in school.[7]

II. FACTORS RELATED TO DROPPING OUT

Introduction

Dropping out of school is a very complex problem. There are many factors that contribute to the cause of dropouts and several factors may operate together to contribute to the cause.[8] According to the literature no single circumstance is responsible; rather, it appears that a combination of factors peculiar to a given individual, possibly triggered by an acute unsolveable problem, precipitates the decision to leave.[9]

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[6]Canada, Dominion Bureau of Statistics, Ottawa, 1961

[7]Newfoundland. Memorial University, Conference, "Developing further education for Newfoundland and Labrador", Gander, 1971.

[8]Richard H. Dresher, "Factors in Voluntary Dropouts", Personnel and Guidance Journal, XXXII (January, 1954), pp. 287-289.

[9]Walter S. Monroe, Editor, Encyclopedia of Educational Research, 1959, p. 1159.

Mann Study[10]

W. E. Mann, in 1965, did a study on the dropout rates from two adult retraining schools in Ontario. He found that the dropout rate in both institutes studies to be between 63 and 65 per cent. Breaking the dropouts down into several categories, he found that females were more persevering than males, especially within the first month of their studies. Age group analysis indicated that the category most prone to dropping out were, first, those under twenty-one and then those from thirty-one to forty. Trainees over the age of forty displayed the strongest staying power. Also, there was a lower dropout rate among married men. Mann also found a strong relationship between dropping out and previous educational achievement. Generally the higher a trainee's previous education, the better his chance of graduation.

Mann lists financial difficulties, teacher problems, home problems, low intellectual levels, and poor adjustment as reasons for dropping out. He concluded his study by saying that the above reasons are "unique in many respects to the adult student and thus the high dropout rate is theoretically 'normal', giving the school a close relationship to an open frontier situation".[11] This seems true considering that adult education is relatively new and has not yet developed uniform selection policy for would-be students.

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[10] W. E. Mann, "Adult Dropouts", Continuous Learning, V (March-April, 1966), pp. 55-65, 127-143.

[11] Ibid, p. 143

Savides Study[12]

Harold Savides did a study in 1960 on adult dropouts from an evening technical program. He found that reasons given for dropping out were 1) financial; 2) family obligations; especially those having large families; and 3) high mobility from one part of the country to another. He found, unlike Mann[13], that most dropped out between the ages of twenty-five and twenty-nine. It was also found that more married students completed their programs; this evidence tends to suggest some reinforcement for the idea that generally people work more effectively under the pressure of family obligations.

Savides also found that there was no difference in mean age between completers and dropouts, that dropping out was most prevalent at the end of the first semester, and that there were more married students than single ones involved in the program. A substantially different load in dependency existed for completing students than for dropouts. Finally there were differences in income, but income did not appear to be an individual major factor related to dropping out.

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[12]Harold A. Savides, "An identification of some characteristics of students who complete and students who drop out of an evening technical curriculum", (Unpublished Doctoral Dissertation, University of Wisconsin, 1960), pp. 68-71.

[13]Mann, op. cit., pp. 55-65.

Hawkins Study[14]

Dorothy Lee Hawkins, in a study of adult dropouts in a basic education program in 1968, says that while there have been many volumes written on secondary dropouts little attention has been given to "second-chance students", dropouts in adult basic education. Public school adult educators concur that the task of maintaining attendance is one of the most stubborn problems in these programs.[15] Hawkins, as did the other writers mentioned in this chapter, contended that dropping out is partially related to personal-biographical factors such as age, sex, marital status, distance from centre, and previous education. It was found, however, in contrast to Savides that dropout rates were higher in the younger age brackets of single students.[16] The number of dependents showed a statistically significant difference between those who persisted and those who discontinued attendance. No differentiation was made in persistent students and the dropouts relative to the number of years of schooling each group had completed. However, there was evidence of differentiation in the matter of occupational levels.

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[14]Dorothy Lee Hawkins, "A Study of Dropouts in an Adult Basic Education Program and a General Education Development Program and Suggestions for Improving the Holding Power of these Programs", (Unpublished Doctoral dissertation, Indiana University, 1968), pp. 1-10.

[15]Ibid., p. 25.

[16]Savides, loc. cit.

Verner and Davis[17]

Verner and Davis, in their review of research, found eleven studies which compared participants in adult education on the basis of age. Five of these found no difference with respect to age between those who persisted and those who dropped out. Other writers, however, reported that young adults drop out more frequently than older adults.[18] Three studies reported by Verner and Davis report that women drop out more often than men, although none of these studies were found to be statistically significant. However, R. Curtis Ulmer did a study in 1963 on this same variable and did find a statistically significant difference.[19] Ten studies researched by Verner and Davis investigated the relationship between educational attainment and the tendency to drop out. Two studies found no relationship, while five studies report that those with more education were found to be more persistent in attendance than those with less.

Two studies reviewed by Verner and Davis reported that married students drop out less frequently than single students. Greenwood, however, reported that unmarried males drop out less often than[20] married males, while Novak and Weiant reported that in adult

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[17]Coolie Verner, and George Davis, "Completions and Dropouts: A Review of Research", Adult Education, XIV (Spring, 1964,) pp. 157-176.

[18]Ibid., p. 164.

[19]R. Curtis Ulmer, "A study of Dropouts in the Evening Division of a Community College", (Unpublished Master's thesis, Florida State University, 1960) cited in Adult Education XIV, Spring, 1963), pp. 153-158.

[20]Walter B. Greenwood, "A study of Persistence of Public Evening High School Students", (Unpublished Doctoral Dissertation, University of Pennsylvania, 1932), pp. 58-65.

shorthand classes the dropout rate was less among single than among married women.[21] Dirks and Preston, revealed that dropouts have significantly more dependents than persistent attenders,[22] while another writer found no relationship.[23] Four studies reviewed by Verner and Davis[24] reported no relationship between occupation and dropout rates, although it was found that there were more dropouts among people earning less than $3000 per year than among those earning $9000 and over.[25]

Summary

The review of the literature concerning dropouts from adult education programs from 1928 to 1968 suggests that the reason for dropping out are many and varied.[26]

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[21]Benjamin, J. Novak and Gwendolyn E. Weiant, "Why Do Evening School Students Drop Out?" Adult Education, XIII (Autumn, 1960), p. 35.

[22]Henry B. Dirks, "Drop Outs in the Evening Adult School", (Unpublished Doctoral Dissertation, University of Southern California, 1955), p. 41.) James M. Preston, "The Study of Continuing and Non-Continuing Adult Students", (Unpublished Doctoral Dissertation, University of California, Berkeley, 1958), pp. 74-83.

[23]Savides, op cit., p. 70.

[24]Verner and Davis, loc. cit.

[25]Preston, op cit., p. 89.

[26]Richard H. Dresher, "factors in VOLUNTARY dropouts", Personnel and Guidance Journal XXXII (January, 1954), pp. 287-289.

Mann,[27] Savides,[28] and Hawkins,[29] as well as the studies reviewed by Verner and Davis[30] found evidence that dropping out might be related to personal factors such as age, marital status, number of dependents, and previous educational level. Savides,[31] says that the characteristics which may distinguish between the dropouts and the completers can be grouped into the following six areas: 1) possible personal differences; 2) differences in age; 3) obligations of support; 4) job relationship; 5) financial well-being; and 6) academic competence and preparation.

III. SUMMARY OF RELATED LITERATURE

Adult education has been defined in many different ways by many different writers. The adult student, however, remains basically the same and while many agencies are intensifying their efforts to structure and more effectively implement the goals of adult education; the increasing number of dropouts goes relatively unnoticed by both adult education authorities and researchers, considering the very little amount of research done in this area.[32]

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[27] Mann, loc. cit.

[28] Savides, loc. cit.

[29] Hawkins, loc. cit.

[30] Verner and Davis, loc. cit.

[31] Savides, op cit., p. 71

[32] Ibid., p. 137

The reasons for dropping out are many varied. Many writers have agreed that there is a significant relationship between personal-biographical factors and the dropout rates in adult education programs.

CHAPTER III

METHODOLOGY

I. DESIGN OF THE STUDY

The purpose of this study was to compare, on ten biographical variables, three different classifications of former up-grading students at the Stephenville Adult Centre. The three categories of students, graduates, dropouts, and no-shows, and the ten biographical variables were defined in Chapter I. The study covered a time period of nearly four years, during which the program at the centre changed. The old program and the new program were also defined in Chapter I.

Each of the three categories of students could be sub-classified into those from the old program and those from the new program. The resulting six categories formed the basis for sampling in the study.

The basic procedures were to sample from each of the six categories of students, collecting the biographical information which was available on each student in the school records. The three categories were then compared on these variables to determine similarities and differences between them for each program.

II. DESCRIPTION OF SAMPLE AND SAMPLING PROCEDURES

During the four year four month period covered by this study, 3950 students enrolled and started classes at the Adult Centre. Four hundred eleven students applied for admission and were accepted but did not report for classes. Thus, there were 4361 students from which to sample for the study.[1]

Files on each student in all three groups for the two time periods representing the old and new programs were given a number; then, using a table of random numbers, samples of one hundred were drawn from each group except the no-shows from the old program. There were only thirty-one students in this category so all were included in the sample for this study. Table 1 provides information on sample size, and the proportion of the population used. Equal sample size for five of the six categories were selected in order to facilitate statistical comparison of the groups. The total sample size was 531.

III. METHOD OF DATA COLLECTION

Data was collected from the student records kept at the Adult Centre. Data came from the Canada Manpower forms, which were filled out by the Manpower Counsellor on each student seeking admission to the Adult Centre to do academic up-grading.

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[1]Quarterly Reports from the Stephenville Adult Education Centre, Stephenville, Newfoundland

TABLE I

POPULATION SIZE, SAMPLE SIZE, AND PER CENT OF POPULATION IN EACH GROUP

	OLD PROGRAM January, 1968-June, 1970			NEW PROGRAM September, 1970-April, 1972		
Category	Population Size	Sample Size	Per cent of Pop.	Population Size	Sample Size	Per cent of Pop.
GRADUATES	1065	100	9.4	2000	100	5
DROPOUTS	401	100	24.9	493	100	20.3
NO-SHOWS	31	31	100	380	100	27.4

There were two types of Manpower forms; 1) Form 451, which was used by Canada Manpower from 1968 to 1971; and 2) Form 500, which was the form in use since 1971. Both forms contained the information needed for the study.

Explanation of Biographical Variables

The following is a recapitulation of the biographical variables used in the study. The basic information of name, year of birth, age at the time of application and hometown were recorded. The investigator was also interested in the area of the province of Newfoundland and Labrador from which the student came to attend the Adult Centre. This was done by using the Newfoundland and Labrador provincial electoral districts, or in some cases, combined categories of districts when they were in close geographical proximity, or when road transportation accessibility was similar in two or more districts. The method of classification of the districts is given in appendix A. This was done because the investigator had hypothesized that ease of transportation was one of the basic factors contributing to student persistence in his program of studies, therefore, those districts which still had water isolated communities were separated; where this was the case for two or more communities they were combined.

The sex of the student as well as his employment status prior to up-grading was recorded. If the student was unemployed, the number of weeks that he had been unemployed was also recorded when this information was available. The student's occupational goal and educational goal were inter-related in that a student was

academically up-graded only to the grade level required for the occupation which he chose to take. For example, if a student's occupational goal was Diesel Mechanics, which required grade ten, then this was as far as the student could be academically up-graded and still receive an allowance from the Federal Government (Canada Manpower). An explanation of trades and occupational courses as well as business, medical and technical courses available and the grade level required for each is given in appendix B.

A student's marital status, number of dependents, and the allowance that he received was also recorded. As earlier stated, this allowance could come from the Federal Government (Canada Manpower), or the Newfoundland and Labrador Provincial Government, depending on the student's eligibility.

A Student's governmental status was determined by whether his allowance was paid by the Federal or Provincial government. The student's educational status prior to up-grading was also recorded. This meant the last grade level that the student had completed in the regular school system.

IV. METHOD OF STATISTICAL ANALYSIS

The analysis of the data proceded in several steps as follows:

Step One. Frequency distributions for each of the ten variables were obtained for each of the six sample groups. A basic method of analysis was the direct comparisons of these distributions for clues about trends in the data. Examination of these distributions also formed the basis for later establishing categories for further analysis.

Step Two. Cross tabulations were done on the categories of graduates, dropouts, and no-shows with the biographical variables. This was done for the old program and the new program for the following variables; a) age; b) sex; c) area of residence; d) employment status prior to entering up-grading; f) occupational goal; g) educational goal; h) educational status prior to up-grading; i) the difference between the educational goal and educational status; j) marital status; k) number of dependents; l) allowance, and m) government status.

Each cross tabulation was examined for significant trends. The old program was compared to the new program. A Chi-Square Test was computed for each cross tabulation. The null hypothesis was rejected at the .05 level of confidence.

Step Three. The preceding two steps were sufficient for the purposes of the study. In order to gain further insights into the relationships being observed, the following cross tabulations were obtained for the old and new programs. a) age and sex; b) age and educational status; c) age and occupational goal, and other variables as seen relevant to the study.

Step Four. The final statistical procedure was a comparison of mean age, weeks unemployed, number of dependents, and allowance using the analysis of variance.

Computer Program. The Statistical Package for the Social Sciences was used to process the data of the study.[2] The computer services were provided by the Newfoundland and Labrador Computer Services through the Memorial University of Newfoundland.

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[2]Norman H. Nie, Dale H. Bent and C. Hadlai Hull, Statistical Package for the Social Sciences, (Toronto: McGraw-Hill Book Company, 1970).

CHAPTER IV

ANALYSIS OF DATA

I. DESCRIPTIVE ANALYSIS OF DATA

The first part of this chapter will present a descriptive analysis of the data gathered on all variables. Where possible an attempt will be made to compare the three student categories with each other and also to compare the three categories as a whole in the two time periods, January, 1968 to June, 1970 and September, 1970 to April, 1972, during which two different types of academic programs were in effect.

Cross tabulations were done between a student's category and each of the variables listed in Chapter III. A chi square was computed on each cross tabulation to see if any statistically significant relationships existed. The level of significance for the chi square was set a priori at .05. An analysis of variance was computed on the following means; 1) age; 2) weeks unemployed; 3) number of dependents; and 4) allowance. The investigator felt that this would help to give a better description of the data observed.

Question 1. Is there any difference between the mean age of graduates, dropouts and no-shows for both programs?

Findings. The biggest percentage of students in either group in both programs were between the ages of 20 and 25. Twenty-six out

of a total sample of 531 were between the ages of 40 and 60, and 87 between the ages of 16 and 19 (see Table II(A)). Reference to Table II(A) reveals that there was no statistically significant relationship between any of the groups in both programs. It will be also noted that an analysis of variance also showed no significant differences between the mean ages in either program or student category.

Discussion. Although there was no statistically significant relationship between any of the groups, it is worth noting that, on the whole, dropouts were a little younger than graduates or no-shows. Reference to Table III, under the old program the mean for graduates was 26 compared to a mean of 23 for dropouts, and 25 for no-shows. Under the new program, the mean for graduates was 27, dropout mean was 24, and no-show mean was 25. It is interesting to note that there was a total of fifteen graduates from both programs between the ages of 40 and 60, compared to 8 dropouts and 3 no-shows.

Question 2. What is the relationship between the area of the province from which students came and graduates, dropouts and no-shows?

Findings. The greatest majority of the students came from the Stephenville area (see Appendix A). This was true for all three groups in both programs. However, significantly more graduates came from the Stephenville area than did dropouts or no-shows (see Table III). This was the case in both programs, however, the no-show category seemed to have students from areas of the province that lived further away from Stephenville, for example, the only two in the sample from Labrador were in this group.

TABLE II(A)

AGE DISTRIBUTION OF STUDENTS

STUDENT CATEGORY	OLD PROGRAM		NEW PROGRAM
	AGE CATEGORY	NUMBER	NUMBER
GRADUATE	16 - 19	18	14
	20 - 25	43	41
	26 - 31	18	22
	32 - 39	15	14
	40 - 60	6	9
DROPOUT	16 - 19	24	14
	20 - 25	44	54
	26 - 31	20	13
	32 - 39	10	3
	40 - 60	2	6
NO-SHOW	16 - 19	5	12
	20 - 25	15	48
	26 - 31	5	21
	32 - 39	5	17
	40 - 60	1	2

Chi Square = 4.9075
P >.05

Chi Square = 9.52721
P >.05

TABLE II(B)

DESCRIPTIVE STATISTICS FOR AGE IN EACH STUDENT CATEGORY

STUDENT CATEGORY	Mean	Range	Median	Standard Deviation
	OLD PROGRAM[a]			
GRADUATE	26	43	22	8
DROPOUT	23	29	22	5
NO-SHOW	25	36	22	7
	NEW PROGRAM[b]			
GRADUATE	27	33	25	7
DROPOUT	24	31	22	7
NO-SHOW	25	28	24	5

a $f = 2.6168$; $P > .05$

b $f = 2.4158$; $P > .05$

A chi square was done on this variable to test the relationship between whether a student graduated, dropped out or did not show and distance from the Adult Centre. The chi square was statistically significant.

Discussion. Since there is a statistically significant relationship on this variable, and since more than half of all graduates (Table III) came from the Stephenville area one conclusion that can be reached is distance from the Adult Centre was a factor related to a student's success at the Centre.

Question 3. Is there any relationship between the sex of the student and graduates, dropouts and no-shows in both programs?

Findings. The sample contained a total of 446 males and 85 females. Reference to Table IV shows that in both the old and new programs dropouts and graduates were represented equally in both sexes; however, in the old program females had a greater representation in the no-show category although it was not statistically significant. In the new program, males were more heavily represented in the no-show category to a statistically significant level.

Disucssion. The statistical significance of the relationship under the new program may be accounted for by the fact that the time taken up to up-grade could be significantly reduced under this program, making it more convenient for women to attend. As noted before, under the old program 71 per cent of the no-shows were women as compared to only four per cent under the new program.

Question 4(a). Is there any relationship between a student's employment status prior to up-grading and graduates, dropouts and no-shows in both programs?

TABLE III

NUMBER OF STUDENTS FROM STEPHENVILLE AREA COMPARED TO STUDENTS FROM ALL OTHER AREAS

	OLD PROGRAM		NEW PROGRAM	
Student Category	No. from Stephenville	Other	No. from Stephenville	Other
GRADUATE	58	42	52	48
DROPOUT	42	58	38	62
NO-SHOW	11	20	32	68

Chi Square = 50.36058
P <.05

Chi Square = 52.87987
P <.05

TABLE IV

SEX OF STUDENTS BY STUDENT CATEGORY

OLD PROGRAM			NEW PROGRAM
Student Category	Sex	Number	Number
GRADUATE	Male	89	84
	Female	11	16
DROPOUT	Male	90	87
	Female	10	13
NO-SHOW	Male	9	96
	Female	22	4
		Chi Square = 0.90148 P >.05	Chi Square = 7.96731 P <.05

Findings. Table V shows the employment status of the sample prior to applying and being accepted for up-grading. The differences between the categories of graduates, dropouts and no-shows were statistically significant for both the old and new programs. An examination of Table V revealed that most of the students were unemployed prior to beginning their up-grading. In both the old and new programs, there seemed to be more graduates who were in school prior to up-grading than in any other category. Also, fewer dropouts were unemployed prior to up-grading than in other categories.

Discussion. The question arises as to whether students were academically up-grading because they were unable to find jobs. Perhaps one reason for dropping out or failure to enroll is success in the job market.

Question 4(b). Is there any relationship between the number of weeks that a student was unemployed prior to up-grading for graduates, dropouts and no-shows?

Findings. Table VI displays the number of weeks each category of students was out of work prior to applying for up-grading. In the old program, no statistically significant differences were found between the mean number of weeks out of work, and no significant differences were found between the distributions of the three categories of students. However, an examination of these distributions indicates that graduates tended to be employed right up to the time of application for up-grading. Dropouts and no-shows tended to be unemployed for longer periods of time.

TABLE V

EMPLOYMENT STATUS OF STUDENTS PRIOR TO ENTERING THE ADULT CENTRE

OLD PROGRAM			NEW PROGRAM
STUDENT CATEGORY	EMPLOYMENT STATUS	NO.	NO.
GRADUATE	Employed	20	8
	Unemployed	62	58
	In School	12	32
	Not in Labour Force	5	0
	No Status Indicated	5	2
DROPOUT	Employed	22	10
	Unemployed	73	80
	In School	4	7
	Not in Labour Force	5	1
	No Status Indicated	0	2
NO-SHOW	Employed	9	15
	Unemployed	22	76
	In School	0	9
	Not in Labour Force	0	0
	No Status Indicated	0	0

Chi Square = 15.77255
P <.05

Chi Square = 34.33904
P <.05

TABLE VI

NUMBER OF WEEKS UNEMPLOYED PRIOR TO ENTERING THE ADULT CENTRE

	OLD PROGRAM		NEW PROGRAM
Student Category	Weeks of Unemployment	Number	Number
GRADUATE	0	43	46
	1 - 6	17	15
	7 - 14	9	12
	15 - 22	8	6
	23 - 37	8	11
	38 - 200	15	10
	Mean	16	12
DROPOUT	0	28	21
	1 - 6	32	16
	7 - 14	18	15
	15 - 22	4	12
	23 - 37	2	15
	38 - 200	6	19
	Mean	14	25
NO-SHOW	0	10	28
	1 - 6	12	19
	7 - 14	3	21
	15 - 22	1	13
	23 - 37	0	5
	38 - 200	5	12
	Mean	13	14

Chi Square = 20.5517
P >.05

f = .1644
P < .05

Chi Square = 24.64600
P < .05

f = 5.7610
P < .05

In the new program this pattern apparently has crystallized. The mean number of weeks a dropout was unemployed was much larger than the mean for the graduate or no-show. An examination of the distributions revealed a very definite tendency for dropouts to be out of the work force for considerable periods of time prior to applying for up-grading.

Discussion. Based on the findings from the above data it seemed evident that more graduates came into academic up-grading presumably after leaving a job to do so, than did dropouts or no-shows. This information led the investigator to hypothesize that one of the reasons that students dropped out was because many of them only attended in the first place because they were unemployed.

Question 5. What is the relationship between a student's occupational goal and graduates, dropouts and no-shows?

Findings. In both the old and new programs, graduates, dropouts and no-shows seemed to be proportionately represented in all the occupational categories. In both programs, the most popular choice was motor vehicle repair (mechanical).

In the new program, one significant tendency of note was discovered. Of the 33 who said they were undecided, about 10 per cent of the sample, 20 were dropouts and only six were graduates.

Discussion. There was no statistically significant relationship found between whether a student graduated, dropped out, or did not show, for either program and the occupational goal that he chose for himself.

It was significant, however, that there were so many students who did not have an occupational goal even after most of them had been

in the labour force from one to three years. In this regard, the tendency of those without occupational goals to dropout should be noted.

Question 6. What is the relationship between a student's educational goal and graduates, dropouts and no-shows?

Findings. An examination of Table VII indicated that in general, graduates of the new program had formulated firmer educational intentions and aspired somewhat higher educationally at the time of application than did the dropouts. In this regard, no-shows in the new program were quite similar to the graduates.

Fewer graduates than dropouts had no educational goal at all, and more graduates than dropouts planned to achieve grade XI.

In all cases, in both the old and new programs, the largest proportion of students planned to up-grade to grade X.

In the old program the same trends were indicated as in the new program, but to a less noticeable degree. In both programs the difference between student categories was statistically significant.

Discussion. There were a total of 22 graduates who had no educational goal in mind, a total of 37 dropouts and 11 no-shows. This may indicate that the educational goal was not one of the variables that contributed to a student's non-showing. Also the larger number of dropouts in this category led the investigator to the hypothesis that dropouts are not as fully decided as graduates, and that this indecision regarding an educational goal may then contribute to their dropping out. It is interesting, however, that a total of 53 graduates from both programs aspired to grade XI, whereas only 32 of the dropouts did and 20 of the no-shows. This may indicate a deeper desire for academic upgrading on the part of the graduates, particularly since under both the

TABLE VII

EDUCATIONAL GOAL BY STUDENT CATEGORY

	OLD PROGRAM		NEW PROGRAM
Student Category	Educational Goal	Number	Number
GRADUATES	No Goal	14	8
	8	3	13
	9	14	17
	10	43	39
	11	26	27
DROPOUTS	No Goal	17	20
	8	13	20
	9	6	9
	10	46	37
	11	18	14
NO-SHOWS	No Goal	0	11
	8	3	18
	9	4	8
	10	20	47
	11	4	16

Chi Square = 19.59190
P <.05

Chi Square = 23.37576
P <.05

old and new programs there was a statistically significant relationship found at the .05 level.

Question 7. Is there any relationship between the number of grade levels that a student takes to up-grade and graduates, dropouts and no-shows in both programs?

Findings. As stated in Chapter III the number of grade levels that a student needed to complete his academic up-grading depended on his occupational goal and educational level prior to enrollment. Occasionally, one or the other of these were unknown making it impossible to tell how many grade levels were needed. As indicated in Table VIII this was the case for 16 of the graduates, 19 dropouts and 1 no-show while the old program was in effect.

Thirty-eight per cent of the graduates, 35 per cent of the dropouts and 38.7 per cent of the no-shows needed to be up-graded two grade levels.

While the new program was in effect, again the largest percentages for all three groups needed to be up-graded two grade levels. There were no statistically significant differences between the student categories in both the old and new programs with respect to the number of grade levels needed to reach the educational goal.

Discussion. There were a total of 34 graguates in both programs who needed three or more grade levels, as compared to 54 of the dropouts and 31 no-shows. This suggests that dropouts had lower educational levels prior to enrollment and consequently took more time in order to up-grade to a point where they could get into the occupation of their choice. Also, for a much larger proportion of dropouts and no-shows, the number of grade levels required was unknown, again indicating in-decision about educational goals.

TABLE VIII

GRADE LEVELS NEEDED BY STUDENT CATEGORY

	OLD PROGRAM		NEW PROGRAM
Student Category	Number of Grade levels Needed	Number	Number
GRADUATE	Not Indicated	16	7
	1	27	38
	2	38	40
	3	12	11
	4	4	3
	5	3	1
	6	0	0
DROPOUT	Not Indicated	19	20
	1	20	21
	2	35	31
	3	20	20
	4	6	6
	5	0	1
	6	0	1
NO-SHOW	Not Indicated	1	22
	1	10	25
	2	12	30
	3	6	17
	4	2	4
	5	0	2
	6	0	0

Chi Square = 12.33571
P >.05

Chi Square = 21.76917
P <.05

Question 8. Is there any relationship between marital status and graduates, dropouts and no-shows?

Findings. Table IX shows that while the old program was in effect there were 57 per cent married in the graduate category as compared to 40 per cent of the dropouts and 40.5 per cent of the no-shows.

While the new program was in effect there were 57 per cent married in the graduate category and 47 per cent married in the dropout category.

There was no statistically significant relationship between marital status and whether a student graduated, dropped out, or did not show. However, there were fewer single students in the dropout category under the new program and more married dropouts in the new program than in the old.

Discussion. The fact that there are more married graduates in the new program than the old may be accounted for by the fact that the shorter time span that it took to up-grade under this program made it more convenient for married men to attend and finish their programs of study.

Question 9. Is there any relationship between number of dependents and graduates, dropouts and no-shows?

Findings. There were a total of 297 students in all categories from both programs who had no dependents. As can be seen from Table X, 40 per cent of the graduates in the old program had no dependents, 61 per cent of the dropouts and 48.4 per cent of the no-shows. This compares to 44 per cent of the graduates under the new program, 59 per

TABLE IX

MARITAL STATUS OF STUDENTS BY CATEGORY

	OLD PROGRAM		NEW PROGRAM
Student Category	Marital Status	Number	Number
GRADUATE	Single	41	41
	Married	55	57
	Separated		
	Divorced	4	2
	Widowed		
DROPOUT	Single	58	41
	Married	40	47
	Separated		
	Divorced	2	2
	Widowed		
NO-SHOW	Single	15	48
	Married	15	50
	Separated		
	Divorced	1	1
	Widowed		

Chi Square = 5.96621
P >.05

Chi Square = 11.38433
P >.05

TABLE X

NUMBER OF DEPENDENTS OF STUDENTS BY STUDENTS CATEGORY

		OLD PROGRAM	NEW PROGRAM
Student Category	Number of Dependents	Number of Students	Number of Students
GRADUATE	0	40	44
	1	10	6
	2	21	16
	3	11	14
	4	6	0
	5- 10	12	19
DROPOUT	0	61	59
	1	4	4
	2	7	10
	3	11	15
	4	7	7
	5 - 10	10	5
NO-SHOW	0	15	54
	1	1	8
	2	3	15
	3	5	11
	4	3	4
	5 - 10	4	8
		Chi Square = 16.78345 P >.05	Chi Square = 10.12144 P >.05

cent of the dropouts and 54 per cent of the no-shows. It will be noted that in both programs, there were more dropouts with no dependents than graduates; however, the differences were not statistically significant. There were no differences in the mean number of dependents, nor was the number of dependents related to the category of the student.

Discussion. Even though there was no statistically significant relationship between graduates, dropouts and no-shows and number of dependents, the fact that there were more dropouts than graduates with no dependents led the investigator to suspect that students who graduate do so partly because of the greater responsibility they have to assume.

Question 10. Is there any relationship between allowance received and graduates, dropouts and no-shows in both programs?

Findings. Table XI reveals that there were three students under the old program who did not receive any allowance. In the old program 26 graduates were receiving the highest allowance between 84 and 102 dollars per week, this compared to 19 dropouts and 14 no-shows receiving this much allowance.

Looking at the new program, however, there were no students who did not receive either a provincial or Federal allowance. Also, as under the old program, the greatest number of students receiving the highest allowance were graduates.

A comparison of the means under the old program showed that graduates received a mean allowance of 58 dollars, compared to 51 dollars for dropouts and 63 for no-shows. The Chi Square test showed that the student categories in the old program were statistically related to the level of allowance. The mean allowances in each category were

TABLE XI

GOVERNMENT ALLOWANCE BY STUDENT CATEGORY

		OLD PROGRAM	NEW PROGRAM
Student Category	Allowance Category in dollars	Number of Students	Number of Students
GRADUATE	0	3	0
	7 - 50	41	44
	51 - 65	17	5
	66 - 83	13	15
	84 - 102	26	36
MEAN		$58.00	$64.91
DROPOUT	0	0	0
	7 - 50	62	59
	51 - 65	12	7
	66 - 83	7	5
	84 - 102	19	29
MEAN		$51.62	$60.06
NO-SHOW	0	0	0
	7 - 50	15	54
	51 - 65	1	7
	66 - 83	1	10
	84 - 102	14	29
MEAN		$63.00	$60.51
		Chi Square = 19.97774 P <.05 F = 3.6071 P <.05	Chi Square = 8.20461 P >.05 F = 1.0153 P >.05

significantly different as well.

A comparison of the means under the new program showed no significant differences. Additionally, the level of allowance and student categories were not statistically related.

Discussion. Under the old program there was a statistical relationship between whether a student graduated, dropped out, or did not show and amount of allowance received. Just the opposite was true while the new program was in effect. Thus, under the new program it is not possible to say that the amount of allowance may be one of the reasons as to why a student dropped out. One of the reasons for this might be that manpower allowances were higher during the time the new program was in effect.

Question 11. What is the relationship between governmental status and graduates, dropouts and no-shows?

Findings. As Table XII shows by far the largest percentage of the students were Federal (received allowance from Canada Manpower). This was true while both programs were in effect. There did not appear to be important differences between the student categories with respect to the source of the government grant.

Discussion. There was no statistical relationship between graduates, dropouts and no-shows and government status. However, the fact that, as Table XII indicates there were more provincial students in the dropout category during the time both programs were in effect, may indicate that younger students, those who have been out of the regular school for less than three years, drop out more frequently than others.

Question 12. What is the relationship between educational status and graduates, dropouts, and no-shows?

Findings. As Table XIII indicates the largest percentage of

TABLE XII

GOVERNMENT STATUS BY STUDENT CATEGORY

	OLD PROGRAM		NEW PROGRAM	
Student Category	Federal	Provincial	Federal	Provincial
GRADUATE	92	8	94	6
DROPOUT	89	11	91	9
NO-SHOW	28	3	93	7

Chi Square = 0.52322 Chi Square = 0.68672

P >.05 P >.05

TABLE XIII

GRADE LEVEL PRIOR TO ENTERING

		OLD PROGRAM	NEW PROGRAM
Student Category	Grade Level Category	Number of Students	Number of Students
GRADUATE	1 - 6	12	5
	7 - 8	53	63
	9 - 10	35	32
DROPOUT	1 - 6	13	36
	7 - 8	69	43
	9 - 10	18	21
NO-SHOW	1 - 6	3	9
	7 - 8	19	32
	9 - 10	9	58
		Chi Square = 11.99298 P >.05	Chi Square = 53.46432 P <.05

students had either a grade VII or a grade VIII prior to starting their academic up-grading. Under the old program 53 per cent of the graduates, 69 per cent of the dropouts and 61 per cent of the no-shows had grade VII or VIII. There were no significant differences in the means under the old program, nor was grade level at start of the program statistically related to the student category.

In the new program, several interesting trends can be noted. There was a statistical relationship between the student category and the grade level at the beginning of up-grading. An examination of Table XIII shows that dropouts tended to have a lower grade level than graduates. Interestingly, the grade level of the no-shows tended to be higher than both dropouts and graduates.

Discussion. The statistically significant relationship under the new program as opposed to the old program may indicate that students with lower educational levels are less able to progress on their own than students with higher educational levels. Individual progress was a feature of the six week module type program. The more prior education a student had the more likely were his chances of success. This is possibly why the mean educational level for the graduates was higher than for the dropouts.

II. CROSS TABULATIONS ON SELECTED VARIABLES

In this section of the chapter a cross tabulation was done on the following variables; 1) age by sex; 2) age by educational status; 3) age by occupational goal and 4) number of grade levels needed by allowance. These cross tabulations were done for both the old and new programs. A chi square at the .05 level of significance was done to

test the relationships between each of the above variables. Comparisons between the old and new programs were made.

Question 13. What is the relationship between age and sex in all three student categories for both programs?

Findings. As Table XIV indicates, 88.7 per cent of all students enrolled in the old program were male as compared to 11.3 per cent females. Of those between the ages of 16 and 19, 19.5 per cent were male, 41.5 per cent were between the ages of 20 and 25, 20 per cent between the ages of 26 and 31, 14.6 per cent between the ages of 32 and 39, and 4.4 per cent between the ages of 40 and 60. This compares to 26.9 per cent of all females under the old program who were between the ages of 16 and 19, 65.4 per cent between 20 and 25, and 7.7 per cent between 26 and 31.

Table XIV also indicates that the greatest percentage for both males and females (44.2 per cent) were between the ages of 20 and 25. It is interesting to note, however, that proportionally there were more younger women (92.3 per cent) between the ages of 16 and 25 than men (61 per cent). There were no women over 31 years of age in the old program. A statistically significant relationship between these two variables was found.

Under the new program, as Table XIV indicates, 89 per cent of all students in the sample enrolled in the new program were male as compared to 11 per cent female. This was similar to the proportions in the old program, however, there was a difference in proportion of females in each student category. Under this program there were 66.7 per cent females between the ages of 16 and 25 and 65.3 per cent males.

TABLE XIV

AGE DISTRIBUTION BY SEX

	OLD PROGRAM		NEW PROGRAM	
Age Category	Male	Female	Male	Female
16 - 19	40	7	34	6
20 - 25	85	17	127	16
26 - 31	41	2	49	7
32 - 39	30	0	42	2
40 - 60	9	0	15	2
	Chi Square = 10.43 P <.05		Chi Square = 2.67 P >.05	

This suggests that fewer younger females are entering academic up-grading compared to the old program. Males, however, showed a slight increase from 61 per cent to 65.3 per cent in the 16 to 25 year old range. Also under this program 12.2 per cent of the females were between the ages of 32 and 60. However, there was no statistically significant relationship.

Discussion. Females, generally, were younger than males under the old program. This was not surprising since under the old program it took ten months to up-grade one grade level, thus preventing many older females from taking that long from other responsibilities to attend.

Under the new program, however, there was no statistically significant relationship between age and sex, both males and females were distributed fairly proportionately under all age categories. This, also, is not surprising since the six week module system allowed students to progress faster through their up-grading.

Question 14. What is the relationship between age and educational status for all three student categories in both programs?

Findings. Table XV reveals that during the old program nobody with lower than grade V entered the Adult Centre. Most of the students, 44.2 per cent, were between the ages of 20 and 25 and 38.5 per cent of all students of all ages had a grade VIII upon entering the Adult Centre. Of all those with grade VIII, 60.7 per cent were between the ages of 16 and 25. Of all those with grade IX, 66.7 per cent were also in this age bracket, a similar situation also holds for those with grade X. There was no statistically significant relationship found between these two variables under the old program.

Under the new program, as can be seen in Table XVI, there was a significant difference in the number of grade levels that students had prior to entering this program as opposed to the old program.

TABLE XV

AGE DISTRIBUTION BY GRADE LEVEL AT START OF OLD PROGRAM

	Grade 5	Grade 6	Grade 7	Grade 8	Grade 9	Grade 10
Age Category	Number	Number	Number	Number	Number	Number
16 - 19	1	5	11	20	8	2
20 - 25	1	9	27	34	22	9
26 - 31	1	4	8	18	10	2
32 - 39	1	2	4	15	4	4
40 - 60	1	3	2	2	1	0
Total	5	23	52	89	45	17

Chi Square = 19.49

P > .05

TABLE XVI

AGE DISTIBUTION BY GRADE LEVEL AT START OF NEW PROGRAM

	No Status Given	Grade 1	Grade 2	Grade 4	Grade 5	Grade 6	Grade 7	Grade 8	Grade 9	Grade 10
Age Category	No.	No.	No.	No.	No.	No.	No.	No.	No.	No.
16 - 19	0	0	0	0	0	7	14	12	7	0
20 - 25	1	0	1	1	9	11	38	46	20	16
26 - 31	0	0	0	3	3	4	9	19	13	5
32 - 39	0	0	1	0	1	4	12	12	11	3
40 - 60	0	1	2	0	0	1	3	5	3	2
Total	1	1	4	4	13	27	76	94	54	26

Chi Square = 62.94
P <.05

Under the new program there was one student who did not indicate any educational status. Also, there were eleven people who came into the program with less than grade V, two of these were between the ages of 20 and 25, three between the ages of 26 and 31, one, between the ages of 32 and 39 and three, between the ages of 40 and 60. However, as under the old program the greatest majority of the students were between the ages of 20 and 25 and most had a grade VIII upon entering.

There was nobody between the ages of 16 and 19 who entered with a grade X; however, 61.5 per cent of all those who did enter with grade X were between the ages of 20 and 25 and 7.7 per cent were between the ages of 40 and 60. There was a statistically significant relationship found between these two variables under the new program.

Discussion. There was no statistically significant relationship found between age and educational status under the old program, however, there was a statistical relationship under the new program. The investigator believes that this was caused by the lower entering grade levels that were permitted to enter the Adult Centre, and not because of generally lower grade levels that existed when the new program was in effect but did not exist while the old program was in effect.

Question 15. What is the relationship between age and occupational goal for all student categories in both programs?

Findings. Students who graduate from the Stephenville Adult Centre usually went into occupations for which courses are offered at the District Vocational Schools, and College of Trades and Technology. A few decided to take courses in Nursing at one of the hospital schools of nursing in the province. Thus, the investigator has listed in Appendix B the different occupations offered at the

above named institutions as well as the grade prerequisites of each. There are a total of 62 such occupations from which students could choose.

Under the old program there were 28 out of a possible 62 occupations chosen. However, it is significant that 14.3 per cent were undecided as to their occupational goal. Of all those between the ages of 16 and 19, 33.3 per cent were undecided, and of those between the ages of 20 and 25, 39.4 per cent were undecided. This compared to 15.2 per cent for ages 32 to 39 and 3 per cent for ages 40 to 60. It seems then that many younger students came to the Adult Centre with no firmly established occupational goal in mind. This re-confirms what was stated earlier in the first part of this chapter under the occupational variable. It is interesting, however, that 72.7 per cent of all those undecided were between the ages of 16 and 25. There was a statistically significant relationship between these two variables under the old program.

Under the new program there were fewer students undecided (11 per cent) as compared to the old program (14.3 per cent). Also, there were more occupations chosen, a total of thirty-four as opposed to twenty-eight for the old program. Under the new program only 18.2 per cent of those undecided were between the ages of 16 and 19 as opposed to 33.3 per cent under the old program; also 54.5 per cent of those who were undecided were between the ages of 20 and 25 as compared to 39.4 per cent under the old program. It seems that under this program as the old the greatest percentage of those who were undecided as to their occupational future were in the 16 to 25 year age bracket. There was a statistically significant relationship found between the two

variables under this program.

Discussion. The one significant finding from the data presented on this question was that the younger the student the less likely that he would have selected an occupational goal. The implications of this finding will be discussed further in Chapter V.

Question 16. What is the relationship between the number of grade levels it takes a student to up-grade and the number of dependents in all three student categories in both programs?

Findings. Under the old program as Table XVII shows there were a total of 26 students with from 5 to 10 dependents who needed one to 4 grade levels, compared to 15 students who had only one dependent and needed one to 4 grade levels.

Under the new program as indicated in Table XVIII there was also a slightly larger number of students who had 5 to 10 dependents needing one to 4 grade levels than students who had one dependent needing the same number of grade levels. Also under the new program there were 4 students who needed 5 grade levels of up-grading, and one who needed 6.

Discussion. The number of grade levels needed referred to the number of grade levels that a student needed in order to be up-graded to a point where he was eligible to enter the occupation of his choice. The investigator hypothesized that the number of grade levels that a student needed would decrease with larger numbers of dependents, because students with large numbers of dependents presumably would not be able to afford to live on the allowance provided. However, as the data presented in the findings suggest, this did not seem to be the case. There was no statistically significant relationship found

TABLE XVII

GRADE LEVELS NEEDED BY NUMBER OF DEPENDENTS IN OLD PROGRAM

	NUMBER OF DEPENDENTS					
	0	1	2	3	4	5 - 10
Grade Levels Needed	Number of Students					
0	21	1	4	1	2	7
1	24	5	10	8	2	8
2	45	7	11	6	9	7
3	18	2	4	9	2	3
4	7	0	1	2	1	1
5	1	0	1	1	0	0

Chi Square = 24.19
P >.05

TABLE XVIII

GRADE LEVELS NEEDED BY NUMBER OF DEPENDENTS IN NEW PROGRAM

	NUMBER OF DEPENDENTS					
	0	1	2	3	4	5 - 10
Grade Levels Needed	Number of Students					
0	26	2	8	4	5	4
1	41	7	10	12	4	10
2	50	7	17	16	5	6
3	32	1	5	4	4	2
4	7	1	1	2	1	1
5	2	0	0	1	1	0
6	0	0	0	1	0	0

Chi Square = 24.28
P >.05

between the two variables in either program.

Question 17. What is the relationship between the number of grade levels it takes a student up up-grade and amount of allowance received in all three student categories?

Findings. Under the old program as shown in Table XIX, 51.5 per cent received from 7 dollars to 50 dollars per week. This compared to 26 per cent who were receiving between 84 and 102 dollars per week. Of those receiving from 7 to 50 dollars, 38.7 per cent needed two grade levels in order to up-grade to a point where they could enter the occupation that they had chosen.

Under the new program as shown in Table XX, there were 49 students who did not indicate any number of grade levels needed. It is also of interest that the one student who needed 6 levels of up-grading received between 84 and 102 dollars per week.

Discussion. Since there was no statistically significant relationship between the number of grade levels needed and allowance received, it does not seem reasonable that one contributed to the other. It is interesting, however, that over half of all students in both programs were receiving between 7 and 50 dollars per week.

TABLE XIX

GRADE LEVELS NEEDED BY ALLOWANCE IN OLD PROGRAM

	ALLOWANCE				
	0*	$7-50	$51-65	$66-83	$84-102
Grade Levels Needed	Numbers of Students				
0*	1	21	0	2	12
1	1	25	12	7	12
2	0	46	11	10	18
3	0	19	5	1	13
4	0	7	1	0	4
5	0	1	1	0	1

* Allowance and grade levels needed were not indicated

Chi Square = 21.77
P >.05

TABLE XX

GRADE LEVELS NEEDED BY ALLOWANCE IN NEW PROGRAM

	ALLOWANCE			
	$7-50	$51-65	$66-83	$84-102
Grade Levels Needed	Number of Students			
0*	25	2	6	16
1	40	7	10	27
2	50	6	8	37
3	33	3	3	9
4	7	1	1	4
5	2	0	1	1
6	0	0	0	1

* Grade levels needed not indicated.

Chi Square = 12.50
P >.05

III. SUMMARY

This chapter had presented the analysis of the data together with a brief discussion of the findings. Several significant differences were noted between the three categories of students. The implications of these differences will be discussed in the following chapter, together with recommendations for programs to be implemented and other needed research.

CHAPTER V

SUMMARY, CONCLUSIONS, AND RECOMMENDATIONS

I. SUMMARY

The review of the literature revealed that there had been little research done on any aspect of adult education and this was particularly true of dropouts in adult education. As Verner and Davis say:

> Virtually every aspect of adult education revolves around participation and persistence of attendance, yet the quantity of substantial research related to this particular aspect of the field is astonishingly small and inadequate. No other aspect of adult education so badly needs systematic and creative basic research.[1]

The main purpose of this study was to investigate differences between three categories of students at the Stephenville Adult Centre: Those who successfully completed their programs, those who dropped out of their programs before completion, and those who selected to attend but did not report to start. These three categories were compared on ten variables in two time periods, January, 1968 to June, 1970 and September, 1970 to April, 1972, during which two different types of academic programs were in effect. In an attempt to compare these three categories and the two programs, seventeen research questions were asked.

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[1] Verner and Davis, op. cit., p. 173.

The sample used in the present study consisted of 531 students randomly selected from a total population of 4361, who attended the Centre from January, 1968 to April 1972.

Data for the present study came from the Canada Manpower Forms. These forms were used by Manpower to gather biographical information on all students seeking admission to the Adult Centre.

Frequency distributions on each of the ten variables were obtained for each of the six sample student categories. Cross tabulations of the student categories in both programs on all biographical variables were also computed, as well as cross tabulations on selected variables. The relationship between those variables was by means of a chi square at the .05 level. The last statistical procedure was a comparison of mean age, weeks unemployed, number of dependents, and allowance, using the analysis of variance.

Several significant differences were noted between the three categories of students, the implications of which are discussed under conclusions. However, in brief, dropouts tended to be a little younger than graduates or no-shows. Most of the dropouts were from outside the Stephenville area, as were the no-shows. Over fifty per cent of the graduates, however, came from the Stephenville area.

Dropouts tended to be single, to have fewer dependents and to be unemployed for longer periods prior to up-grading than were graduates or no-shows. Also, there were more students in the dropout category who were undecided as to their educational and occupational goals.

It is also noteworthy that dropouts and no-shows were more alike on more variables than graduates.

II. CONCLUSIONS

This section is divided into three parts. The first part describes the typical graduate, dropout, and no-show from both programs and presents a comparison between the three categories in both programs. Second, comparisons are then made between the two programs, pointing out major differences. The last part of this section presents findings that are suggestive of further research.

Old Program

Graduate. Data gathered in this study describe a graduate in the old program as being usually a male having a mean age of 26 years, however, the preponderence of graduates were between the ages of 20 and 25, with a median age of 22. He typically came from the Stephenville area, since 58 per cent of all graduates came from this area. He was typically unemployed from one to six weeks prior to starting up-grading. A graduate typically had an educational goal of grade X. This meant that generally he had a grade VIII upon applying for admission to the Adult Centre; since he usually needed two grade levels of up-grading.

He usually had from one to ten dependents and received a mean allowance of 58 dollars per week paid primarily by the Federal Government (Canada Manpower).

Dropout. The dropout in the old program was usually a male, having a mean age of 23 years with a median age of 22. Fifty-eight per cent of all dropouts came from outside the Stephenville area. He was usually unemployed prior to up-grading; when he did enter the Adult Centre his educational and occupational goal were not very well established in his mind. He usually came into up-grading with a grade VIII education and needed two levels of up-grading in order to up-grade to a point where he could enter the occupational course of his choice. The dropout was usually single and had no dependents. He received an allowance of $51.62 primarily from the Federal Government (Canada Manpower).

No-show. The no-show in the old program was usually a female, having a mean age of 24 years with a median of 22. The no-show typically came from outside the Stephenville area and was unemployed for a period of thirteen weeks prior to up-grading. She usually came to the Adult Centre with a grade VII or VIII and needed two grade levels of up-grading in order to up-grade to a point where she could enter the occupational field that she had chosen. She had no dependents, although 49 per cent of all no-shows in the old program had from one to ten. She received a mean allowance of 63 dollars primarily from the Federal Government (Canada Manpower).

Comparison. As Table II (B) indicated the mean age of the graduates, dropouts, and no-shows in the old program showed slight difference. However, this difference was not statistically significant at the .05 level. The medians were the same which

suggested that the numbers as seen in Table II(A) were distributed disproportionately in all three categories. For example, there were more dropouts (24 per cent) in the 16 to 19 year old category than graduates (18 per cent)or no-shows (16 per cent). Also, there were more students between the ages of 40 and 60, (6 per cent) in the graduate category than in the dropout category (2 per cent) or the no-show category (3.2 per cent). The conclusion reached by the investigator was that graduates as compared to dropouts or no-shows were as a group, generally older and presumably more mature.

It seemed that the further away from the Adult Centre a student lived the more likely were the chances that he would either drop out, if, indeed, he showed up at all. The investigator reached this conclusion because as Table III indicated the largest percentage of students from the Stephenville area were graduates and no-shows were from more areas of the province than any other category.

The major difference in employment status regarding the three categories was the fact that graduates tended to be employed right up to the time of application. Dropouts and no-shows, however, were unemployed for longer periods of time. This led the investigator to conclude that more graduates came into upgrading after leaving a job to do so, than did dropouts or no-shows.

The graduates, as opposed to dropouts or no-shows, had their occupational and educational goals more firmly established in their mind.

Another very important difference between graduates, dropouts, and no-shows, under the old program was that there were more dropouts who were single than graduates or no-shows. The investigator hypothesizes that this was because more provincial students were dropouts; those students had been out of the regular school for less than three years. Observation of Table XII confirmed this even though the difference was not statistically significant. There was a difference, however, and maybe this warrants further research.

New Program

Graduate. The typical graduate under the new program was usually a male, having a mean age of 27 years. Most were between the ages of 20 and 25 with a median age of 25. He typically came from the Stephenville area since 52 per cent of all graduates under the new program came from that area. He was usually unemployed from one to six weeks prior to up-grading, however, there were 46 per cent who were not unemployed at all prior to up-grading.

The graduate typically had a grade VII or VIII prior to application for up-grading, and usually needed two grade levels of up-grading in order to up-grade to a point where he could enter the occupational course of his choice. He was typically married and had from one to ten dependents, and received a mean allowance of $64.91 usually from the Federal Government (Canada Manpower).

Dropout. The dropout was usually a male, having a mean age of 24 years. Most were between the ages of 20 and 25, with a median age of 22. The typical dropout under the new program

came from an area of the province outside of Stephenville. He was usually unemployed for 25 weeks prior to making application for up-grading. He typically had no educational goal; however, when this was indicated it was usually grade X. He typically came to the Adult Centre with a grade VII or VIII and needed two grade levels of up-grading in order to do the occupational course that he had selected. He was usually married but had no dependents, although 41 per cent of all dropouts under the new program had one to ten. He received an allowance of 60 dollars per week from the Federal Government (Canada Manpower).

No-show. The no-show was usually a married male, having a mean age of 25, with a median age of 24. He usually came from outside the Stephenville area and was unemployed for a total of 14 weeks prior to up-grading. His educational goal was usually grade X and he needed two grade levels of up-grading in order to be up-graded to a point where he could do the occupational course he had chosen. The no-show typically had no dependents and received an allowance of $60.51 per week paid by the Federal Government (Canada Manpower).

Comparison. The typical graduate, dropout, and no-show, under this program were married males, between the ages of 20 and 25. The graduate, although not significantly so, was a little older than the dropout or no-show. In comparing medians it is readily seen that the dropout is the youngest of all three categories. The investigator concluded that the dropout problem may, therefore, be related to the immaturity of the participants.

Fifty-two per cent of all graduates came from the Stephenville area compared to 38 per cent of the dropouts and 32 per cent of the no-shows. The investigator concluded, therefore, that distance from the Adult Centre was possibly a factor related to academic success while the new program was in effect.

The percentage of married dropouts was 10 per cent less than the number of married graduates, with the no-shows resembling the dropouts more than the graduates as shown in Table IX.

The dropout was more likely than the graduate or no-show to have no dependents. The investigator concluded that this was one of the major reasons for the graduates' success, the added marital responsibility that he had to assume, and thus inversely one of the reasons why a dropout would not have to stay. The no-show again resembles the dropout and does not show up for up-grading for possibly the same reason that the dropout left.

It cannot be said that allowance, or lack of it, was one of the reasons for dropping out since all three categories under the new program received a mean allowance of approximately the same amount.

There were nine provincial students in the dropout category compared to six graduates and seven no-shows. While this was not significantly different at the .05 level, it does tend to confirm one of the investigator's earlier conclusions that younger students dropout more frequently than older ones.

The difference in the entering grade level seemed to be a major factor related to whether a student graduated or dropped out.

As Table XIII indicated there were significantly more dropouts with lower entering grade levels than graduates or no-shows. This led the investigator to the conclusion that the higher the entering grade level the greater were a student's chances of academic success while in up-grading.

Comparisons Between Old and New Programs

The typical graduate, dropout, and no-show were very similar in both programs. Thus, an effort was made here to point out only important differences.

Under the new program there were significantly more males between the ages of 20 and 25, also there were more between the ages of 40 and 60. The investigator concluded that this was possible due to the six week module type program in effect under the new program, allowing more students to attend since time required for up-grading could be cut in half in some cases.

Under the new program the lowest entering grade level was grade I, whereas, the lowest under the old program was grade V. The lower entering grade level under the new program was probably due to the basic literacy program started when this program came in effect. Also, as indicated in Table XIII there were more dropouts with lower entering grade levels than graduates or no-shows. The investigator concluded, therefore, that entering grade level and academic success were related.

There were significantly more males than females in all categories in both programs, except the no-show category under the old program. Females in the new program were more proportionately

distributed than in the old program. Out of a total of 43 females under the old program 11 graduated, however, out of a total of 33 under the new program 16 graduated. This compares to a total of 188 males under the old program, 89 of whom graduated, and 267 under the new program, 84 of whom graduated. Thus, it seems more likely that females will not only report for up-grading if accepted more often than males but the proportion that will graduate will also be greater than males.

The investigator hypothesized that the reason many students were in up-grading was because of their inability to find employment and dropped out as soon as they did. As shown in Table VI this seemed to be the case in the new program where the mean number of weeks unemployed for dropouts and no-shows was higher than for graduates. Based on this finding the investigator hypothesizes that dropouts leave to take jobs. This was especially true during the new program when the academic year was such that students may be in school during the summer, and this is usually the time of year when construction type work makes employment opportunities at a peak.

The educational and occupational goals of dropouts and no-shows were not nearly as firmly established as those of graduates. Also their aspirations were not so high since significantly more graduates aspired to grade XI, (See Table VII). There were quite a few more dropouts than graduates or no-shows who did not have an occupational goal under the new program. Under the old program the proportion of dropouts with no occupational goal was not so great and this was also the case for the no-shows. The reason for this the investigator concluded may be that the new program of six week modules was not

long enough for students to know what they wanted to do. Also, the decreased contact with teachers and somewhat impersonal atmosphere may have been contributing factors.

The government allowance under the new program was higher than under the old program. This increase was due primarily to inflation and general rise in the cost of living from September, 1970 to April, 1972 as opposed to January, 1968 to June, 1970 and not because students under the new program had significantly more dependents which would also cause an increase in allowance.

Under the new program there seemed to be a decrease in the number of provincial students as opposed to the old program. The reason for this the investigator concluded was that young people were possibly staying in the regular school longer.

Findings of Special Interest and Suggestions for Further Research

It was impossible to predict whether a student will succeed in academic up-grading by the occupational goal that he had chosen. It is extremely interesting, however, that 14.7 per cent of all students in all categories in the old program aspired to do a trade in Motor Vehicle Repair (Mechanical) and 16 per cent aspired to do the same trade under the new program. Also there were only 16 students in both programs who aspired to do courses for which Canada Manpower or the Provincial Government did not provide an allowance.

While there was not any statistically significant relationship between the number of grade levels needed and whether a student graduated, dropped out, or did not show, the fact that 54 per cent of the dropouts as opposed to 34 per cent of the graduates who needed

three or more grade levels, led the investigator to the conclusion that time needed to up-grade may have been a big factor in determining whether a student succeeded. Further research is recommended.

Data suggested that the more dependents a student had the greater were his chances of finishing his academic program.

The greatest percentage of students were Federal students in both programs. However, it appeared that younger students dropped out more frequently. Further research is highly desirable in view of the fact that most of these students had also dropped out of the regular school less than three years ago.

The dropout and no-show categories seemed to resemble each other on most of the biographical variables. The investigator therefore hypothesizes that these two categories are biographically similar, however, further research is strongly recommended.

III. RECOMMENDATIONS

1. In view of the findings from data presented it is recommended that consideration be given to the establishment of adult centres in other areas of the province. It is hypothesized that this would curtail the dropout rate.
2. It is recommended that a comprehensive vocational counselling centre be set up immediately. Theoretically, this type of service was supposed to have been provided by Canada Manpower before a student entered the up-grading Centre. However, evidence from data presented in this study suggested that sizable numbers of students still did not have firm educational or occupational plans.

3. In view of data presented which suggested that younger students were dropping out more frequently than others, the investigator recommends that for all students below the age of twenty-five, counselling services be made readily available; also since this was the category that had less firm educational and occupational goals, career guidance is strongly recommended for this age group, perhaps linked to a more flexible system establishing occupational and educational goals by Canada Manpower.

4. Data revealed that students with low entering grade levels were more likely to drop out than others. This was unusual especially under the new program where a student was supposed to begin at his own level. The investigator hypothesized, therefore, that lack of personal contact may be a factor in dropping out. In addition, these students may be lacking in basic study skills, and in the ability to plan and organize on their own. It is recommended, therefore, that students with low entering grade levels have constant contact with the school counsellor for psychological support. In addition instructors should be helping develop needed study skills.

5. It is recommended that the Division of Vocational Education in conjunction with Canada Manpower undertake a study immediately to ascertain why so many no-shows who are unemployed do not report for up-grading.

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APPENDIX A

APPENDIX A

RESIDENTIAL CLASSIFICATIONS

The area of the province the student came from was classified according to the electoral districts of his residence. The districts included under number one were regarded as the Stephenville area.

1. Port au Port
   St. Georges
   Humber East
   Humber West

2. St. Barbe North
   St. Barbe South

3. White Bay South
   White Bay North

4. Grand Falls
   Green Bay

5. Lewisporte
   Twillingate

6 Fortune Bay
   Gander

7. Hermitage

8. Fogo

9. Bonavista South
   Bonavista North

10. Trinity South
    Trinity North

11. Harbour Main
    Port de Grave
    Harbour Grace
    Carbonear
    Bay de Verde

12. Burin
    Placentia West
    Placentia East

13. St. Mary's
    Ferryland

14. St. John's South

    St. John's North

    St. John's East Extern

    St. John's West

    St. John's East

    St. John's Centre

    Bell Island

15. Burgeo La Poile

16. Labrador South

    Labrador North

    Labrador West

APPENDIX B

APPENDIX B

EDUCATIONAL PREREQUISITES FOR VOCATIONAL COURSE OFFERINGS

These courses are offered by District Vocational Schools, The College of Grades and Technology, and the College of Fisheries, Marine Navigation and Engineering. The grade level required for acceptance into the course is given to the right of the course name.

TRADE AND OCCUPATIONAL COURSES	GRADE LEVEL REQUIRED
1. Aircraft Airframe Maintenance	Not Specified
2. Aircraft Engine Maintenance	Not Specified
3. Barbering	8
4. Beauty Culture	10
5. Bricklaying	8
6. Carpentry and Joinery	9
7. Catering	8
8. Clerk-Accounting	11
9. Clerk-Hotel Front Office	11
10. Clerk Typist	11
11. Commercial Art	10
12. Cooking (Commercial)	8
13. Drafting (Basic)	11
14. Drafting (Architectural)	11

15.	Drafting (Engineering)	11
16.	Drafting (Mechanical)	11
17.	Diesel Mechanics	10
18.	Dressmaking and Sewing	8
19.	Electrical (Basic)	10
20.	Electrical (Electrical Power Utilities)	11
21.	Electronics (Basic)	11
22.	Electronics (Communications)	11
23.	Electronics (Industrial)	11
24.	Gas and Diesel Mechanics	10
25.	Heavy Duty Equipment Repair	10
26.	Heavy equipment operation	8
27.	Jewelry	
28.	Machinist Trade	10
29.	Millwright - Industrial Mechanical Trade	11
30.	Motor Vehicle Repair - Body	8
31.	Motor Vehicle Repair - Mechanical	10
32.	Plumbing and Domestic Heating Trade	9
33.	Pottery	
34.	Printing	10
35.	Refrigeration	10
36.	Sheet Metal Work	10
37.	Shorthand and Typing	11
38.	Stationary Engineering	10
39.	Steam Fitting	10
40.	Weaving	

41. Welding - Arc and Gas 10
42. Stationary Engineering (3rd, 2nd, 1st, class) 10
43. Fish Plant Inspector 11
44. Lighthouse Serviceman
45. Cook
46. Seamstress
47. OTHER
00. UNDECIDED

BUSINESS, MEDICAL AND TECHNICAL COURSES

50. Accounting 11
51. Business Administration 11
52. Secretarial Science 11
53. Medical Laboratory Technology 11
54. X-Ray Technology 11
55. Medical Laboratory Assistants 11
56. Construction Technology 11
57. Electrical Technology 11
58. Electronic Technology 11
59. Forestry Technology 11
60. Surveying Technology 11
61. Pharmacy Technology 11
62. Food Management Technology 11
63. Nursing Assistant 10
64. Teacher 11