AN OVERVIEW OF THE EDUCATIONAL CHARACTERISTICS OF REGISTERED INDIANS IN CANADA

by

Jeremy Hull

The Working Margins Consulting Group Winnipeg

for Indian and Northern Affairs Canada

1987

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The opinions in this report are those of the author and do not necessarily reflect the views or policies of Indian and Northern Affairs Canada.

FOREWORD

As registered Indians reassume control of their political, social and economic affairs, it is essential that those involved in this process have available a comprehensive and accurate picture of Indian conditions. The Overview Series on Registered Indian Conditions, of which this research report is a part, was initiated and sponsored by Indian and Northern Affairs Canada (INAC). This series provides analyses of key demographic, social and economic conditions of registered Indians in the early 1980s. It draws comparisons between the situation of on- and off-reserve Indians and the general population at that time.

The reports in this series are intended to provide the reader with as complete a picture as possible of the past situation of registered Indians. While the series makes some use of information from the mid-1970s to early 1980s drawn from various federal administrative data bases, it is based primarily on 1981 Census data. By providing extensive baseline data, the series establishes a reference point against which future comparisons with data on Indian conditions collected by subsequent Censuses may be made.

The data in this series of reports should be used with care. Many of them may not reflect current conditions. There is some more recent evidence of significant improvements in Indian conditions. Most noteworthy, the number of post-secondary students sponsored by INAC has grown significantly over the years. In 1981-82, the department provided financial assistance to the equivalent of 4,445 full-time students (based on a 32-week academic year). In 1985-86, the number increased to 9,906 of which an estimated 423 received funding from INAC after registration under Bill C-31. There is also good evidence of expanding Indian entrepreneurship and business enterprise both on- and off-reserve which is increasing the Indian private sector contribution to Indian income and employment. As well, in recent Indians have exercised greater control over their economic establishment development through the ofa growing Indian-controlled economic and financial institutions operating locally, regionally and nationally.

Following are the titles of the 14 research reports in the series:

- * An Overview of Registered Indian Conditions in Canada
- * An Overview of Registered Indian Conditions in Nova Scotia and Newfoundland
- * An Overview of Registered Indian Conditions in New Brunswick and Prince Edward Island
- * An Overview of Registered Indian Conditions in Quebec
- * An Overview of Registered Indian Conditions in Ontario
- * An Overview of Registered Indian Conditions in Manitoba
- * An Overview of Registered Indian Conditions in Saskatchewan
- * An Overview of Registered Indian Conditions in Alberta
- * An Overview of Registered Indian Conditions in British Columbia
- * An Overview of Registered Indian Conditions Methodology Report (Canada and Selected Provinces)
- * An Overview of the Housing Conditions of Registered Indians in Canada
- * An Overview of the Educational Characteristics of Registered Indians in Canada
- * An Overview of Economic Circumstances of Registered Indians in Canada
- * An Overview of Socio-Demographic Conditions of Registered Indians Residing Off-Reserve

As with all major long-term undertakings, this series of reports is the product of the cooperation and efforts of many individuals too numerous to mention here. Their contributions are greatly appreciated.

I expect that the series will be a useful and supportive information source for those interested in Indian conditions and hope that it will generate future related research.

Melie Co

Mike Sims Director General Policy, Economic Development

Preface

This overview of Indian educational characteristics and circumstances is part of a series of overview studies commissioned by Indian and Northern Affairs Canada (INAC). The series draws on data from 1981 Census customized tabulations and other sources to provide a more comprehensive statistical picture of Indian conditions than has previously been possible.

The present study addresses Indian education from several standpoints. The introductory chapter identifies issues and methods used in preparing this study. Chapter 2 is concerned with on-reserve schooling at the elementary and secondary levels. Chapter 3 provides an analysis of some of the socio-economic factors which may affect children's success in the schools. Chapter 4 deals with post-secondary training and education, and Chapter 5 looks at the educational attainment of adults. The sixth chapter provides a brief look at INAC's educational expenditures. Each of these chapters attempts to provide both a basic understanding of recent conditions, and a more analytical understanding of correlations and interrelationships. The final chapter provides a brief set of conclusions regarding the findings of the previous six chapters.

Acknowledgements

The production of this study has taken about two years and has involved the cooperation of a number of government departments and individuals. I would like to acknowledge, first of all, the key roles played in this project by Tom Brecher of Indian and Northern Affairs Canada (INAC), and Wendy Wright of Statistics Canada. Tom has provided advice and feedback throughout the project, while also being responsible for the coordination of activities and information required from INAC sources and from Statistics Canada. Wendy was responsible for planning the production of special Census tabulations, and has acted as a consultant concerning the limitations and possibilities for using Census data in this study.

Many other people have also contributed to this project. Within INAC, assistance has been provided by Sheila Klein, Kirsti Walker, Sam Pandith, Monique Major, Roy Pankhurst and Jim Wyman at the headquarters office. These people, and others with whom I have not had direct contact, have provided data and explanations concerning INAC programs and data collection procedures. The project has also benefitted from consultations with several regional INAC staff, including D.J. Lavin in British Columbia, and John Fadak, Fred Foss, and Pat McManus in Manitoba.

Several people outside the federal government also worked on this project or assisted in its preparation. Rene Johnson and Brenda Peach of WMC Research Associates did the word processing for the drafts and final version of this report. John Hilton did the programming of data from the three major data sources, including the running of the logistic regressions. Stewart Clatworthy provided advice concerning the planning and implementation of the project at several points, and Stacey Huget undertook a literature search and annotation as background for the definition of issues. Ron Phillips of the Manitoba Indian Education Association also provided helpful information and advice.

Finally, I would like to express my appreciation for the leadership provided by Lizzy Fraikin and Gilles Larocque of INAC in initiating this extensive series of studies. They and other INAC colleagues of theirs have taken an open and flexible approach in supporting this research and have contributed to the final product through their review of draft reports, including the data in tables and figures. Their action has resulted in both the production of an important series of research reports on registered Indians, and in the creation of an extensive set of special Census tabulations which will prove beneficial to researchers and others in many areas concerned with Native issues.

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Highlights

The following points summarize the most important findings of this study.

Elementary-Secondary Indian Students Living on Reserves

- o Enrolments in band-operated schools increased dramatically between 1978 and 1982, while enrolments in federal and provincial schools have fallen.
- o There are increased enrolments at the high school level, particularly in band-operated schools.
- o Withdrawal rates of registered Indian students are high among those over 14 years of age. High withdrawal rates are influenced by high levels of age-grade deceleration at the grade 8 and 10 levels.
- o Age-grade deceleration is highest in band-operated schools while school leaving rates are highest in federal and provincial schools.
- o Grades 12 and 13 graduation rates are highest in band-operated schools and lowest in federal schools, but are much lower overall than graduation rates of non-Indian students in Canada.

External Factors Affecting Success in School

o Indian children's success in school is strongly influenced by their parents' socio-economic status and family income, as well as by place of residence (on or off reserve). When factors such as these are kept constant, Indian success rates begin to approach those of non-Indians.

- o The use of a Native language in the home is associated with lower rates of success in the school system among the Indian population.
- o In conclusion, socio-economic conditions, poverty, and barriers caused by language differences are important areas requiring attention from educators of Indian children.

Post-Secondary and Occupational Training

- o Indians are only one-third as likely as other Canadians to be enrolled in university programs, and are only half as likely to be enrolled in other post-secondary training programs.
- o The largest proportion of Indian post-secondary and occupational skills students are found in university Bachelor's programs, with teaching and general arts being the most common fields of study.
- o The fields of study of Indian men and women reflect sexually stereotyped occupations. Women are more likely than men to be in social science, teaching, or clerical fields; men are more likely to be in science, engineering, and trades programs.
- o Within three to four years of having enrolled just over half of Indian post-secondary and occupational skills students have achieved at least partial success in their programs, but less than 15 per cent have successfully graduated from their programs.
- o The major reason given by Indian students for withdrawing from post high school programs is "social and personal problems". Those in university and professional programs also cite difficulty of the academic subject matter as a reason for withdrawing.

- o Married students, older students, and women have higher post-secondary and occupational training success rates than others.
- o Previous educational attainment is also an important factor in post-secondary success. Those having at least a grade 10 level are more likely to be successful than those with less education, particularly among younger students.

Adult Educational Attainment

- o The on-reserve Indian population has a much lower level of educational attainment than the off-reserve Indian and the non-Indian populations. Nearly half of the on-reserve Indian population has less than a grade 9 education.
- o Within the Indian population those under the age of 45 have higher levels of schooling than those 45 or older. Those under 25 are much more likely to have completed part or all of their high school education than those 25 or older.
- o Educational attainment has a strong impact on employment rates among the Indian population, and as educational levels increase, the gap in employment rates between Indians and others decreases.
- o Educational attainment also has a substantial impact on average incomes, although sex is the major factor affecting income. High school completion, in particular, leads to higher incomes.

- o Among the Indian population, those with higher levels of education are more likely than others to be migrants. In major urban areas, recent migrants have higher levels of education than longer-term Indian residents in most cities.
- o Indians who speak an Amerindian language or Inuktitut at home have lower levels of education than other Indian people. Lower average income is also associated with use of Native languages, except that those who live on reserve and have completed high school, have higher incomes when they speak an Amerindian language.
- o The two major factors affecting likelihood of being employed are sex and education (high school graduation). Other factors are relatively unimportant, although age and degree of isolation have an effect on employment as well. When these factors are taken into account, ethnicity (Indian vs. non-Indian) has little effect on employment rates.
- o Age, sex and educational attainment all have a major impact on income, with older men with a high school education or better being in the most advantaged position. Once these factors are taken into account, differences in income due to ethnicity are less important, particularly for those 25 years of age and older.
- O Degree of isolation or urbanization is an important factor in influencing educational attainment, as is ethnicity. Age and sex are also important influences on educational attainment, but to a lesser degree.

1. INTRODUCTION

The purpose of this overview is to provide basic descriptive statistics concerning the education of registered Indians in Canada, as well as initial analysis of the relationship between educational attainment and other social and economic characteristics. conceived of as a background document which may serve a variety of program planners, program managers, and researchers within Indian and Northern Affairs Canada (INAC), among Indian organizations, in other government departments, and among the general public. The study is based largely on three computerized data bases - the 1981 Census of Canada, the INAC Nominal Roll, and the INAC Continuing Education Information System. Accordingly, the information which follows is statistical in nature and provides a general understanding of Indian educational circumstances rather than specific analysis of particular programs, or of program implementation issues.

This first chapter of the study will provide a brief overview of issues concerning Indian* education in Canada through a review of relevant research literature. This chapter will then discuss the methods used in obtaining the data for this study, and will describe the characteristics and limitations of the data sources. The following four chapters will present tables and graphs describing and analyzing elementary-secondary schooling of Indian students, the post-secondary education and occupational training of this group, and the educational attainment of the adult Indian population. Where possible, direct comparisons with the non-Indian* population will be provided.

^{*} For convenience, the term "Indian" will be used to refer to "registered Indians" in this study. The term "non-Indian" is used to refer to all other Canadians, excluding registered Indians.

These four chapters will be followed by a brief chapter on INAC expenditures on education. The seventh and final chapter will provide a summary and conclusions.

1.1 Issues Concerning Indian Education in Canada

A wide variety of perspectives have been taken on Indian education in previous research, ranging from the philosophical to the economic. Much of the research has been concerned with the success and design of specific schools and programs. Such studies often include skill testing, surveys of attitudes and perceptions, community surveys, and research into the educational and related needs of Indian students. However, the broad statistical nature of the present study is such that these more specific educational questions cannot be dealt with. Therefore this discussion of issues will be confined to those questions which can be examined through analysis of available national computerized data sources.

Age-Grade Deceleration

The primary issue which has been the implicit focus of much previous research has been the lack of success of Indian students in school, and the consequent limited opportunities for employment of the adult Indian population. Success in school has been measured in several ways: through looking at the degree to which students are behind the expected grade level for their (age-grade age deceleration); through looking at drop-out rates; through skill testing; and through assessments of students' attitudes, self-concept, and career goals.

Past research has documented high levels of age-grade deceleration among Indian students. Kirkness (1978) found that in Manitoba an average of 32 per cent of Indian students in federal (INAC) schools and 27 per cent of Indian students in provincial schools were behind their

grade during the 1972-77 period. In Saskatchewan in 1974, Hull and McLaren (1975) found that 62 per cent of all Indian students registered in the INAC Nominal Roll were behind their expected grade levels, with age-grade deceleration being markedly higher in the northern districts than in the south. In the Prince Albert district in Saskatchewan Hull (1978) found that 66.5 per cent of Indian students were behind their expected grade levels. In Manitoba in 1980 it was found that 55 per cent of Indian students were age-grade decelerated, with a slightly greater deceleration among students in provincial schools (59 per cent) as opposed to federal (55 per cent) and band-operated schools (52 per cent). (Education Branch, INAC, Manitoba Region, 1981).

Withdrawal and Enrolment Rates

Another way in which student success has been examined has been through determining the number of students who drop out of school and the age or grade level at which they leave. The Indian Conditions study (1980) found that fewer than 20 per cent of Indian students enrolled in grade 2 are still enrolled in grade 12. Siggner, et al (1982) found that this rate varied from a low of 10 per cent or less in Manitoba and Saskatchewan to a high of more than 25 per cent in Quebec and Ontario. Kirkness (1978) found that 16 per cent of Indian students in federal schools and 17 per cent in provincial schools in Manitoba dropped out of grades 6 through 12 each year during the 1975 to 1977 Dropout rates were especially high for grades 9 through 12, peaking in grade 11 at over 50 per cent in the federal schools. largest numbers of dropouts were found among the 15 and 16 year-old age groups, and at the end of grades 7 and 8. Kirkness' figures would suggest that 91 per cent of Indian students in federal schools dropped out between grades 6 and 12, compared to 81 per cent of those in provincial schools.

Another way of looking at the issue is to examine the enrolment rate or non-attendance rate of the population based on INAC on-reserve population statistics. The <u>Indian Conditions</u> study (1980) showed that, nationally, Indian enrolment rates for the 14-18 year old age group were well below those of non-Indians over the 1969 - 1978 period, generally in the 60 to 70 per cent range. Again, these rates

were lowest in Saskatchewan (20 per cent) and Manitoba (30 per cent) as of 1976, and highest in Quebec (46 per cent) and Ontario (45 per cent). (Siggner, et al, 1982). This approach was also taken by Foss and Miller in Manitoba (1981) who found there was a high percentage of "non-attenders" among the population 14 and older, reaching more than 20 per cent by age 16.

Using data from the Kirkness study, Stevens (1982) showed that students who were age-grade decelerated were four times as likely to drop out of school as those who were not. Among those grade 6 through 12 students who were behind their expected grade, 31.8 per cent dropped out as compared to 7.7 per cent of other grade 6 through 12 students.

Absenteeism

Absenteeism is another problem which is related to dropping out of school. Lenton (1979) found that those Indian students who subsequently dropped out of school had a high rate of absenteeism, and that this was particularly true among grade 7 and 8 students. High rates of absenteeism have been found among Indian students, although these statistics are often not maintained. Hull (1978) found that the average attendance rate among Indian students in northern Saskatchewan was 72 per cent in 1977-78, or in other words that 28 per cent of students were absent on an average day over the course of the year. Hull and McLaren (1975) found higher levels of absenteeism among Indian student populations than among non-Indians in Saskatchewan. One important factor contributing to absenteeism identified by Blowers (1981) was the more frequent and more serious illnesses among low-income Indian populations, as compared to others.

Academic Achievement

A number of studies have also examined Indian student achievement through skill tests, and Indian students' attitudes and self-concepts with respect to schooling. These will not be reviewed here since the present study will not be able to directly address the question of skill levels and student perceptions.

Indian Control

An important dimension of the Indian education debate which can be examined here is the question of Indian control of education. The philosophy and rationale underlying Indian (or local) control has been set forth by the National Indian Brotherhood (1972), Douglas Cardinal (1974), and many other individuals and organizations. In general, arguments in favour of Indian control are based on such points as the need to incorporate aspects of Indian cultures into the schools; the need for greater parental involvement; the need for greater local accountability; the need to integrate education with other aspects of local development; and the right of Indian parents to determine the type of education to be provided for their children.

A number of studies have attempted to assess the success of Indian students in band-operated schools in relation to their success in federal and provincial schools. Most of these studies, however, have shown little difference among the different types of schools. Hull and McLaren (1975) found philosophical and attitudinal differences at an early stage of the Indian control movement in Saskatchewan. The Assembly of Manitoba Chiefs All-Chiefs Budget Committee Report (1984) identified the success of Indian-controlled schools in increasing high school enrolments. Hurlburt, Henjum and Eide (1983) found few differences between Indian students in Indian controlled schools and those attending provincial schools in a residential setting. In short, no definitive results have emerged, but there is wide support for an Indian-control policy both within and outside the federal government. Enrolment trends have reflected this support, as will be seen below.

Urban Native Education

An important related issue is the question of urban Native education. Again, this is a question which cannot be directly addressed in the present study. However, it should be noted that in a number of cities the urban Native population has grown dramatically over the past 20 years, and that urban school systems have adopted new programs and approaches in response to the educational needs of Native students. In some cases special all-Native "survival schools" have been established, and evaluations of these schools have tended to support their value. (Belsher, 1983; Hunter and Kettle, 1979).

Enrolment Growth

Growth in Indian elementary-secondary school enrolments has been an an important practical planning issue for school systems serving Indian students. Between 1965 and 1979 the size of the Indian student population for which the federal government was responsible grew from 55,000 to 75,000 (<u>Indian Conditions, A Survey</u>, 1980). Changing trends in Indian education policy, combined with demographic changes, have caused dramatic shifts in enrolments during the past 20 years. Hull (1978) showed how in northern Saskatchewan, enrolments in federal and band-operated schools constituted 12 per cent of the on-reserve student population in 1971, but had risen to 66 per cent by 1978. However, the dramatic "baby boom" of the Indian population has now peaked and is working its way through the school system affecting enrolments accordingly.

University Enrolments and Success

In the area of post-secondary training there has been an explosion of activity over the past 15 years and a substantial body of research literature has developed around this question. The Indian Conditions study (1980) reported that Indian university enrolments dramatically from 1968 when there were 200 students to 1978 when there were 2,600 enrolled. Owston (1981) reports that the University of New Brunswick Indian Teacher Education Program has achieved good results in intellectual growth. reduced drop-outs, and student performance. The Calgary Institute for Research (1981) evaluated the Brandon University Northern Teacher Education Program and found that graduates were likely to find employment as teachers and to find work Other such studies have also identified positive in the North. outcomes of special university training programs, with the major outcome being an increase in the number of Indian university students and graduates.

Post-secondary enrolment rates have been found to be lower among the Indian population than others. According to the <u>Indian Conditions</u> study (1980), the Indian university enrolment rate climbed from 1 per cent in 1965 to 5 per cent in 1975, although it remained less than half

of the non-Indian enrolment rate in Canada. In 1975 Indian university enrolment rates were lowest in Ontario, and highest in Manitoba (Siggner et al, 1982). Hull (1982) found that in Saskatchewan, the Indian university enrolment rate was one-third that of non-Indians, and the Indian vocational enrolment rate was one-fourth of the non-Indian rate. However, an evaluation study of the INAC Post-Secondary Education Assistance Program by the DPA Group (1985) found that among the population aged 18 to 29 with at least a grade 11 education, Indian enrolment rates in Canada are similar to those of non-Indians. This study also examined regional patterns in enrolments, and concluded that post-secondary Indian enrolment rates were highest in the Saskatchewan and Atlantic INAC regions.

Other Post-Secondary Enrolments and Success

While Indian university enrolments have been increasing, other post-secondary and adult education enrolments have both risen and fallen over the past 20 years. The <u>Indian Conditions</u> study (1980) showed that Indian pre-vocational training enrolments peaked at 4,500 in 1972, falling to 1,200 by 1979. Vocational training enrolments also peaked in 1972 at 3,500, falling to less than 1,000 in 1979. Other adult education programs, including basic literacy courses, followed the same pattern, reaching more than 30,000 participants in 1972, and falling to about 3,000 in 1979.

Non-university post-secondary training programs have also received attention from researchers, notably the New Careers competency-based training program in Manitoba, which allows grade 9 students to obtain training and enter the job market. MacKenzie (1982) indicated that 87 per cent of the 1981-82 graduates were employed in Manitoba. Fifty-four per cent of New Careers students in 1982 were of Native ancestry.

Striking differences have been identified by various researchers in the types of university and technical programs taken by Indian men and women. Hull (1984) found that Indian women living on reserves participated in a very narrow range of training courses, primarily in

clerical, health-related, and adult basic education courses. Indian men, on the other hand, participated in a wider variety of training programs, although they also tended to be concentrated in such areas as carpentry, heavy equipment operating, and adult basic education courses.

Factors Affecting Post-Secondary Success

Two general approaches have been taken to the question of what factors contribute to the success of Indian post-secondary students. On the one hand, the personal characteristics and backgrounds of students have been examined, including sex, education, age, and marital status. While many counsellors and educators have suggested that lack of educational preparation is a major factor in lack of success at the post-secondary levels, available statistics do not bear this out. Using INAC administrative data the DPA Group (1985) found that a similar proportion of Indian students were successful, regardless of their previous educational attainment. For example, 56 per cent of those with a grade 7 background in the INAC Post-Secondary Education Assistance Program either graduated or completed their successfully, compared to 49 per cent of those with a grade 12 background. Other common reasons cited for lack of success include family problems, urban adjustment problems, personal problems, child care problems, and lack of finances. DPA found that 57 per cent of their small sample of drop-outs cited personal reasons, and 26 per cent cited financial reasons for leaving school.

Others have focused on the socio-economic context of post-secondary education and the ways in which the design of the program can address these broader issues. The New Careers program has been a strong advocate of this point of view based on more than a decade of experience. MacKenzie (1984: page 4) cites the program's working assumptions as follows:

"1. Poverty is the result of economic, social, or geographic barriers and is not caused by inherent personal weakness.

- The most immediate need of disadvantaged persons is employment which also provides training/education and then career opportunities.
- Successful training programs are geared to functional learning.
 Adults more readily learn concepts that are related to job and life concerns.
- 4. There is little relationship between the level of formal education and job performance, therefore, many of the educational criteria for jobs are irrelevent. Waiving the criteria for career paths would not result in the lowering of performance.
- 5. Learning is valid regardless of the environment in which it has occurred or the manner in which it has been obtained."

Adult Educational Attainment

It has been clear from past research that Indian educational attainment was well below that of the general population, but reliable national statistics have not been available prior to the completion of the 1981 Census. In urban areas several broad-based surveys of the Native population have been done. Clatworthy (1981) found that 80 percent of the registered Indian population of Winnipeg had less than a grade 11 education, while 7 per cent had some level of post-secondary training. Clatworthy and Hull (1983) found that 56 per cent of registered Indians in Regina and 46 per cent in Saskatoon had less than a grade 9 education, while 17 per cent and 25 per cent respectively had a grade 12 education or better. In Calgary a survey by the city's social services department found that 31 per cent of the sample had less than grade 10 education, while 24 per cent had some form of post-secondary or vocational training. (City of Calgary, 1984).

A number of surveys have been conducted on reserves as well, although these are often done in the context of community plans or other studies, and are generally unpublished. WMC Research Associates (1983) in a survey of eastern Manitoba reserves found that 81 per cent of the population has less than grade 10 education while only 3 per cent had completed grade 12. This survey also found that residents of fly-in reserves were more likely to have less than seven years of schooling than others (26 per cent vs. 46 per cent), and more likely to have completed grade 12 (6 per cent vs. 2 per cent). A large scale survey of five Indian reserves and adjacent communities in northern Manitoba found that 50 per cent of the adult population had less than grade 9 while 8 per cent had completed grade 12 (Hull, 1984). These surveys have also documented the higher levels of schooling among the younger adult population as compared to older adults.

Educational Attainment and Employment

An important focus of research into the effects of educational attainment among the Indian population has been the question of employment. Clatworthy (1981) found that the unemployment rate among Native residents of Winnipeg with at least 12 years of schooling was half the rate of those with less schooling (16 per cent vs. 36 per cent). Hull (1984) found that this relationship also held up on reserves in northern Manitoba with employment rates increasing substantially with increases in educational attainment. In the same study it was also found that participation in all post-secondary education increased the probability of being employed. The DPA Group (1985) also obtained results which support this relationship. They found that 20 per cent of their sample of Indian post-secondary graduates were unemployed as compared to 49 per cent of the drop-outs they interviewed.

Data from the 1981 Census of Canada also confirms the relatively low levels of attainment among the registered Indians, as shown in

Brecher, et al (1985) and the correlation between employment and educational attainment in the Indian population, as reported in the DPA Group study (1985). However, in view of the extensive analysis of Census data in the present study, these findings will not be described here.

In summary, there are a number of important issues concerning Indian education which can be addressed in the present study. These include:

- o enrolments of Indian students at all levels of education;
- o enrolment rates;
- o success as measured by progress through school, program completion, and educational attainment;
- o relationship of educational attainment to other variables;
- o factors influencing educational attainment and educational success;
- o correlates of educational attainment and educational success.

Most of these topics have been researched previously for Canada or for regions. However, because of the availability of Census data in particular and the availability of INAC computerized data, the present study is able to be somewhat more comprehensive in addressing these issues and is able to investigate factors influencing educational success.

1.2 Methods and Data Sources

The present study is based primarily on three sources of data: INAC customized data based on the 1981 Census of Canada, the INAC Nominal Roll, and the INAC Continuing Education Information System (CEIS). These data sources were supplemented by other INAC administrative data where necessary, such as the budgetary information obtained from the expenditure accounting system. Each of the data sources and its problems or limitations will be discussed below.

The approach taken to analyzing the data involved four stages. First, a set of desired tables and statistics was defined based on the

types of research questions described in the previous section, and on a preliminary description of the three data bases. Second, the actual characteristics and limitations of each data base were investigated, and the reliability and value of each source was investigated. This investigation led to changes in the set of tables to be produced.

The third stage was to actually produce the bulk of the tables; this was handled differently for the different data bases. In order to obtain data from the Census, special tabulations were requested, through INAC, from Statistics Canada. These requests were discussed and modified a number of times as the technical limitations of producing the desired tables were assessed. Costs were also assessed during this stage by INAC, leading up to a final set of special tabulations as specified in a contract between INAC and Statistics Canada.

The tables were then generated by Statistics Canada both as hard copy tables and as machine readable magnetic tapes. The tapes were used as the preferred source of data in producing the material for this study, with the hard copy tables used as backup. A complete set of hard copy tables was produced and is being stored at INAC headquarters.

In the case of the Nominal Roll and CEIS data, INAC simply copied its current data onto tape, excluding personal information that might identify individuals, and forwarded the tapes to the researcher. These tapes covered a period of years: 1978 through 1982 for the Nominal Roll data, and 1979 through June, 1984 for the CEIS data.

As the data were received a set of basic descriptive tables was produced from each source. Once these initial tables were produced and digested, a second set of more analytical tables was produced. In the

case of the CEIS data and the Census data, this fourth stage included the production of several logistic regression analyses as an attempt to explore some of the underlying relationships of the variables available in the data bases.

In order to examine the relationships between Indian education and geographic location several strategies were used. The first approach was to examine regional differences using each of the three major data For the 1981 Census data the regions chosen were individual provinces or groups of provinces or territories. For the Nominal Roll and CEIS data the INAC administrative regions were used, which are only slightly different from provincial regions. The 1981 Census was also used to examine on and off-reserve populations at both the regional and national levels, and to examine the off-reserve populations of selected Finally, for tables based on the 1981 Census the population was broken down into categories of degree of isolation or urbanization of place of residence. These included three INAC-based categories for on-reserve residents and three Census-based categories for off-reserve residents, and were used both for national and provincial or regional The choice of categories to be used in the geographic analysis was dictated largely by the size of the Indian population within various possible categories. The danger was that the data would be too sparse to support analysis.

In producing both the descriptive and the more analytical tables a number of methodological issues had to be addressed. Most of these related to the characteristics of the data and will be discussed below. However, an important consideration was how educational attainment could be related to socio-economic status (SES). For this purpose the Blishen-McRoberts (1976) ranking of occupations in Canada based on 1971 occupations was used since it had already been created by Bernard Blishen and was available for use in the Census-based portion of this study.

A second important consideration was how best to compare the educational characteristics of registered Indians to those of other Canadians. For the most part, the data from the Nominal Roll and the CEIS do not lend themselves to comparison with available data concerning non-Indians. However, the Census provides a consistent set of data and definitions for Indians and non-Indians alike. Moreover, the tables produced from the Census have been produced for five ethnic categories:

- 1. total population
- 2. registered Indians
- not registered Indians
- 4. all other Natives
- 5. non-Natives

Categories 2 and 3 equal the total population (category 1) and were the basis of the comparisons reported in this study. The data concerning other Natives is available from INAC and may be of interest to other researchers.

Following is a more specific description of each of the three major data sources:

INAC Customized Data Based on the 1981 Census of Canada

The 1981 Census placed particular emphasis on attempting to achieve accuracy and comprehensiveness with regard to identifying the Native population of Canada. While the results appear to be somewhat low when compared to the Indian Band Lists maintained by INAC, the Census provides a better national coverage of the characteristics of the Native population than has ever previously been available. Moreover,

it identifies the Native population according to the categories employed (for better or worse) by government and by Native people themselves: Inuit, Status or Registered Indian, non-status Indian, and Métis. Therefore, in the case of the present overview, it is possible to obtain data which are directly relevant to the mandate of INAC - that is data concerning registered Indians.

There are several new types of data and analysis which the 1981 Census makes possible. The long form of the Census, which was distributed to one household in every five in most parts of Canada, includes detailed questions on employment, housing, income, education, and migration. Therefore, a national profile of these characteristics of the Indian population, along with their demographic characteristics, is now possible, and analysis of the relationships among these characteristics can be carried out.

The second advantage of the 1981 Census data is that direct comparisons between the Indian population and the non-Indian population are possible in terms of the socio-economic variables collected, and may be disaggregated by various regional groupings of Census divisions and sub-divisions. Therefore, it was possible to compare and analyze the differences between Indians and others much more carefully and precisely than in the past.

In carrying out the regional analysis some difficulties were encountered. The major one was an incompatibility between the 1981 Census definition of "on-reserve residents" and the Indian Affairs definition which usually includes the Indian population living on Crown lands. While the Indian Register identifies those living on Crown lands, the 1981 Census does not. Therefore in order to maintain consistency with the INAC definition and customary usage, Census sub-divisions with Indian settlements had to be identified. This was done by the INAC Research Branch working in conjunction with Statistics Canada. (See Klein and Wright, 1985).

Secondly, Indian bands have been categorized by INAC as remote, special access, rural, or urban depending on their ease of access and proximity to regional urban centres. The assignment of reserves and other Indian settlements to these categories was accomplished by matching each Census sub-division defined as on-reserve or Crown lands (as described above) to the <u>Schedule of Indian Bands</u>, <u>Reserves and Settlements</u> (1983) and then to the "Classification of Indian Bands by Geographic Zone" prepared by the Housing and Band Support Branch of INAC (1983, revised 1984). The on-reserve population was divided into three categories: urban, rural, and remote and special access. (The remote and special access categories were combined because of the small population falling into these individual categories and the Crown lands category was included with them.)

A similar division of the off-reserve population was used which was based on the size and density of place of residence. The 1981 Census defines an urban area as a population of 1,000 or more with a density of 400 or more people per square kilometre. Following an analysis of the distribution of the Indian population among different sizes of urban centres, it was decided that the best categories for analysis would be: 1) urban areas of 100,000 or more; 2) urban areas of 5,000 to 99,999; and, 3) smaller urban areas and rural areas. division was largely dictated by the need to have a sufficient population in each category for analysis, but also reflected an intuitive sense of similarity in the characteristics of towns or cities within a given category. The on and off-reserve categories were worked out in conjunction with Stewart Clatworthy and Harvey Stevens who used the same categories in An Overview of the Housing Conditions of Registered Indians in Canada (currently in preparation).

The result was that the population of Canada or within a given province or region could be subdivided into the following categories:

- 1. total population 2. population on reserves or on Crown lands 3. remote/special access reserves or Crown lands 4. rural reserves 5. urban reserves 6. population off reserves 7. rural and urban areas up to 4,999 8. urban areas of 5,000 to 99,999
- 9. urban areas of 100,000 or more

In addition, the registered Indian population data had to be adjusted in order to overcome a number of discrepancies in the data, such as those concerning non-Indian women married to Indian men, and "Indian" adults born outside of Canada. Through the efforts of Sheila Klein of INAC and Wendy Wright of Statistics Canada the population to be included within the status Indian population was defined, taking into account place of birth, family relationships, and other factors. (See Klein and Wright, 1985). There were, however, other problems involved in using Census data. First, the educational levels of children under 15 are not included in the Census. Therefore, a direct comparison of the achievement or educational progress of Indian and non-Indian children is not possible using the Census, nor can the socio-economic characteristics of the family be related to the school achievement of children under 15. Second, while the 1981 Census is an improvement over previous censuses of Canada, it is still characterized by a degree of undercoverage of the Native population. Six reserves were not covered at all due to the refusal of band councils to participate. In several urban areas, where independent and systematic data collection has been carried out, the census appears to be low. (See Clatworthy, 1981; Clathworthy and Hull, 1983). example, in Regina, the census Native population in 1981 was approximately 6,000 while Clatworthy and Hull (1983) identified a population of approximately 12,000 in 1982. Undercoverage is a more

significant problem in Manitoba and Saskatchewan than elsewhere. (Hull, 1985).

In order to deal with the question of relating parents' socio-economic status to the educational success of their children, it was necessary to limit certain tables to the census family population and the characteristics of children 15 or older who were living with their parents. Similarly, in relating marital and parental status to educational attainment, the census family population was studied, and in order to relate family poverty to children's education, the economic family population (as defined by the Census) was analyzed. (For explanations of these terms, see the 1981 Census Dictionary)

However, given these limitations, it was possible to examine the following variables and their interrelationships:

- o adult educational attainment;
- o occupations;
- o various employment characteristics;
- o family/parent status;
- o family income;
- o home language;
- o residency (on/off reserve);
- o degree of isolation/urbanization;
- o mobility;
- o regional patterns;
- o selected cities:
- o socio-economic status.

The Nominal Roll

The major gap in the Census data, for the purposes of this overview, is the lack of data on the education of children under 15. To a considerable extent, the gap is filled for Indian children by This administrative file is computerized, and the Nominal Roll. identifies Indian children enrolled in federal and band-operated schools each fall, as well as the Indian children in provincial schools and private schools who are sponsored by INAC. Therefore, it identifies the enrolment characteristics of Indian children living on reserves (and on Crown lands), but not most of the Indian children whose families are permanent off-reserve residents. (Those children living off reserve temporarily who received allowances or supplies are included in the Nominal Roll.) Moreover, the Nominal Roll does not cover Indian students attending schools in the Yukon and Northwest Territories.

From the above, it will be seen that a substantial proportion of the total Indian school population is not covered by this data source. A second problem with the data base is that it has been modified recently, so that it is not entirely consistent over time. In the past some of the fields on the registration form have been filled in differently by different people across the country. However, INAC staff feel that it provides a reasonably accurate source of data for the five year period (1978-1982). It should be noted that Nominal Roll data are reported for INAC administrative regions which are similar to but not the same as provinces.

Another problem is that the Nominal Roll includes a small number of non-Indians. Some of the non-Indian population is made up of other Native students some of whom may be eligible for Indian status. About one per cent of the students are not Native. At the same time small numbers of Inuit students and Indian students living off-reserve have been included in the Nominal Roll from 1971-1982. (See Appendix A).

The Nominal Roll provides some important indicators of Indian student achievement and provides an historical record which can support trend analysis and geographic analysis. Further it provides the basis for examining the growth in enrolments under federal jurisdiction. the historic in and trends enrolments federally-administered and band-administered schools. Moreover, since 1982 a special "leavers file" has been created each year to identify those students no longer enrolled, and their reason for leaving.

The following variables were of greatest value in the present study:

- o number of school leavers;
- o enrolment data;
- o age-grade placement data;
- o type of school (federal, band, provincial or private);
- o reason for leaving school;
- o number of graduates.

Continuing Education Information System (CEIS)

CEIS is a computerized data file based on the Education Assistance forms used by INAC to monitor costs and progress of Indian and Inuit post-secondary and occupational skills students. It provides data concerning subjects of study, educational progress, type of institution, previous education, and family characteristics. As such it can support an analysis of Indian post-high school achievement beyond that provided in the Census.

The major problem with this source of data is that it is incomplete. In the Manitoba and British Columbia regions of INAC many students who are assisted are not documented on individual registration forms, but rather on collective forms. Thus their characteristics and progress cannot be determined. In B.C. during the 1979-1983 period

about 50 per cent of those assisted were not individually documented. In Manitoba, a larger proportion are believed to be undocumented. (See the DPA Group, 1985). The nature of the bias that this missing data creates in the CEIS statistics is not known, but a comparison of CEIS data for British Columbia with data collected in the region as a summer project in 1984 did not show major discrepancies in the distribution of students by fields of training. It should be noted that residents of the Yukon receive little assistance through the INAC Education Assistance Program and the few students involved are therefore only included in the Canada totals in this report. Indian students in the Northwest Territories receive assistance through the territorial government, and are not counted in CEIS data.

CEIS data was used in the present study to examine the following:

- o enrolment trends;
- o fields of study;
- o educational success:
- o student characteristics.

Student characteristics, such as age, sex, marital status, and dependents are available on the initial application for assistance required of each student. Progress reports are then completed at the conclusion of the program or year, indicating the degree of success that the student has had: completed year, partially completed year and may be re-admitted, graduated, withdrew, or was unsuccessful and will not be re-admitted. For the purposes of this study it was assumed that those who should have completed a progress report and had not were unsuccessful or had withdrawn from their programs. This study has also eliminated those participating in adult upgrading programs and non-graded community courses from the population being examined.

Other Data Sources

A few other sources of data were important to this study. INAC education expenditures were provided by Roy Pankhurst of INAC's Headquarters Financial Services. Additional statistics were provided by Monique Major of the INAC Program Reference Centre. In addition, the population projections study using adjusted Indian Register data done by Perreault, Paquette, and George of Statistics Canada (1985) was the basis for enrolment projections. Lastly several Statistics Canada publications have been used for reference and comparisons, particularly Education in Canada, A Statistical Review for 1982-83 (Cat. #81-229) and the 1981 Census Dictionary (Cat. #99-901).

2. ELEMENTARY-SECONDARY EDUCATION OF REGISTERED INDIANS

Information concerning the education of registered Indian students in elementary and secondary schools comes primarily from the INAC Nominal Roll. When reading and interpreting the following tables it should always be kept in mind that the Nominal Roll is essentially a record of the schooling of students living on reserves and that apart from limited inclusion of off-reserve students for a short time, the substantial off-reserve population is not included. A small number of non-Indian students attending reserve schools are also included in the Nominal Roll. Secondly, it is important to remember that the Nominal Roll is taken once each year, in October, and that enrolments vary over the course of the year. The only way in which varying enrolments are captured in the Nominal Roll is through documentation of students who have left school between one October and the next. In addition, the Nominal Roll does not cover Indian students attending schools in the Yukon or Northwest Territories. (For further discussion of the Nominal Roll see Section 1.2 above and Appendix A).

This chapter will present tables and graphs under three headings: Enrolments; Graduations and Withdrawals; and Factors Affecting Success in School. While there was an initial intention to examine retention rates as well, the limited period for which computerized data were available, and the changes in coverage of the student population prevented this.

2.1 Enrolments

Tables 2.1 and 2.2 provide a five-year overview of Indian enrolment trends in Canada, by grade level and by age. It will be seen that, over the period 1978-1982, enrolments have risen and then fallen. This pattern reflects two demographic trends during this period: continuing

Table 2.1 Elementary-Secondary Registered Indian Student Enrolments By Grade, Canada, 1978-1982

	YEAR.							
Grade	1978	1979	1980	1981	1982			
К4	3,301	3,397	3,481	3,628	3,603			
K5	5,949	5,478	5,935	5,765	5,596			
1	8,466	8,155	8,221	7,907	6,989			
2	7,552	7,447	7,205	7,118	6,833			
3	7,378	7,422	7,302	6,803	6,551			
4	7,175	7,224	7,357	6,983	6,330			
5	6,946	6,935	7,021	6,930	6,430			
6	6,658	6,791	6,731	6,848	6,294			
7	6,771	6,903	6,939	6,645	5,450			
8	6,126	6,200	6,001	5,936	6,140			
9	5,145	5,174	5,352	5,027	5,328			
10	3,806	3,965	4,176	4,225	4,186			
11	2,478	2,535	2,766	2,814	3,214			
12	1,493	1,579	1,717	1,784	2,255			
13	50	59	59	54	211			
Special Ed.	2,059	1,945	2,526	1,994	1,997			
Unknown	6	28	12	5	5			
Total	81,359	81,237	82,801	80,466	77,412			

Notes:

- The Nominal Roll is taken in October of each year.
 A small number of non-Indian students are included in the Nominal Roll.

Table 2.2 Elementary-Secondary Registered Indian Student Enrolments By Age, Canada, 1978-1982

Age (Dec. 31)	1978	1979	YEAR 1980	1981	1982
4	2,968	2,884	3,029	3,354	3,369
5	5,422	5,245	5,632	5,352	5,224
6	6,320	6,023	6,135	5,947	5,505
7	6,473	6,425	6,330	6,070	5,704
8	6,588	6,529	6,489	6,088	5,709
9	6,487	6,594	6,527	6,255	5,725
10	6,590	6,491	6,669	6,267	5,823
11	6,378	6,528	6,496	6,346	5,872
12	6,415	6,304	6,558	6,258	5,921
13	6,448	6,313	6,226	6,154	5,826
14	6,100	6,192	6,038	5,789	5,612
15	5,424	5,454	5,690	5,274	5,126
16	4,191	4,339	4,540	4,489	4,311
17	2,882	2,968	3,307	3,294	3,548
18	1,522	1,634	1,817	1,956	2,151
19	621	696	766	862	1,054
20	219	248	264	333	436
21	72	74	79	121	187
22+	106	155	90	169	210
Unknown	133	141	119	88	99
Total	81,359	81,237	82,801	80,466	77,412

Notes:

- The Nominal Roll is taken in October of each year.
 A small number of non-Indian students are included in the Nominal Roll.

off-reserve migration of the Indian population, and movement of the "bulge" in the Indian population from the early school years into the later school years. By 1982, the largest single year age group among the on-reserve Indian population was the 17 year-old group. As will be seen below, by the age of 16, many Indian students are no longer attending school. (See Table 2.3) Therefore, as the largest age groups have begun to move out of the school system, enrolments have begun to decline.

The pattern of declining enrolments after 1980 does not apply to all grades and age groups. Enrolments in grades 11 to 13, and among 17 through 22 year olds have continued to increase through 1982. One factor which is affecting enrolments at the high school level has been the increase in the provision of high school programs on reserves.

While in the past, few reserve schools have offered high school level courses, the increase in band-operated schools (which is shown in Tables 2.4 and 2.5 below) has been associated with an increase in high school programs on reserve. This has increased accessibility of high school to reserve students.

Table 2.3 relates 1982 enrolments to the 1982 on-reserve Indian population (including those living on Crown lands). There is not a perfect match between population and enrolment figures, since, for one thing, a number of on-reserve residents may be attending school off-reserve, without INAC sponsorship. In addition a small number of non-Indian children attend the reserve schools, although they would not be included in the on-reserve Indian population figures. To the extent possible these problems have been corrected in Table 2.3 by excluding all students except for registered Indians.

Table 2.3 shows a steady enrolment rate of about 90 per cent of the on-reserve population for the ages of 6 through 13, after which

Table 2.3
Estimated On-Reserve Registered Indian
Enrolment Rates By Age Groups, Canada, 1982

Age Group (as of Dec. 31)	A. Number Enrolled (as of Oct.)	B. On-Reserve Population (as of Dec. 31)	Estimated Enrolment Rate
			q
5	4,843	5,910	81.9
6	5,065	5,657	89 . 5
7	5,272	5,816	90.6
8	5,303	5,816	91.2
8 9	5,324	5,811	91.6
10	5,401	5,946	90.8
11	5,471	5,969	91.7
12	5,541	6,129	90.4
13	5,444	6,066	89 . 7
14	5,260	6,039	87.1
15	4,843	5,990	80.9
16	4,075	6,034	67 . 5
17	3,336	6,162	54.5
18	2,019	6,029	33.5
19	1,000	6,026	16.6
14 - 17	17,514	24,225	72.3

Notes:

- 1. On-reserve population includes those living on Crown lands.
- 2. In this table only registered Indian students have been included in enrolments, excluding other Native, Inuit and non-Native students. Therefore these figures will differ from those in Table 2.2 which covers all Nominal Roll students. (See Appendix A for an annual breakdown of Nominal Roll students by ethnicity.)
- 3. Estimated enrolment rate is A/B.

Sources: Nominal Roll, Education Branch, INAC, 1982 and unadjusted population data from the Indian Register as of Dec. 31, 1982.

enrolment rates fall off substantially. By the age of 17 approximately half of the potential students have left school. Among the 14 - 17 year old on-reserve Indian population, about 72 per cent are enrolled, as compared to 85 per cent among the total Canadian population in 1982-83. (Statistics Canada, 1983, Cat. #81-229). It is clear that there is a high drop-out rate among the reserve population and that most Indian students do not complete high school, particularly in light of the age-grade deceleration levels among this population, as will be documented below.

Table 2.4 shows the changing distribution of Indian students in the INAC regions among different school types over the 1978 through 1982 period. Reserve students attend four types of schools, and statistics for the school types will be compared in this chapter. Federal schools are run directly by INAC; provincial schools are paid tuition by INAC for Indian reserve students who attend them; band-operated schools are provided with operating and capital funds primarily by INAC; and private schools are again provided with tuition payments for Indian students. (Provincial schools are also sometimes referred to as either "joint schools" or "tuition schools" depending on whether INAC has jointly funded capital costs, or has only agreed to provide tuition payments. For the purposes of this overview these two types have been First it may be noted that the proportion of Indian students in both provincial and federal schools has been falling while the proportion in band-operated schools has been increasing. Secondly, there are striking regional differences in the distribution of Indian students by school type. In 1978 only Manitoba, Saskatchewan, and British Columbia had significant numbers of students in band-operated By 1982 these INAC regions, along with the Atlantic and schools. Quebec regions, had more students attending band-operated schools than were attending federal schools. In Manitoba and Saskatchewan more than one-third of Indian on-reserve students were enrolled in band-operated schools.

Table 2.4
Percentage of Registered Indian Students Enrolled,
By School Type, Canada and INAC Regions, 1978-1982

YEAR INAC Region, School 1978 1979 1980 1981 1982 **Type** Atlantic: Federal 51.1 51.7 31.3 30.0 22.2 Provincial 48.0 47.9 49.3 49.4 46.8 0.2 18.0 30.2 Band 0.2 19.6 Private 0.7 0.9 1.4 1.0 0.8 Ouebec: Federal 29.3 27.6 25.4 16.5 14.5 Provincial 67.0 67.8 68.2 69.0 68.9 2.8 14.6 Band 3.3 4.9 13.1 Private 0.9 1.5 1.4 2.0 1.2 49.5 48.0 Ontario: Federal 50.2 49.3 48.5 Provincial 46.8 44.8 44.8 44.9 44.7 3.1 5.6 5.5 Band 1.3 1.6 Private 2.5 1.4 2.4 2.8 1.5 Manitoba: Federal 47.4 45.4 44.2 36.1 35.4 38.9 39.0 Provincial 40.0 30.3 28.3 14.6 16.8 33.6 Band 13.7 36.3 Private 0.0 0.0 0.0 0.0 0.0 Sask .: Federal 36.5 35.4 33.4 28.9 26.3 Provincial 55.0 50.3 39.1 51.2 53.1 Band 12.0 11.1 11.1 20.6 34.5 Private 0.3 0.4 0.5 0.2 0.1 Alberta: Federal 34.1 33.9 32.1 30.0 34.4 Provincial 64.0 63.6 63.9 63.4 56.0 Band 1.9 2.4 3.8 6.6 9.7 Private 0.1 0.0 0.1 0.0 0.0 B.C.: Federal 8.9 7.6 7.8 7.2 8.0 73.3 Provincial 73.3 73.8 73.1 67.8 Band 10.5 12.6 12.6 14.5 18.5 7.3 5.8 5.1 5.8 Private 6.5 CANADA: Federal 35.2 34.2 32.1 28.0 28.2 Provincial 55.8 56.3 56.6 54.2 49.7 Band 7.1 9.5 7.8 16.3 20.6

Notes:

Private

1. Enrolment as of October each year.

1.9

2. Provincial school enrolments include joint school students and tuition students.

1.8

3. A small number of non-Indian students are included in the Nominal Roll.

1.8

1.4

1.5

The proportion of Indian students in provincial schools also varied a great deal from region to region. This proportion is highest in British Columbia and Quebec where two-thirds of on-reserve Indian students were attending provincial schools in 1982. In most INAC regions, the proportion of students in provincial schools has remained almost constant, with the growth in band-operated school enrolments coming at the expense of federal school enrolments. In fact, band-operated schools are often simply former INAC schools which have changed jurisdiction. The provincial school enrolments have fallen to a greater extent in Manitoba and Saskatchewan than elsewhere, and in Manitoba amounted to only 28 per cent of total enrolments by 1982.

Table 2.5 provides an analysis of the changing Indian enrolment patterns by school type and grade level for Canada. (Similar tables are provided for each INAC region in Appendix B). From this table it is apparent that at the higher grade levels Indian students generally attend provincial schools, while federal school enrolments concentrated in the lower grade levels. The proportion of federal students in the high school grades (10 through 13) was only 3 per cent of total federal enrolments in 1982, as compared to 20 per cent of provincial enrolments. The distribution of band-operated students fell in between the other two groups, with 9 per cent at the high school level in 1982. The number of high school students is growing rapidly in band-operated schools and has more than doubled between 1978 and 1982.

Using the population projection figures prepared by Perreault, Paquette, and George (1985) it is possible to provide enrolment projections for the on-reserve Indian population by age group components, through 1996. These projections are shown in Figure 2.1. The "medium growth" scenario of population projections has been used, and it has been assumed that the current enrolment rates would continue unchanged. This latter element can be affected by a number of factors, such as whether more high school programs are provided on-reserves, and whether educational programs are pursued which will attract more non-attenders. It may also be affected by the recent amendment to the

Table 2.5 Registered Indian Student Enrolments, By Grade Level and School Type, Canada, 1978-1982

	YEAR						
Grade Level & School Type	1978	1979	1980	1981	1982		
K - 6 Federal Provincial Band Private Total	23,001 25,580 3,940 904 53,425	22,014 25,648 4,369 818 52,849	21,041 25,840 5,557 815 53,253	17,746 24,097 9,528 611 51,982	16,851 19,889 11,276 610 48,626		
7 - 9 Federal Provincial Band Private Total	4,634 11,906 1,082 420 18,042	4,750 11,991 1,140 396 18,277	4,458 12,013 1,415 406 18,292	3,863 11,205 2,248 292 17,608	3,990 9,790 2,850 288 16,918		
10 - 13 Federal Provincial Band Private Total	726 6,328 619 154 7,827	701 6,628 614 195 8,138	691 7,120 693 214 8,718	704 7,047 956 170 8,877	698 7,536 1,424 208 9,866		
Special Education Federal Provincial Band Private Total	241 1,621 155 42 2,059	272 1,454 187 32 1,945	384 1,873 213 56 2,526	213 1,301 401 79 1,994	286 1,292 361 58 1,997		
Total Federal Provincial Band Private Total	28,602 45,435 5,796 1,520 81,353	27,737 45,721 6,310 1,441 81,209	26,574 46,846 7,878 1,491 82,789	22,526 43,650 13,133 1,152 80,461	21,825 38,507 15,911 1,164 77,407		
Unknown	6	28	12	5	5		
TOTAL	81,359	81,237	82,801	80,466	77,412		

Notes:

- Enrolment as of October each year.
 Provincial enrolments include joint school and tuition students.
- 3. A small number of non-Indian students are included in the Nominal Roll. (See Appendix A.)

<u>Indian Act</u> allowing for the reinstatement of Indian status to many Indian women and the registration of their children. To the extent that the present high rates of school leaving among older Indian students may be reduced in the future, these projections should be seen as minimum enrolment projections, particularly among 15 to 19 year olds.

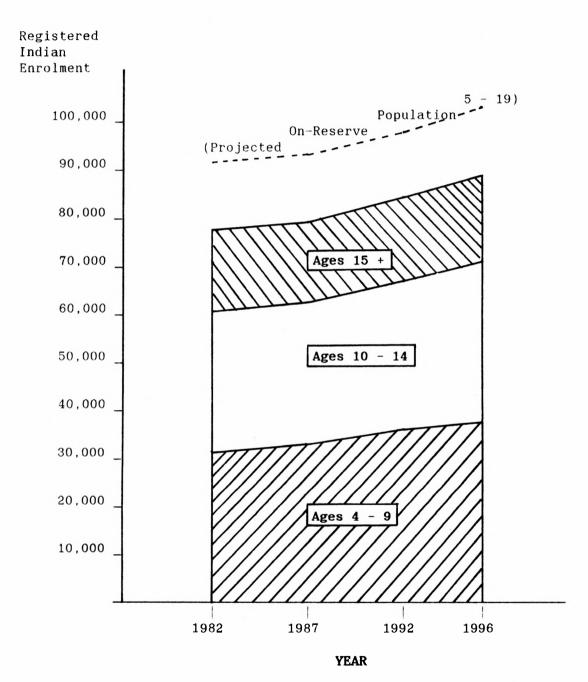
Figure 2.1 shows the projected Indian student enrolments, as divided among three component age groups: ages 4 through 9, 10 through 14, and 15 or older. Of the total 1982 enrolment of about 77,000, some 31,000 were in the 4 through 9 age group, 29,000 in the 10 through 14 age group, and 17,000 in the 15 or older age group. The enrolment is expected to rise steadily among the 4 to 9 year olds, from about 31,000 students in 1982 to 38,000 students in 1996. The enrolment of 10 to 14 year olds is expected to drop slightly to 1987, and then increase rapidly, from 29,000 in 1987 to almost 33,000 in 1996. The 15 and older age group is expected to remain fairly constant over the 14 year period, fluctuating slightly.

Figure 2.1 also shows the total projected population aged 5 to 19. The gap between this line and the enrolment projection gives some sense of the number of non-attenders who could potentially be attracted by modified school programs or greater accessibility. This gap amounts to about 14,000 young people over most of the 1982-1996 period. It should be noted that only 16 per cent of 15 to 19 year olds not attending school full time and living on-reserve had completed high school or higher education, according to 1981 Census customized tabulations prepared for this report.

Table 2.6 provides enrolment projections for each INAC region. The largest growth in enrolments is expected in Ontario, Manitoba, and Saskatchewan, each of which will experience an increase of more than 2,000 students over the 1982 through 1996 period. Enrolment growth in the prairie provinces, particularly in Saskatchewan, is expected to accelerate after 1987, while enrolment growth in Ontario is expected to slow down after 1992.

Figure 2.1

Elementary - Secondary Registered Indian
On-Reserve Enrolment Projections Showing Age Group Components
Canada, 1982 - 1996



Sources: Perreault, Paquette, and George, <u>Population Projections of Registered Indians</u>, 1982 to 1996, Research Branch, INAC, 1985; Nominal Roll, Education Branch, INAC, 1982.

Table 2.6
Registered Indian Student Enrolment Projections
By Age Groups, Canada and INAC Regions, 1982-1996

Region, Year	5 - 9	Age G 10 - 14		Total 4-20+
Atlantic 1982 (Actual) 1987 (Projected) 1992 (Projected) 1996 (Projected)	1,105 1,261 1,347 1,366	1,246 1,205 1,369 1,459	810 877 852 945	3,401 3,597 3,839 4,057
Quebec 1982 (Actual) 1987 (Projected) 1992 (Projected) 1996 (Projected)	4,023 3,881 4,347 4,521	4,250 3,945 3,799 4,198	2,222 2,232 2,072 1,974	11,022 10,561 10,729 11,228
Ontario 1982 (Actual) 1987 (Projected) 1992 (Projected) 1996 (Projected)	5,224 5,713 6,012 6,069	5,273 5,556 6,035 6,296	3,061 3,026 3,163 3,376	14,073 14,838 15,788 16,339
Manitoba 1982 (Actual) 1987 (Projected) 1992 (Projected) 1996 (Projected)	5,042 5,302 5,859 6,291	5,182 4,975 5,234 5,609	2,729 2,929 2,814 2,922	14,007 14,276 15,033 16,023
Saskatchewan 1982 (Actual) 1987 (Projected) 1992 (Projected) 1996 (Projected)	4,203 4,573 5,430 5,812	4,608 4,491 4,884 5,651	2,365 2,607 2,548 2,690	11,786 12,313 13,569 14,931
Alberta 1982 (Actual) 1987 (Projected) 1992 (Projected) 1996 (Projected)	4,061 4,332 4,648 4,846	4,236 4,237 4,590 4,885	2,020 2,020 2,046 2,193	10,778 11,066 11,792 12,461
British Columbia 1982 (Actual) 1987 (Projected) 1992 (Projected) 1996 (Projected)	4,182 4,321 4,505 4,515	4,243 4,161 4,304 4,455	2,974 2,782 2,731 2,798	12,293 12,143 12,440 12,686

(continued)

Table 2.6 Continued Registered Indian Student Enrolment Projections By Age Groups, Canada and INAC Regions, 1982-1996

Region, Year	Age Group Total					
	5 - 9	10 - 14	15 - 19	4-20+		
Canada						
1982 (Ac tual)	27,867	29,054	16,190	77,412		
1987 (Projected)	29,693	28,568	16,509	79,169		
1992 (Projected)	32,558	30,450	16,259	83,929		
1996 (Projected)	33,859	32,872	17,037	88,696		
]				

Notes:

- 1. These enrolment projections are based on average enrolment rates for each five-year age group, and assume no change in enrolment rate over the period. (Projections for single years of age were unavailable).
- 2. Population projections used as the basis for these enrolment projections are from the medium growth scenario of the registered Indian on-reserve population, as shown in Perreault, Paquette, and George (1985).
- 3. The projected total enrolment (ages 4-20+) for 1987, 1992, and 1996 is calculated by multiplying the 5-19 age group enrolment projection by 77,412 and dividing by 73,111 (the 5-19 enrolment in 1982).
- 4. Enrolments refer only to those whose elementary or secondary level education is sponsored by INAC. Provincial, federal, band-operated and private schools are included. A small number of non-Indian students living on reserves are included in these enrolment figures.
- 5. Students living in the Yukon and the Northwest Territories are included in the Canada projections.

Sources: Perreault, Paquette, and George, Population Projections of Registered Indians, 1982 to 1996, Research Branch, Corporate Policy, Indian and Northern Affairs, February, 1985.

Nominal Roll, Education Branch, INAC.

An important characteristic of enrolments, which can be determined from the Nominal Roll data, is the degree to which students are behind the normal grade level for their age. Being "age-grade decelerated" indicates that a student started school later than usual or has been left back over the years. Students' grade placement is an important indication of their progress through the school system.

Table 2.7 shows the percentage of Indian students who are age-grade decelerated by grade level, type of school, and sex. This proportion reaches 30 per cent or more of students by grade 6, after which it begins to drop. The reason for reduced age-grade deceleration is the increased number of drop-outs from the upper grades. As has been shown in Table 2.3, drop-outs begin to be a factor among 14 and 15 year old Indian students, many of whom are attending grade 7 or 8 if they are a year or more behind their expected grade level.

Age-grade deceleration rates are highest among students in band-operated schools, and lowest among students attending provincial schools. Age-grade deceleration is also higher among males than among females. The highest proportion of decelerated students is found among males attending grade 6 at band-operated schools (43 per cent). It should be kept in mind, however, that a low age-grade deceleration rate can mean both that students are progressing through school and that students who are behind their age group are dropping out of school. Moreover it is likely many students drop out when they reach the point of having to transfer from a band-operated or federal elementary school to a provincial secondary school. Again this will tend to make age-grade deceleration higher in band-operated schools.

Figures 2.2 and 2.3 show the student-teacher ratios in federal schools. These ratios have been calculated for professional teachers only, and for all teaching staff (that is, including teacher aides). As shown in Figure 2.2, these ratios fell between 1978 and 1980, and rose again in 1981. The student-professional teacher ratio remained below 20:1 throughout this period, while the total student-teaching staff ratio was 15:1 or less.

Table 2.7
Percentage of Registered Indian Students
Behind Their Expected Grades, By Grade, School Type
And Sex, Canada, 1982

School Type and Sex

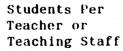
Grade		Federal Schools		Pr	ovincia Schools		Bar	id-Opera Schools	
	M	F	Т	M	F	T	М	F	T
	8	%	%	%	જ	%	જ	%	%
1	11.7	8.3	10.1	11.6	8.8	10.3	13.1	9.9	11.5
2	17.8	14.4	16.1	15.8	12.4	14.1	21.6	18.5	20.2
3	26.2	16.1	21.3	20.5	16.8	18.7	27.7	22.5	30.1
4	30.7	22.9	26.9	24.8	19.4	22.1	38.6	27.4	33.0
5	38.2	27.3	33.1	28.2	20.5	24.4	39.9	27.6	33.9
6	34.4	27.1	30.7	32.7	27.6	30.2	42.8	33.4	38.2
7	27.2	21.2	24.1	16.1	12.6	14.4	25.3	18.4	21.6
8	26.8	19.0	22.7	19.0	17.2	18.1	30.4	21.3	25.4
9	22.9	22.9	22.9	20.5	16.8	18.6	29.6	26.3	27.8
10	20.3	17.4	18.8	10.3	9.1	9.7	17.0	11.8	14.1
11	10.4	9.2	9.8	9.7	6.3	8.0	14.3	11.7	13.0
12	13.7	5.1	9.3	7.0	7.3	7.1	19.4	14.0	16.7
13	*	*	*	4.2	6.8	5.8	25.0	*	25.0

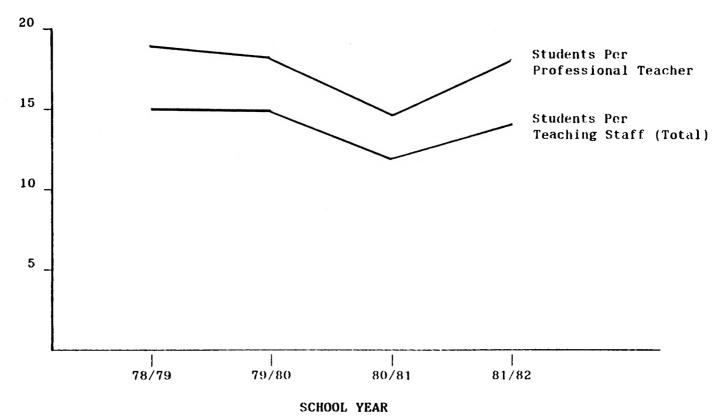
Notes:

- 1. The Nominal Roll is taken in October of each year.
- 2. A small number of non-Indian students are included in the Nominal Roll.
- 3. An asterisk (*) indicates no students attending this grade.

Source: Nominal Roll, Education Branch, INAC.

Figure 2.2 Student-Teacher Ratios for Federal and Band-Operated Schools Canada, 1978-79 to 1981-82 School Years





Note: In this figure, data for Federal and Band-Operated schools are combined.

Source: "Federal Schools Facts and Figures," Program Reference Centre, INAC (various years).

There was substantial variation in student-teacher ratios among INAC regions in 1981, as shown in Figure 2.3. Ontario had the highest ratios at that time, while British Columbia's ratios were much lower than elsewhere. Overall, the Indian student-teacher ratio was equal to the average for all of Canada.

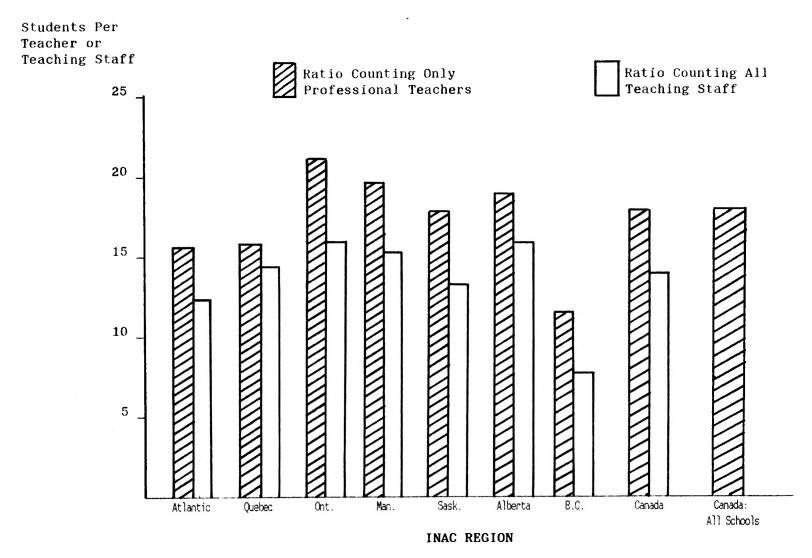
2.2 Graduation and Withdrawal

Table 2.8 provides a picture of school leaving rates at various grade levels for INAC regions and school types. These leaving rates were arrived at by dividing the number of "leavers" (identified in the 1982 Nominal Roll leaver file) by the 1981 enrolment for the given grade level. Thus, these are the leaving rates during the 1981-82 school year. Graduates have been excluded in calculating these rates, but leavers include those who have moved off reserve and may be attending another school without INAC sponsorship. Therefore, they are not equivalent to drop-outs, but they include drop-outs, and it is assumed that a higher school leaving rate implies a higher school dropout rate.

At most grade levels, the highest leaving rates are found at provincial schools, with the lowest leaving rates at band-operated and private schools. The leaving rates at the grades K to 6 level probably do not include many school drop-outs and can perhaps be seen as a background level of student transfers and the like. Leaving rates are much higher at the junior and especially the senior high school levels.

The highest leaving rates among INAC regions are found in the western regions, and particularly in Saskachewan, Alberta, and British Columbia. At the high school level, Saskatchewan's school leaving rate exceeds 50 per cent. The central and eastern regions have comparatively low rates. Figures 2.4 and 2.5 provide a graphic comparison of high school leaving rates.

Figure 2.3
Student-Teacher Ratios for Federal and Band-Operated Schools
Canada and INAC Regions, 1981-82



Note: In this figure, data for Federal and Band-Operated schools are combined.

Sources: "Federal Schools Facts and Figures, 1981-82" Program Reference Centre, INAC; Education in Canada, Statistics Canada, 1983.

Table 2.8
School Leaving Rates, By Grade Level and
School Types, Canada and INAC Regions, 1981–82

School Type

Grade Level and Region	Federal	Provincial	Band	Private	Total
	%	%	%	g	8
Grades K - 6					
Atlantic	1.5	9.9	2.4	3.1	4.6
Quebec	2.1	4.7	1.3	0.0	3.6
Ontario	4.9	8.8	6.2	1.3	6.1
Mani toba	8.5	8.2	6.3	_	7.6
Saskatchewan	9.7	35.2	12.8	50.0	22.3
Alberta	3.1	21.6	11.4	_	14.8
British Columbia	5.8	19.9	13.0	10.3	16.4
Canada	5.8	17.5	8.2	9.3	11.7
rades 7 - 9					
Atlantic	7.6	14.9	5.3	0.0	11.7
Quebec	27.3	15.8	4.6	1.0	14.1
Ontario	11.7	14.4	9.8	7.7	12.8
Mani toba	20.5	21.6	13.1	-	18.6
Saskatchewan	18.9	41.4	25.5	100.0	33.6
Alberta	20.9	29.7	35.4	_	27.9
British Columbia	13.9	23.7	14.2	7.1	22.0
Canada	17.0	24.0	15.9	7.5	21.2

(continued)

Table 2.8 Continued School Leaving Rates, By Grade Level and School Types, Canada and INVC Regions, 1981-82

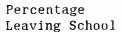
School Type

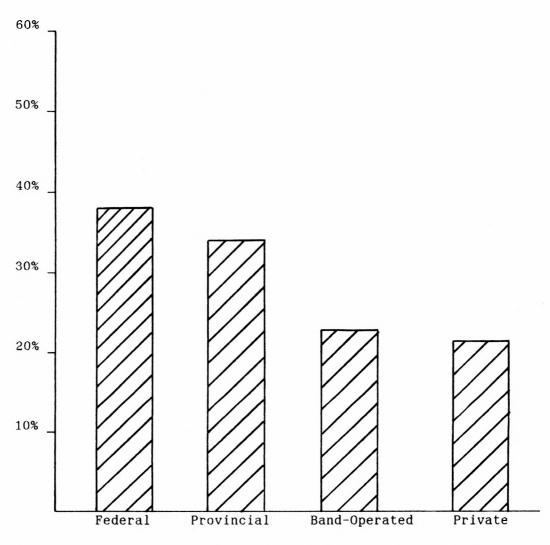
Grade Level and Region	Federal	Provincial	Band	Private	Total
Grades 10 - 13	%	%	%	q	q
Atlantic	_	24.0	_	100.0	22.8
Quebec	 -	36.6	14.9	11.1	18.5
Ontario	11.1	20.5	4.5	18.6	17.7
Mani toba	27.4	38.9	18.6	_	31.8
Saskatchewan	32.8	65.1	38.4	33.3	52.2
Alberta	52.6	42.8	36.5	-	44.3
British Columbia	33.3	33.3	11.8	25.0	30.8
Canada	37.8	33.8	22.7	21.2	32.7

Note: 1. School leaving rate is defined as those identified as having left school between the time of the 1981 and the 1982 Nominal Roll registrations, divided by the 1981 enrolment, multiplied by 100 per cent. Graduates are not counted as school leavers.

2. A small number of non-Indian students living on reserves are included in these figures.

Figure 2.4
Percentages of Registered Indian Students in Grades 10 - 13
Leaving School, By School Type, Canada, 1981-82

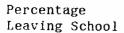


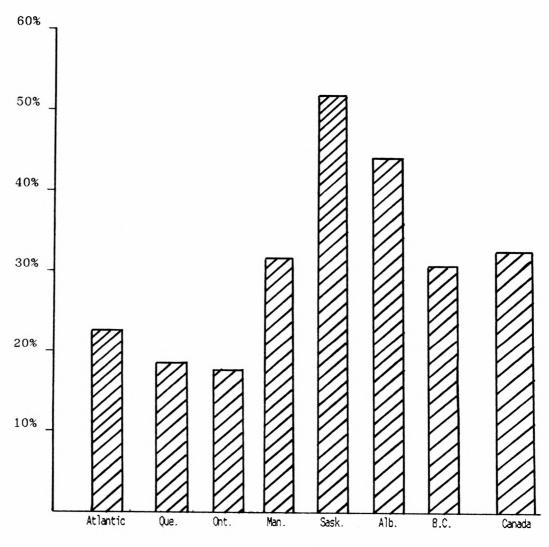


SCHOOL TYPE

Note: School leavers are those who have left school between October, 1981 and October, 1982, excluding graduates.

Figure 2.5
Percentages of Registered Indian Students in Grades 10 - 13
Leaving School, Canada and INAC Regions, 1981-82





INAC REGION

Note: School leavers are those who have left school between October, 1981 and October, 1982, excluding graduates.

It is important to identify "high risk" students, that is, those who are likely to quit school before completing grade 12 or even grade 10. For this reason a series of special tabulations was prepared looking at age-grade deceleration and withdrawal rates in grades 8 and 10. These grades are periods when the likelihood of withdrawing reaches a high point, and were expected to show a relationship between deceleration and withdrawal. This issue was examined both in relation to schools as a whole in order to establish norms for school systems and in relation to individual students.

Table 2.9 shows the reasons for leaving school in grades 8 and 10 as recorded on the Nominal Roll. About 22 per cent of grade 8 leavers and 38 per cent of grade 10 leavers "withdrew" while a substantial number were "promoted" or "moved off the reserve".

It is apparent that the actual destination of those promoted or who moved is not known, since they are not listed as having transferred. A substantial proportion of these students may also have withdrawn from school entirely, although the number is impossible to determine.

Table 2.10 again focuses on grades 8 and 10, and shows the number of schools with given withdrawal rates at these grade levels. These rates refer only to those leavers whose reason for leaving school is given as "withdrew". Most schools have Indian withdrawal rates of less than 5 per cent, although the proportion with higher rates is greater at the grade 10 level than at the grade 8 level. Only 11 per cent of schools have grade 8 withdrawal levels over 20 per cent, while 25 per cent of schools have grade 10 withdrawal rates over 20 per cent. The average Indian withdrawal rate across Canada for grade 8 is 7 per cent, and for grade 10 is 15 per cent.

Table 2.11 provides a similar look at the distribution of schools with given levels of age-grade deceleration in grades 8 and 10. Almost one-third (32 per cent) of schools had a grade 8 age-grade deceleration rate of 20 per cent or more, while 15 per cent of schools had a grade 10 deceleration rate of 20 per cent or more.

Table 2.9
Reasons For Leaving School Among Grades 8 and 10
Registered Indian Students, Canada, 1981-82

Reason	% of School Leavers				
	Grade 8	Grade 10			
Graduated	1.3	0.7			
Promoted	38.2	33.5			
Transferred	6.7	3.1			
Withdrew	21.6	37.6			
Moved Off Reserve	20.8	16.7			
Urban Students/Cut Off	11.0	8.0			
Deceased	0.4	0.4			
Leavers As Percentage of All Students in Grade	32.2	40.0			
Total Number of Leavers	2,394	2,230			

Notes: 1. Leavers are those who were registered in October, 1981 and who had left the school by October, 1982.

3. A small number of non-Indian students are included in the Nominal Roll.

Source: Nominal Roll, Education Branch, INAC.

left the school by October, 1982.2. Urban students are those who have resided off reserve for 12 months and are therefore no longer considered reserve residents for purposes of INAC sponsorship.

Table 2.10 Schools with Given Withdrawal Rates Among Grades 8 and 10 Registered Indian Students, Canada, 1981–82

Withdrawal Rate	Schools Given Rate - Number of Schools	Grade 8	Schools With Given Rate – Grade 10 Number of Schools % of Schools		
Less Than 5%	670	78.3	466	65.3	
5 - 9%	41	4.8	19	2.7	
10 - 14%	31	3.6	29	4.1	
15 - 19%	19	2.2	20	2.8	
20 - 24%	21	2.5	21	2.9	
25 - 29%	17	2.0	34	4.8	
30 - 34%	17	2.0	24	3.4	
35 - 39%	6	0.7	10	1.4	
40 - 44%	1	0.1	14	2.0	
45 - 49%	0	0.0	1	0.1	
50% or Higher	33	3.9	76	10.6	
All Schools	856	100.0	714	100.0	

Notes: 1. Withdrawal rates are the percentage of students withdrawing from given grade for any reason.

Includes federal, band-operated, provincial, and private schools.
 A small number of non-Indian students are included in the Nominal Roll.

Table 2.11 Schools with Given Age-Grade Deceleration Rates Among Grades 8 and 10 Registered Indian Students, Canada, October, 1982

Age – Grade Deceleration Rate	Schools Given Rate - Number of Schools	Grade 8	Schools With Given Rate – Grade 10 Number of Schools % of Schools		
Less Than 10%	500	58.4	535	74.9	
10 - 19%	80	9.4	70	9.8	
20 - 29%	92	10.8	34	4.8	
30 - 39%	56	6.5	26	3.6	
40 - 49%	18	2.1	7	1.0	
50 - 59%	44	5.1	20	2.8	
60 - 69%	11	1.3	1	0.1	
70 - 79%	2	0.2	1	0.1	
80 - 89%	5	0.6	0	0.0	
90% or Higher	48	5 . 6	20	2.8	
All Schools	856	100.0	714	100.0	

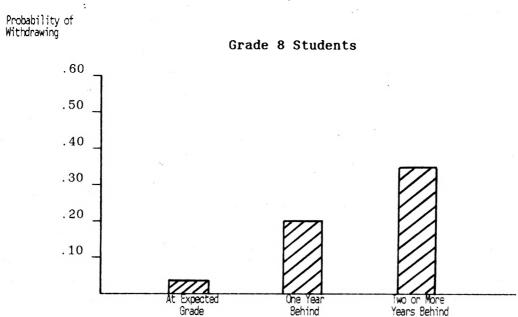
Notes: 1. Age-grade deceleration rate is the percentage of students in a given grade who are older than expected.
2. Includes federal, band-operated, provincial, and private schools.
3. A small number of non-Indian students are included in the Nominal Roll.

Figure 2.6 shows the relationship between age-grade deceleration and the likelihood of withdrawing from school, again in grades 8 and 10. Those who are behind their expected grade by one or more years are significantly more likely to withdraw from school than others, and the farther behind they are, the greater this likelihood becomes.

Grade 12 and 13 graduation rates for different types of schools are shown in Figure 2.7. Band-operated schools had the highest Indian graduation rate in the 1981-82 school year at 35 per cent of grade 12 and 13 enrolments. Provincial schools followed with a 27 per cent rate, and federal schools had a 14 per cent rate. The average graduation rate of 27.2 per cent however is very low. By contrast the Canadian average for 1981-82 was 80.9 per cent (Statistics Canada, Cat. #81-229, 1983).

In conclusion it can be said that a number of major issues are facing school systems as they attempt to enable a greater proportion of Indian students achieve educational success. Enrolment rates, particularly among older age groups, need to be improved; age-grade deceleration needs to be reduced; and a greater level of community access and community participation in the schools is called for.

Figure 2.6
Likelihood of Withdrawing From School Among Grades 8 and 10
Registered Indian Students, By Years Behind Expected Grade,
Canada, 1981-82



AGE-GRADE DECELERATION

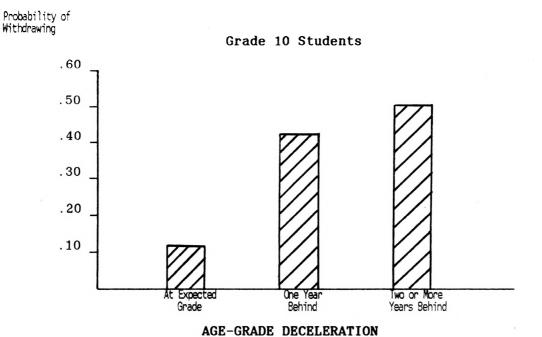
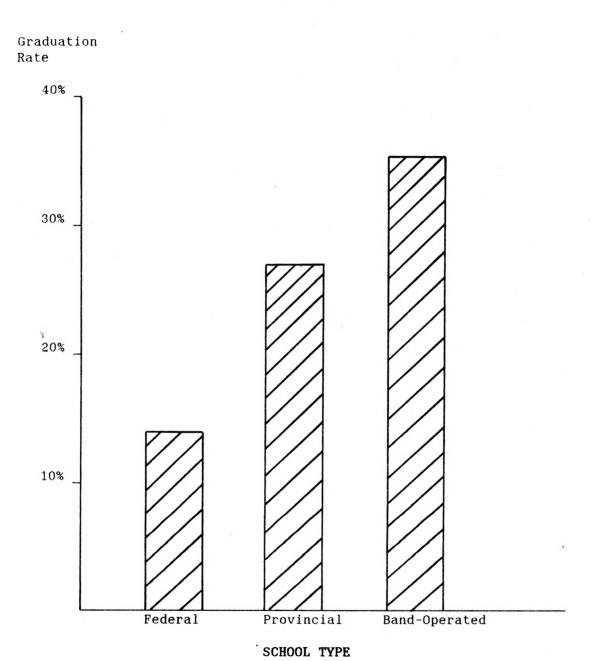


Figure 2.7
Grade 12 and 13 Graduation Rates Among Registered Indian Students
By School Type, Canada, 1981-82



Note: Graduation rate is the number of grade 12 and 13 graduates as a proportion of grade 12 and 13 enrolment.

Source: Nominal Roll, Education Branch, INAC, 1981 and 1982.

3. INFLUENCES OF FAMILY CIRCUMSTANCES ON THE SUCCESS OF INDIAN STUDENTS

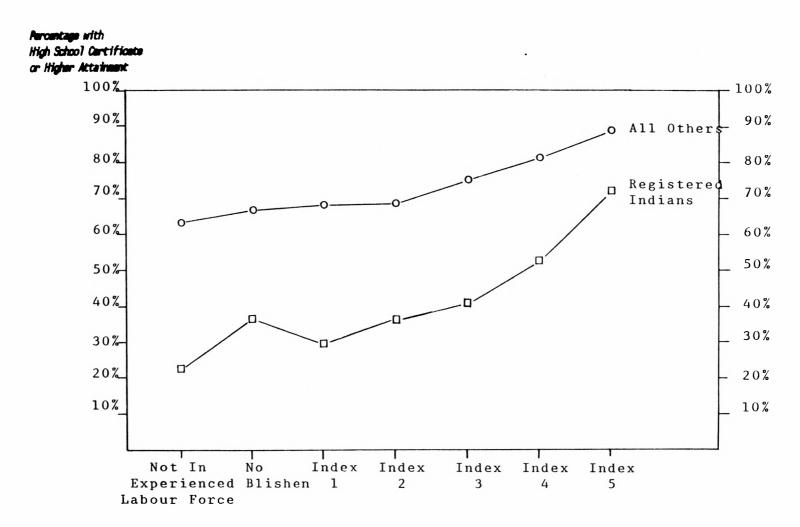
Chapter 2 has provided some limited indications of factors related to Indian students' success in elementary and secondary schools. In this section data from the 1981 Census are analyzed in order to relate characteristics of the family to the success of children in schools. As was noted in the Introduction, the Census did not identify the educational attainment of children under 15 years of age. In addition, it is impossible to link individuals over the age of 15 to their parental families if they are no longer living at home. Therefore, the data in this section refers to children who are 15 to 24 years old and who are living in "census families" or in "economic families". (See the 1981 Census Dictionary for complete definitions of these terms).

Most of the following figures are based on an analysis of the relationship between children's educational attainment and their parents' socio-economic status (SES). This latter concept is based on research which indicates that a strong correlation exists between a person's occupation, educational attainment, income, and social status. Moreover, the socio-economic circumstances of parents have been shown to strongly affect their children's educational success. (National Council of Welfare, 1975). Blishen and McRoberts (1976) analyzed the 500 hundred occupations in the Canadian Classification and Dictionary of Occupations to determine their ranking in terms of education and income, using data from the 1971 Census. This resulted in the ranking employed in the present study, which groups occupations into five quintiles. (The ranking of 1981 occupations had not been published when this study was being conducted).

Figure 3.1 shows how parents' SES is related to the likelihood of children (aged 20 to 24) completing high school. As expected, the higher the status of the parent, the greater the likelihood that the

Relationship Between Educational Attainment of Children Aged 20-24 in Census Families And Their Parent's Socio-economic Status, By Ethnicity, Canada, 1981

Figure 3.1



Parent's Socio-economic Status

Source: INMC Customized Data Based on The 1981 Census of Canada.

Notes to Figures 3.1 - 3.3

- 1. Parent refers to the husband in husband-wife families, or to the lone parent, of those people aged 15-24 who were living as children in Census Families. (See 1981 Census Dictionary).
- 2. Socio-economic Status (SES) is based on the Blishern-McRoberts classification of 1971 occupations. The Indexes refer to quintiles of occupations, with Index 1 being the lowest ranked SES group, and Index 5 being the highest. Some parents had not been in the labour force since January, 1980, or their occupations could not be classified under the Blishen-McRoberts scheme. In Figure 3.2 the numbers at the bottom refer to these same quintiles, with "O" referring to parents who are not in the experienced labour force.

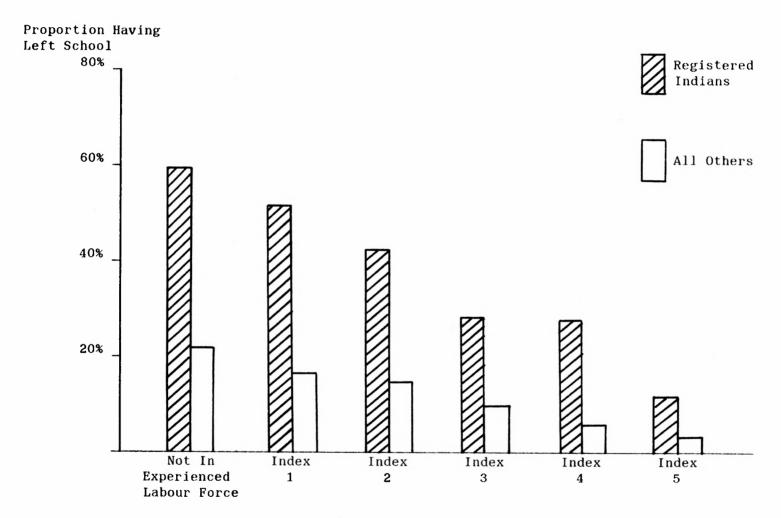
child will have completed high school. The figure shows this relationship for both registered Indians and for all others, that is, the total population, less the registered Indian population. At all levels the non-Indian group is much more likely to have finished high school than the Indian group.

The effect of parents' socio-economic status is more pronounced among Indians than among non-Indians. Thus for children whose parents are not in the labour force, there is a difference of 40 per cent between Indian and non-Indian children, while for children whose parents fall into the highest quintile (index 5), the difference is slightly less than 20 per cent. The figure suggests that ethnicity and SES act in combination to have a negative impact on Indian children's likelihood of finishing high school.

Figure 3.2 examines the relationship between parents' SES and children's school attendance. Again the focus is on the 20 to 24 year-old age group of children living with their parents. The figure shows the proportion of children who have left school prior to completing grade 11 for each socio-economic group. This proportion is shown for both Indians and for non-Indians. Within each socio-economic group there is a much higher proportion of Indian non-attenders with less than a grade 11 education. For example, among those whose parent was not in the experienced labour force, 60 per cent of Indian children had left school with less than a grade 11 education, compared to 20 per cent of non-Indian children. Within each socio-economic category Indian children were two or three times as likely as non-Indians to have left school at this level of attainment.

In addition to ethnicity it is also clear that socio-economic status has a major impact on the likelihood of early school leaving. Those children whose parents were in Index 3, 4, or 5 were much less

Figure 3.2
Proportion of All Children Aged 20-24 in Census Families Who Have Left School
And Have Less Than a Grade 11 Educational Attainment
By Ethnicity and Parent's Socio-economic Status, Canada, 1981



PARENT'S SOCIO-ECONOMIC STATUS

Source: INAC Customized Data Based on the 1981 Census of Canada.

likely to be early school leavers. This was true among both Indians and non-Indians, although the large gap between the two ethnic groups is present within each SES category.

Figure 3.3 provides a similar comparison to those in the previous two figures, but includes the **home language** variable. Home language refers to the language currently being spoken most often by an individual in the home. Non-Indians are not included in this figure, but instead two groups of Indian children are shown: those whose home language is an Amerindian language or Inuktitut, and those who speak some other language predominantly in the home. Again only 20 to 24 year olds living with their parents are considered, and the proportion who have completed grade 11 or better is shown.

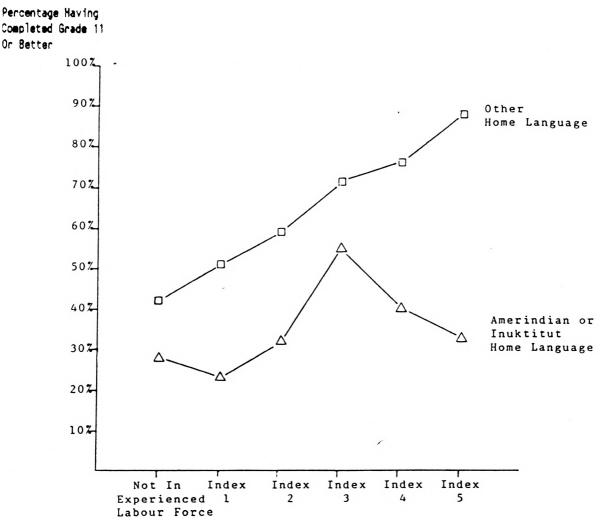
For those with an "other" home language, there is a direct relationship between parents' SES and their success in school. This relationship is not as clear for those who speak an Amerindian language or Inuktitut at home. Among this group, those whose parents fall into index 3 have had the greatest educational success. In addition, for all SES groups, children who do not speak a Native language at home have had better educational success than others.

The reasons for this pattern are not clear and suggest the need for more detailed studies of language and education. One factor is likely to be linguistic and cultural barriers encountered in the school system by children with a Native language background. However, the relatively poor performance of Native language speaking children whose parents have higher SES levels is perplexing.

The last factor examined in this section is the poverty status of the parents of children in economic families. Family poverty status

Figure 3.3

Percentage of Registered Indian Children Aged 20 to 24 in Census Families
Having Completed Grade 11 or Better, By Parent's Socio-Economic Status
And Home Language, Canada, 1981



Parent's Socio-Economic Status

Notes: 1. Parent's Socio-economic Status is based on the Blishen-McRoberts ranking of occupations in Canada in 1971. Index 1 is the lowest ranked quintile of occupations, and Index 5 is the highest.

2. Home language is the language spoken most often by the individual in the home.

3. In order to simplify the tabulation, either the husband's occupation was used in husband-wife families, or the lone parent's occupation was used, as the basis for the SES index.

Source: INAC Customized Data Based on The 1981 Census of Canada.

was defined in terms of family size and residency (on or off reserve). The note to Table 3.1 provides the cut-off points. Table 3.1 and Figure 3.4 provide information on the educational attainment of children, broken down by ethnicity, sex, place of residency, and family poverty status. While Table 3.1 looks at children aged 15 to 24, and shows four levels of educational attainment, Figure 3.4 focuses on the 20 to 24 year old age group, and on the proportion having completed high school or higher education.

It is clear that sex, ethnicity, and family poverty status are all important factors in children's educational success. Female students are much more likely to succeed than male students, as are those who are not poor and non-Indian. In addition, living on reserve appears to be a handicap in achieving educational success. However, an important caveat must be emphasized in interpreting these data. Since the table and figures here refer only to children living at home, there is a large potential for bias in omitting others in the same age group.

Nevertheless, it is clear that family poverty has a strong negative impact on children's education, particularly for Indian children living off reserve. While one quarter of male and female Indian childen from poor off-reserve families had less than grade 9 education, less than 9 per cent of Indian children from better-off families living off reserve had this level of education. On the other hand, Indian children of both sexes were approximately twice as likely to have completed high school or higher education if their family income was above rather than below the poverty line.

The figures and table in this chaper have identified a set of socio-economic factors which affect the educational success of Indian students, but over which the schools have little direct control. These factors include parents' socio-economic circumstances, cultural and linguistic differences between the home and the school, parents' income

Table 3.1
Educational Attainment Among 15-24 Year-Old Children
In Economic Families, By Ethnicity, Residency, Sex
And Poverty Status, Canada, 1980
(Row Percentages)

Residency, Ethnicity,	Under	9 - 10	11 - 13	H.S.
Sex, Poverty Status	Grade 9		w/o Cert.	Cert.
On-Reserve, Reg. Indians	%	%	%	%
Male: At/Below Poverty Line	43.3	37.0	12.4	7.2
Above Poverty Line	29.5	38.6	16.2	15.5
Female: At/Below Pov. Line	35.8	41.7	13.1	9.1
Above Poverty Line	23.4	39.4	18.2	19.0
Off-Reserve, Reg. Indians				
Male: At/Below Poverty Line	24.8	46.3	16.7	12.1
Above Poverty Line	10.5	39.8	26.6	23.3
Female: At/Below Pov. Line	23.3	47.6	16.4	12.5
Above Poverty Line	7.0	39.4	25.4	28.2
Off-Reserve, All Others				
Male: At/Below Poverty Line	13.6	35.1	22.5	28.8
Above Poverty Line	4.6	24.8	24.6	46.0
Female: At/Below Pov. Line	9.4	33.4	25.1	32.1
Above Poverty Line	2.8	23.0	24.2	50.0

Notes: 1. Family Poverty Status is based on the following low income cut-off points for Economic Families:

Family Size	Low Income Cut-off(\$)			
	On-Reserve	Off-Reserve		
1	5,289	7,152		
2	6,912	9,436		
3	9,256	12,622		
4	10,699	14,545		
5	12,441	16,949		
6	13,583	18,511		
7 or more	14,966	20,375		

2. Off-reserve low income cut-offs are the 1980 Statistics Canada cut-offs for cities of 500,000 or more; on-reserve cut-offs are those for rural areas. (As reported in 1984 Poverty Lines, National Council of Welfare, 1984, p. 7.)

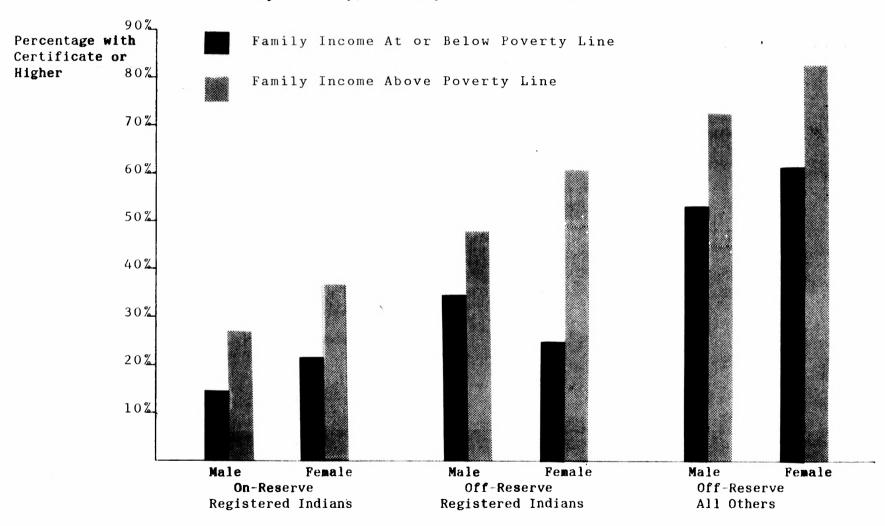
Source: INAC Customized Data Based on the 1981 Census of Canada

Figure 3.4

Percentage of Children Aged 20 to 24 in Economic Families

With High School Certificate or Higher Education

By Ethnicity, Residency, Sex, and Family Poverty Status, Canada, 1981



ETHNICITY, RESIDENCY, SEX

Source: INAC Oustamized Data Based on the 1981 Census of Canada

levels and sex roles and expectations. The data presented here suggest that these are important areas which should receive as much attention as the equally important issues of Indian control, parental involvement, and educational access on reserves.

4. POST-SECONDARY AND OCCUPATIONAL TRAINING OF REGISTERED INDIANS

Post-secondary Indian education has been a rapidly expanding field over the past 15 or 20 years. In large part the expansion has been the result of an increasing financial commitment to supporting Indian students and special Indian programs by INAC, especially through the Post-Secondary Education Assistance Program (PSEAP). This program covers the cost of tuition, books, living allowances and other necessary expenses for Indian and Inuit students accepted into accredited post-secondary programs.

In addition to the Post-Secondary Education Assistance Program, INAC has sponsored Occupational Skills Training. These are programs which fall within the scope of The National Training Act and include technical and vocational training of up to one year's duration. Funding under PSEAP is considered "non-discretionary" in that all registered Indian students admitted to accredited post-secondary programs are entitled to financial support under current INAC practice. Occupational Skills Training is considered "discretionary" by INAC, and therefore the funding for this training must be argued from year to year. This distinction has meant that post-secondary enrolments have tended to increase while occupational skills enrolments have fluctuated as will be seen below.

In order to keep track of expenditures and student progress the Continuing Education Information System (CEIS) was established, and most of the data found in this chapter are derived from this information system. Both post-secondary and occupational skills training are monitored by CEIS. For most of the tables shown below, these two "assistance types" are differentiated and compared. [It should be noted that in the 1982-83 fiscal year more than 8,000 registered Indians received various types of skill training through the Canada Employment and Immigration Commission's National Training Program. (CEIC, 1984) These students are not included in INAC's CEIS data.]

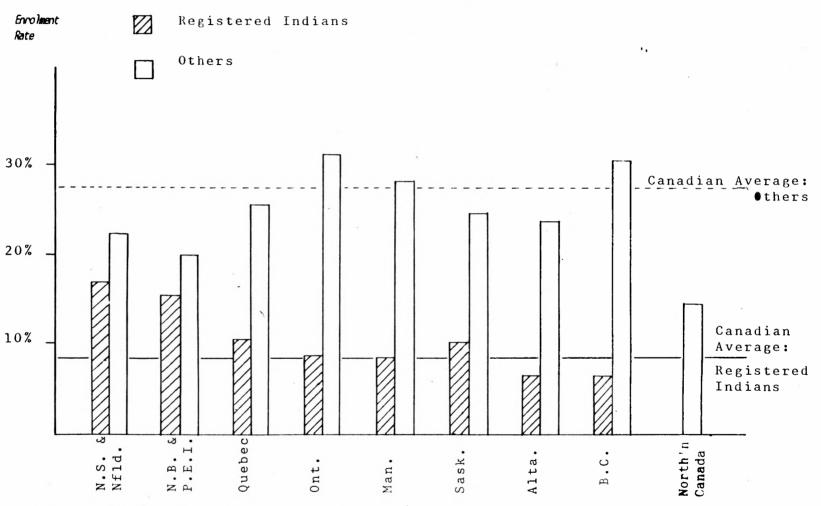
Readers should keep in mind that the CEIS data are incomplete, particularly in the British Columbia and Manitoba regions, and therefore should be seen as a large scale non-random sample rather than a total census of Indian students. An evaluation of the INAC Post-Secondary Education Assistance Program by the DPA Group (1985) describes a number of the problems with CEIS. It should also be noted that the nature of the post-secondary assistance program has been controversial at times, with Indian students and organizations sometimes challenging the appropriateness of the guidelines which govern the provision of assistance. The most central issue in this debate is whether educational assistance at the post high school level is a right guaranteed or implied in the treaties, or whether it is an administrative program to which access may be limited. (Further discussion of the CEIS data base is provided in Section 1.2 above).

4.1 Enrolments and Student Characteristics

The 1981 Census data were used to determine post-secondary enrolment rates for both the Indian and non-Indian populations. There are several options in defining enrolment rates; in some cases 18 to 24-year olds have been used by researchers as the base population, in other cases 18 to 29-year olds, or 18 to 21-year olds have been used. In its recent report the DPA Group (1985) used the 18 to 29-year old population who had completed grade 11 as its base population. This narrows the focus to those who have the minimum qualifications required for entrance into most post-secondary programs. However, the present study will adopt the traditional 18 to 24-year old age group as the base population. This approach results in much lower enrolment rates, particularly among the Indian population, than does the DPA approach.

Figures 4.1 and 4.2 show the university and non-university enrolment rates for various provinces, and provide comparisons between the Indian and non-Indian populations. Wide discrepencies in university enrolment rates exist in most provinces between Indians and non-Indians, although in the four Atlantic provinces the gap is much

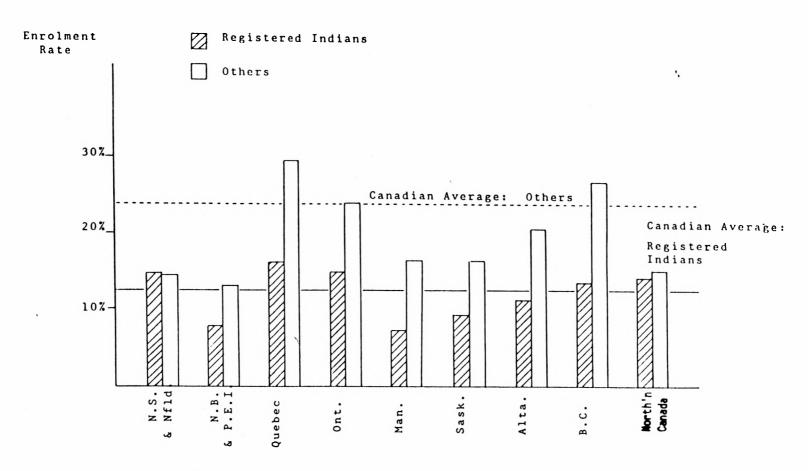
Figure 4.1
University Enrolment Rates of Registered Indians and Others
Canada and Provinces/Regions, 1981



Notes: 1. Northern Canada refers to the Yukon and Northwest Territories.

2. The university enrolment rate is the population 15 or older who attended university full-time or part-time during the 1980-81 school year, as a proportion of the population aged 18 through 24. Attendance at a university is inferred from the individual's highest level of schooling. Therefore, the enrolment rates shown here are estimates.

Source: INAC Customized Data Based on the 1981 Census of Canada.



Notes: 1. Northern Canada refers to the Yukon and Northwest Territories.

2. The non-university enrolment rate is the population 15 or older who attended non-university post-secondary institutions full-time or part-time during the 1980-81 school year, as a proportion of the population aged 18 through 24. Attendance at a university is inferred from the individual's highest level of schooling. Therefore, the enrolment rates shown here are estimates.

Source: INAC Customized Data Based on the 1981 Census of Canada.

smaller than elsewhere. Overall, non-Indians are three times as likely to be enrolled in university as are Indians. There were apparently no Indian university students residing in the northern territories at the time of the 1981 Census.

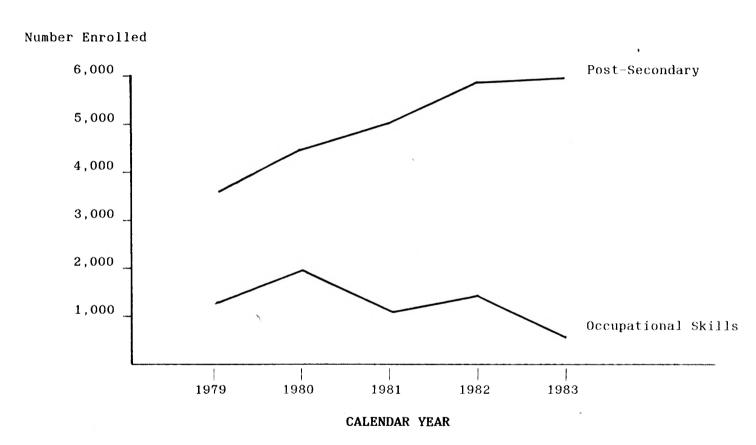
As shown in Figure 4.2, the gap between the two groups is much smaller for non-university, post-secondary students. Overall, the non-Indian enrolment rate is still double that of the Indian population, but for many provinces, the gap is relatively small. While Indian non-university enrolment rates are higher than university enrolment rates, the opposite is true for non-Indians.

Figure 4.3 charts the CEIS enrolment trends over the 1979 through 1983 period (calendar years). While "post-secondary" enrolments have been increasing steadily over the period "occupational skills" enrolments have been generally decreasing. By 1983, post-secondary enrolments had almost reached 6,000, while occupational skills enrolments had fallen to about 500. Longer term educational programs, particularly university programs, have been increasingly favoured, either by INAC funding provisions, by Indian students, or both. However, the low occupational skills enrolment in 1983 is due in part to the transfer of responsibility for these students out of INAC's Education Branch into the Resource, Economic and Employment Development Branch in April, 1983. After this time these students were no longer included in the CEIS data base.

Figure 4.4 compares the distribution of CEIS entrants by type of program for 1979 and 1983. Enrolments have been increasing in university B.A. programs, but falling in most other areas. Community college and university B.A. programs make up about three-quarters of all CEIS students for both years.

Tables 4.1 and 4.2 compare the distribution of fields of training for different INAC regions, over the 1979 to 1983 period. Table 4.1 refers to "post-secondary" students, while Table 4.2 refers to

Figure 4.3
Registered Indian CEIS Enrolment Trends,
By Assistance Type, Canada, 1979-1983 Calendar Years



- Notes: 1. CEIS data are incomplete. (See text.)
 - 2. In April, 1983 occupational skills training was removed from the Education Branch and placed under the Resource, Economic and Employment Development Branch of INAC. Students enrolled in occupational skills training after this time are not included in this chart.

Figure 4.4

Percentage of Registered Indian CEIS Students Enrolled,
By Type of Program, Canada, 1979 and 1983 Calendar Years

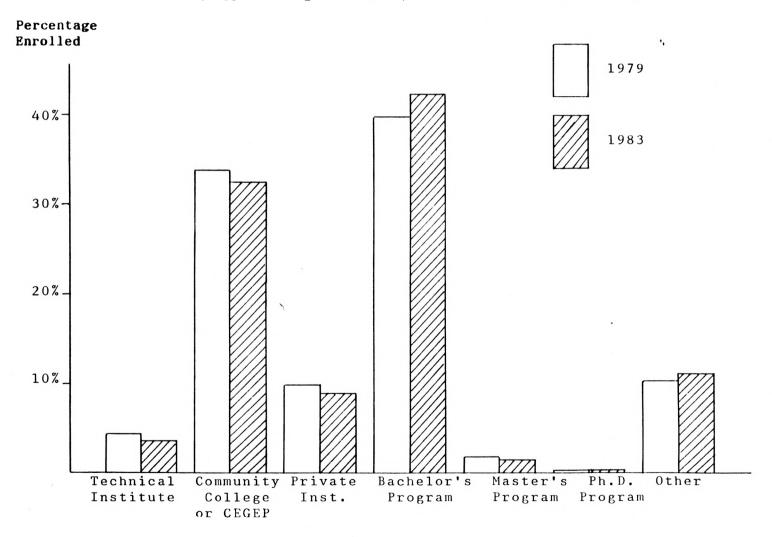


Table 4.1
Fields of Training of Registered Indian CEIS Post-Secondary
Entrants, Canada and INAC Regions, 1979–1983

INAC Region

Field	Atlantic	Quebec	Ontario	Marni toba	Saskatchewan	Alberta	British Columbia	Canada
Managerial, Administrative	% 4.3	% 6 . 2	% 7 . 2	% 0 . 9	% 5 . 5	% 9 . 2	% 10.4	% 6.7
Sciences, Engineering	2.2	4.4	7.3	1.0	1.0	2.2	3.9	4.0
Social Sciences	5.6	11.3	14.7	4.6	13.1	12.8	15 . 0	12.1
Teaching	33.7	36. 0	14.7	41.4	32.6	19.1	30.5	25.6
Medicine and Health	1.8	4.0	4.9	1.7	1.7	3 . 5	3.6	3 . 5
Clerical	4.0	8.0	11.7	0.5	2.9	7 . 6	2.9	7.2
Sales, Service	1.2	1.6	1.8	0.0	0.2	1.6	0.3	1.2
Primary Economy, Industrial and Construction Trades	1.7	1.8	4.6	0. 5	0.7	1.8	3.2	2.6
Transportation, Handling, Crafts	0.5	1.0	1.1	0.1	0.7	1.2	1.0	0.9
Miscellaneous	2.8	5.7	7.0	1.5	2.6	10.6	6.5	5.9
General Courses	42.4	20.1	25.1	47. 8	39.0	30.4	22.7	30.3
Total (N)	(3,163)	(3,237)	(8,222)	(1,156)	(3,704)	(3,654)	(1,858)	(24,997)
					1 7			

Notes: 1. Fields of Training are based on the Canadian Classification and Dictionary of Occupations.

2. CEIS data are incomplete. (See text.)

^{3.} Post-secondary Assistance is for training programs of one year or greater duration.

Table 4.2
Fields of Training of Registered Indian CEIS Occupational
Skills Entrants, Canada and INAC Regions, 1979–1983

INAC Region

Field	Atlantic	Quebec	Ontario	Mani toba	Saskatchewan	Alberta	British Columbia	Canada
Managerial, Administrative	1.9	% 0 . 4	1.7	% 7 . 8	1.9	% 2 . 6	3.0	2.4
Sciences, Engineering	1.6	0 . 8	1.7	2.1	0.0	1.2	0.9	1.1
Social Sciences	0.5	0 . 8	4.2	1.2	1.7	2.8	2.3	2.6
Teaching and Related	1.9	1.2	6.8	0.8	` 0. 8	2.0	0.7	2.5
Medicine and Health	0.8	2.0	7 . 8	6.2	4.1	2.9	6.0	4.4
Clerical	32.5	17.9	9.6	37.5	24.4	18.5	25.5	20.0
Sales, Service	15.6	22.6	15.8	7.0	9.0	7.4	14.6	11.2
Primary Economy, Industrial and Construction Trades	23.4	23.7	26.7	18.1	20.7	30.8	20.4	25.9
Transportation, Handling, Crafts	3.8	22.2	12.3	7.4	25.8	14.3	9 . 5	14.7
Miscellaneous	4.3	2.3	3.5	3 . 7	3.1	2.7	2.0	3.0
General and Preparatory Courses	13.7	6.2	10.0	8.2	8.6	14.8	15.2	12.2
Total (N)	(372)	(257)	(1,273)	(243)	(1,060)	(2,428)	(705)	(6,338)

Notes: 1. Fields of Training are based on the Canadian Classification and Dictionary of Occupations.

2. CEIS data are incomplete. (See text.)

^{3.} Occupational Skills Assistance is for training programs of up to one year's duration.

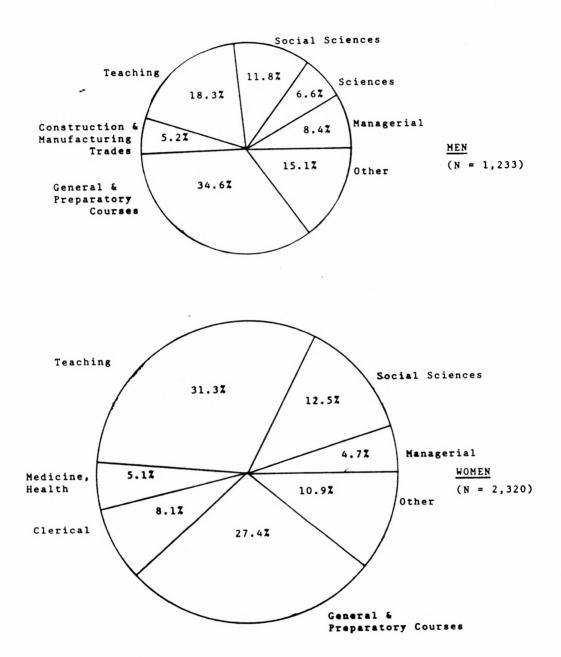
"occupational skills" students. Across Canada, general and preparatory courses are the most common type of course among post-secondary students, followed by teaching and social sciences. This pattern tends to exist as well within each region, with some exceptions.

Among occupational skills students the largest groups of students were in industrial and trades courses, followed by clerical, and transportation courses. However, there was considerable variation from region to region with clerical courses being most common in the Atlantic, Manitoba, and British Columbia regions, transportation being most common in Saskatchewan, and sales and services courses assuming importance in the Quebec, Atlantic, Ontario, and British Columbia regions.

Figures 4.5 through 4.8 show how the distribution of CEIS students in various fields has shifted over time. These graphs also break down the enrolments by sex, with the relative size of each circle indicating the relative proportion of male and female students. Among post-secondary students (figures 4.5 and 4.6), almost two-thirds (65 per cent) have been women both in 1979 and in 1983. The fields of training strongly reflect sexual stereotypes, with more than half of women in the social science, teaching, and clerical fields. Between 1979 and 1983, teaching and medicine became less common fields of study among women, while the proportion of women in clerical, social science, and managerial training grew. Among men, teaching also declined as a field of study while trades and scientific fields increased.

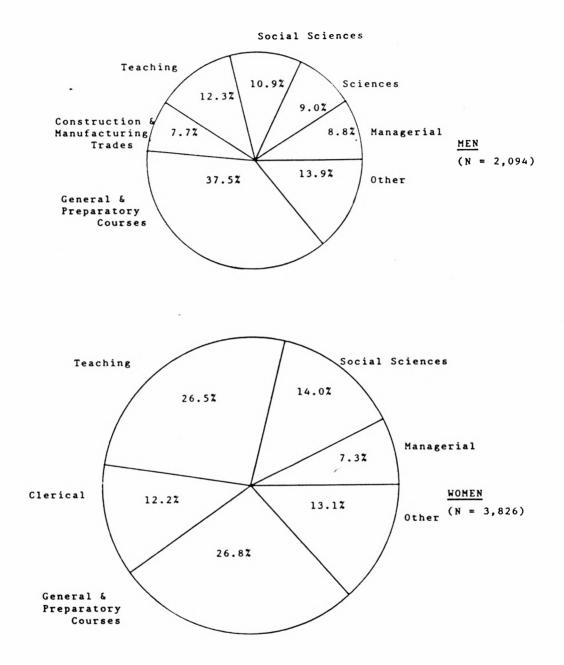
Figures 4.7 and 4.8 shows that occupational skills students are more equally divided between men and women. Fields of study are even more segregated by sex for these students, with men concentrated in trades and transportation, and women concentrated in clerical, sales and service courses.

Figure 4.5
Distribution of Registered Indian CEIS Post-Secondary Entrants
By Intended Field of Study and Sex, Canada, 1979 Calendar Year



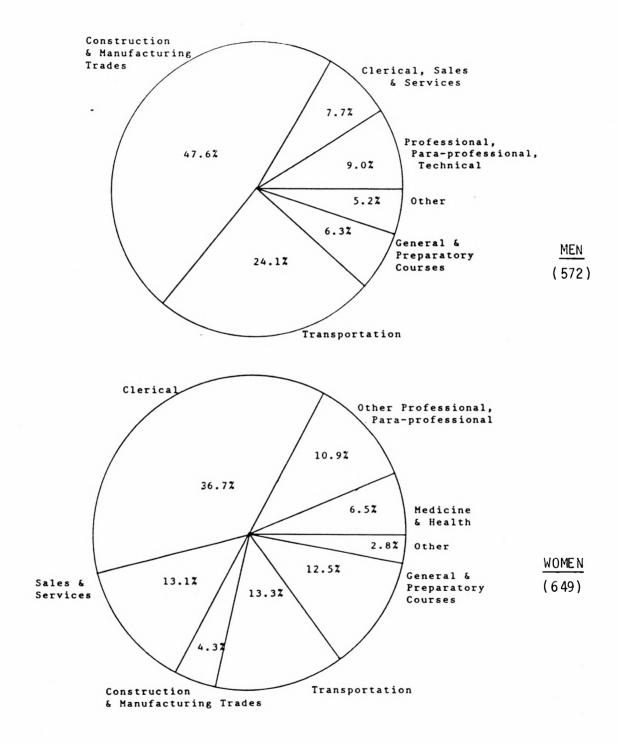
2. The size of men's and women's circles is proportionate to the number of male and female entrants in the year.

Figure 4.6
Distribution of Registered Indian CEIS Post-Secondary Entrants
By Intended Field of Study and Sex, Canada, 1983 Calendar Year



2. The size of men's and women's circles is proportionate to the number of male and female entrants in the year.

Figure 4.7
Distribution of Registered Indian CEIS Occupational Skills Entrants
By Intended Field of Study and Sex, Canada, 1979 Calendar Year

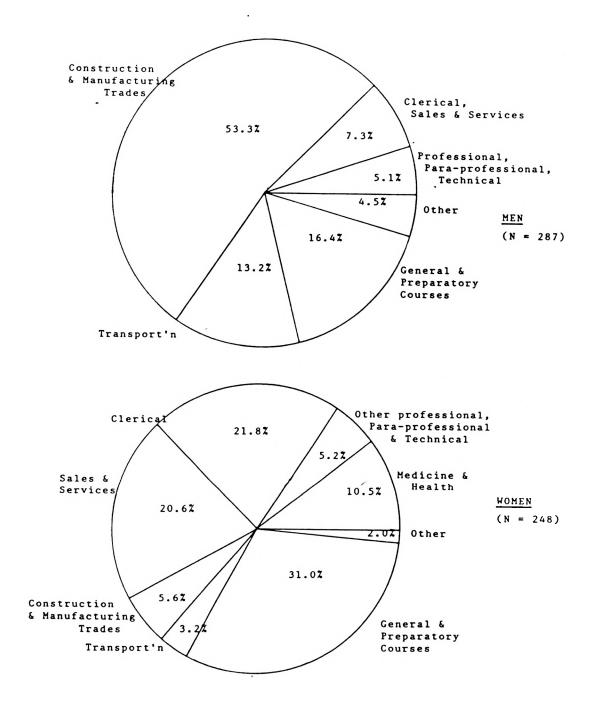


2. The size of men's and women's circles is proportionate to the number of male and female entrants in the year.

Figure 4.8

Distribution of Registered Indian CEIS Occupational Skills Entrants

By Intended Field of Study and Sex, Canada, 1983 Calendar Year



2. The size of men's and women's circles is proportionate to the number of male and female entrants in the year.

Tables 4.3, 4.4, and 4.5 provide a description of the characteristics of CEIS students. Both post-secondary and occupational skills students are almost evenly divided between those under 25 years of age, and those 25 or older. By comparison, 25 per cent of undergraduates in Canada were under the age of 25 during the 1982-83 school year. (Statistics Canada, Cat. #81-229, 1983). Therefore, the Indian CEIS student population appears to be younger than the non-Indian student population in Canada.

As shown in Table 4.3, most post-secondary students have completed grade 12 before entering the program, although a large proportion (45 per cent) have grade 11 or less. It is much more likely that younger post-secondary students will have a grade 12 education than that older students will. The largest group of occupational skills students, on the other hand, falls into the grades 10 and 11 category, and shows little variation between men and women, or older and younger students.

The marital and parental status of CEIS students is shown in Table 4.4. There is a striking difference between older and younger Indian students in the proportion who are single without children. While the great majority of younger students are single and childless, only 27 per cent of older students are in this category. Secondly, there is a dramatic difference in the proportion of men and women who are single parents for both assistance types and age groups. Overall, 2 per cent of male students and 21 per cent of female students are single parents. Married parents are more likely to be male and older than female or younger.

Table 4.5 again shows the marital and parental status of students, this time broken down into part-time and full-time students. Post-secondary students are more likely than occupational skills students to attend full-time, and men are more likely than women to be full-time students. Marital status also influences whether students are full-time or part-time, with those who are married (regardless of parental status) being less likely to attend school full-time than are single parents.

Table 4.3
Previous Educational Attainment
of Registered Indian CEIS Entrants
By Age, Sex, and Assistance Type, Canada, 1979 - 1983 Period
(column percentages)

Assistance Type and Age

Sex and Attainment		-Secondary	Occupational Skills			
-	Under 25	25 or Older	Under 25 25 or 01de			
	8	g	8	8		
MEN						
Less Than Grade 10	6.8	15.5	34.0	38.5		
Grades 10 and 11	27.1	36.2	41.8	41.8		
Grade 12 or Better	66.2	48.3	24.1	19.8		
Total (N)	(4,568)	(4,159)	(1,516)	(1,473)		
WOMEN						
Less Than Grade 10	7.7	17.3	30.2	35.2		
Grades 10 and 11	28.3	39.0	42.2	43.1		
Grade 12 or Better	64.0	43.7	27.7	21.7		
Total (N)	(7,658)	(8,612)	(1,703)	(1,646)		

Notes: 1. CEIS data are incomplete (see text).

Table 4.4
Comparison of Marital/Parental Status of
Registered Indian CEIS Entrants
By Sex, Assistance Type, and Age, Canada, 1979 - 1983 Period
(column percentages)

Assistance Type and Age

Sex, Marital/ Parental Status	Post-S Under 25	econdary 25 or Older		onal Skills 25 or Older
rarental status	%	25 OF Order	%	% %
MEN				
Single, No Children	85.3	38.0	78.1	35.0
Married, No Children	1.9	7.4	1.8	5.6
Single Parent	0.9	3.7	1.5	3.5
Married Parent	12.0	50.9	18.6	55.9
Total (N)	(4,568)	(4,159)	(1,516)	(1,473)
WOMEN	in the state of th			
Single, No Children	74.2	21.1	62.3	18.7
Married, No Children	4.8	19.4	6.0	16.6
Single Parent	13.7	29.4	22.1	35.5
Married Parent	7.2	30.0	9.6	29.2
Total (N)	(7,658)	(8,612)	(1,703)	(1,646)

Note:

1. CEIS data are incomplete (see text).

Table 4.5
Marital/Parental Status of Registered Indian CEIS Entrants
By Sex, Assistance Type, and Full-Time/Part-Time Status
Canada, 1979-1983
(row percentages)

Assistance Type and Status

Sex and	Post-Secondary			0ccu	1s	
Marital/Parental Status	Full- Time	Part- Time	Total	Full- Time	Part- Time	Total
MEN	g ₀	%	(N)	%	g,	(N)
Single, No Children	91.7	8.3	(5,475)	80.4	19.6	(1,699)
Married, No Children	84.1	15.9	(395)	62.2	37.8	(111)
Single Parent	90.3	9.7	(193)	71.6	28.4	(73)
Married Parent	66.7	33.3	(2,664)	72.1	27.9	(1,106)
Total	87.8	12.2	(8,727)	76.4	23.6	(2,989)
WOMEN		·				
Single, No Children	90.1	9.9	(7,505)	75.7	24.3	(1,368)
Married, No Children	73.5	26.5	(2,044)	51.5	48.5	(375)
Single Parent	83.8	16.2	(3,587)	74.0	26.0	(961)
Married Parent	76.2	23.8	(3,134)	63.5	36.5	(645)
Total	84.0	16.0	(16,270)	70.2	29.8	(3,349)

Note:

1. CEIS Enrolment Data are Incomplete (see text).

4.2 Factors Affecting Post-Secondary Educational Success

The CEIS data were analyzed in order to determine the rates of success Indian post-secondary students have had, and the factors which influence these rates of success. Two levels of success were considered: graduation; and successful completion of the most recent year of the program in which a student is enrolled. Successful completion included partial completion of a year's program if the student would be re-admitted in the following year. Those for whom no information was recorded were treated as unsuccessful. This group amounted to a substantial proportion of the total, sometimes more than half.

Since CEIS data are continuously updated with individual progress reports, and since the completion of programs can take several years, a strategy for eliminating students who had enrolled too recently to have achieved success was required. For most tables and figures in this section, the approach taken was, first, to consider the student's most recent progress report, and second to eliminate those students whose progress could not be known since they were currently enrolled. This was determined by the training period end date as provided on their initial application forms. Thus, educational success was determined by the most recent progress report either completed or which should have been completed, regardless of the length of time an individual had been enrolled in a program.

Table 4.6 looks at the educational outcomes of CEIS students three to four years after they have first enrolled in a training or educational program. There are a significant number of "Unknown" cases, but for the purpose of this analysis these are treated as unsuccessful outcomes. Overall, 14.3 per cent of the students had graduated from their programs by June, 1984. Partial success is more common than graduation, with 40.9 per cent having obtained some success in their training programs. Therefore, 55.2 per cent of students had either graduated or achieved partial success.

Table 4.6
Educational Outcomes as of June, 1984 of Registered Indian
CEIS Students Who Enrolled in Training/Educational Programs
in 1979 or 1980 By Training Type, Canada

Type of Training	Graduated Program	Partial Success	Wi thdrawn	Unknown	Total
Technical	73	146	161	101	481
Institute	(15.2%)	(30.4%)	(33.5%)	(21.0%)	
Community College or CEGEP	657 (17.7%)	1,398 (37.7%)	1,018 (27.4%)	640 (17.2%)	3,713
Private	349	196	257	323	1,125
Institution	(31.0%)	(17.4%)	(22.8%)	(28.7%)	
Bachelor's	232	2,252	743	1,038	4,265
Program	(5.4%)	(52.8%)	(17.4%)	(24.3%)	
Master's	25	86	22	32	165
Program	(15.2%)	(52.1%)	(13.3%)	(19.4%)	
Ph.D.	6.	12	1	2	21
Program	(28.6%)	(57.1%)	(4.8%)	(9.5%)	
Other	256	484	269	399	1,408
Programs	(18.2%)	(34.4%)	(19.1%)	(28.3%)	
Total	1,598 (14.3%)	4,574 (40.9%)	2,471 (22.1%)	2,535 (22.7%)	11,178

Notes:

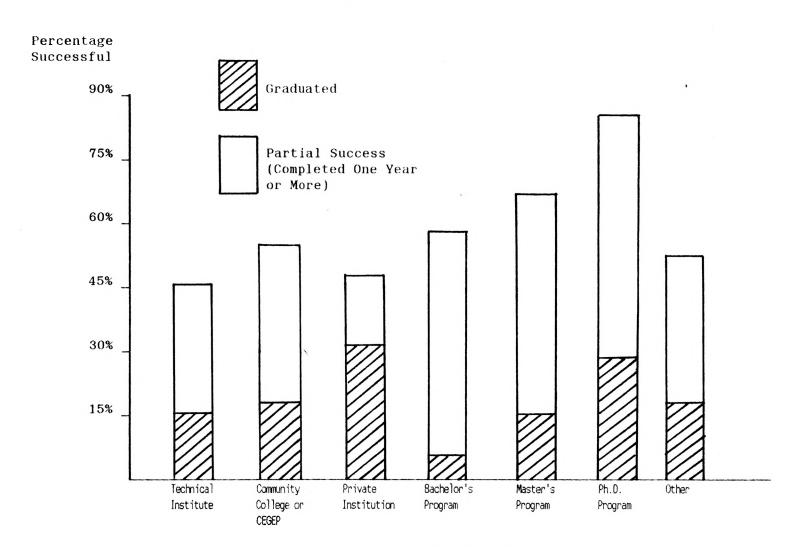
- 1. CEIS data are incomplete. (See text.)
- 2. Partial success includes full or partial completion of year where student is eligible to be readmitted.

The highest graduation rate is found among students enrolled in private institutions. Very few of the students enrolled in Bachelor's Programs had graduated (5.4 per cent) but a high proportion of these students (52.8 per cent) had achieved some university success. The private training institutions show the opposite pattern, with a high graduation rate, but a lower proportion of students achieving partial success. The greatest overall success has been achieved by the Ph.D. students, with more than 85 per cent achieving some level of success in this type of program. Figure 4.9 illustrates the success rates of different types of training or educational programs.

The wide gap between the graduation success rate and the total success rate for B.A. students is cause for concern. While this may in part reflect the length of the B.A. program (usually three years), it also suggests that a large number of university students are leaving university prior to receiving their degrees. On the other hand, the fact that nearly 60 per cent of B.A. students have successfully completed one or more years of university indicates a significant level of success for these students. As will be seen in Chapter 4, partial university completion improves an individual's employment opportunities.

Table 4.7 provides a summary of reasons given by students for withdrawing from their programs. The most common reason given by both post-secondary and occupational skills students is "social or personal problems". (31 per cent of both groups). For post-secondary students, "academic problems" play a significant role (17 per cent of the total) followed by "change of goals" (14 per cent). "Change of goals" is also an important reason for withdrawal among occupational skills students (11 per cent), and suggests that these withdrawals may be a positive development for some students rather than a negative one. "Academic problems" are a relatively unimportant consideration among occupational skills students, and financial and employment related problems are only a minor concern of both groups of students. Figure 4.10 presents the same information for Canada in graphic form.

Figure 4.9 Success Rates as of June, 1984 of Registered Indian Students Who Enrolled in 1979 or 1980, By Training Type, Canada



TRAINING TYPE

Note: CEIS data are incomplete (see text).

Table 4.7 Reasons for Withdrawing From School Among Registered Indian CEIS Students, By Assistance Type Canada and INAC Regions, 1979 – 1983 Period

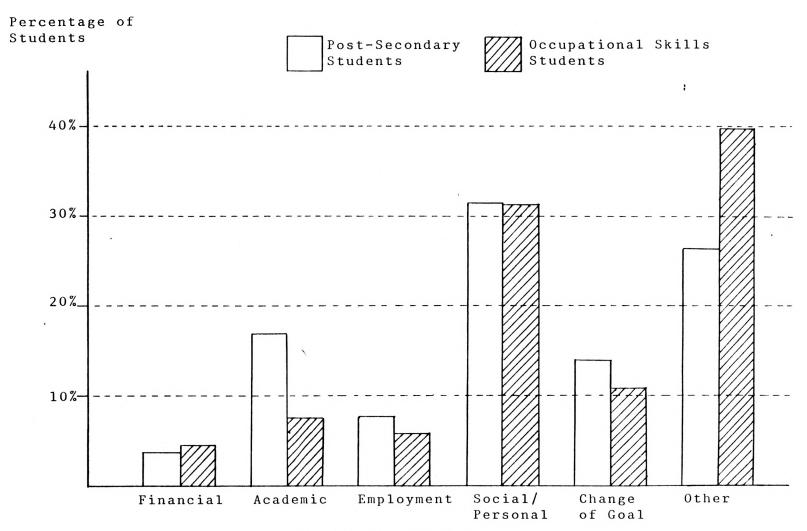
INAC Region

Assistance Type and Reason	Atlantic	Quebec	Ontario	Marri toba	Saskatchevan	Alberta	British Columbia	Canada
Post-Secondary	og.	oy.	%	og o	o _o	ď	%	%
Financial Academic Employment Social/Personal Change of Goals Other	5.1	0.3	4.8	3.1	1.8	2.7	10.8	3.8
	20.3	9.6	21.0	20.4	13.4	14.8	14.6	17.0
	5.1	12.2	10.1	8.1	2.1	4.7	9.9	7.7
	31.0	29.4	36.3	40.8	26.9	23.3	41.6	31.5
	18.3	14.0	10.1	4.1	43.9	6.0	6.9	14.0
	20.3	34.5	17.9	23.5	12.0	48.5	16.2	26.4
Total (N) No Response (N) Occupational Skills	(197)	(293)	(1,042)	(98)	(342)	(635)	(130)	(2,737)
	(170)	(139)	(732)	(35)	(130)	(430)	(89)	(1,725)
Financial Academic Employment Social/Personal Change of Goals Other Total (N) No Response (N)	7.8	6.5	4.3	0.0	0.9	4.9	4.8	4.4
	14.1	0.0	5.7	13.6	8.2	8.0	4.8	7.5
	1.6	35.5	10.5	4.5	3.6	2.3	4.8	5.7
	26.6	22.6	40.5	40.9	34.5	23.5	50.8	31.4
	20.3	6.5	7.1	13.6	17.3	9.8	12.7	11.0
	29.7	29.0	31.9	27.3	35.5	51.5	22.2	39.9
	(64)	(31)	(210)	(22)	(110)	(388)	(63)	(888)
	(42)	(12)	(106)	(13)	(33)	(279)	(63)	(548)

Notes: 1. Fields of Training are based on the Canadian Classification and Dictionary of Occupations.

2. CEIS data are incomplete. (See text.)

Figure 4.10
Reasons for Withdrawal Among Registered Indian CEIS
Post-Secondary and Occupational Skills Students
Canada, 1979 - 1983 Period



Reason for Withdrawing

Note: CEIS data are incomplete. (See text.)

Source: INAC Continuing Education Information System.

Table 4.8 looks at the possible effects of sex and previous educational attainment on educational success. From this table it appears that previous education has some impact on success, but not as large an impact as might be expected. For some groups a grade 10 or 11 education seems to be more valuable than a grade 12 education. However, the grade 12 level is clearly associated with graduation from post-secondary training programs. There are also, generally, higher success rates among women than among men, particularly in terms of successful completion of the year, as opposed to graduation.

Table 4.9 examines educational success in terms of marital status and sex. (It was found that parental status was relatively unimportant, and these results are not reported here). There is a consistent difference in success rates between married and single students, with married student overall success rates about nine percentage points higher than those of unmarried students for both post-secondary and occupational skills students. While 71.2 per cent of married post-secondary students have achieved some success, 62.3 per cent of single post-secondary students were successful. Among occupational skills students, these success figures are 61.9 per cent and 53.1 per cent respectively. The difference between married and single students is most marked for female post-secondary students.

Graduates are examined in terms of their fields of studies in Figure 4.11. These fields are based on the standard occupational categories used by Statistics Canada, with the addition of a general and preparatory category. Over the five-year period more than 300 Indian teachers (code 4 in Figure 4.11) have graduated from post-secondary and occupational skills programs in Canada, along with nearly as many professional or para-professional social workers (code 3 in Figure 4.11). These students have been trained mainly through INAC's post-secondary assistance program.

Table 4.8
Successful Completion Rates of Registered Indian CEIS Students
By Previous Educational Attainment, Sex, and Assistance Type,
Canada, 1979-1983 Period

Assistance Type and Success

Previous	Post-Se	condary	Occupational Skills			
Education and Sex	Graduated Program	Completed Year	Graduated Program	Completed Year		
•	%	%	%	8		
Less Than Gr. 10						
Male Female Total	9.2 6.9 7.6	41.0 57.5 52.7	32.8 26.4 29.7	20.1 23.7 21.8		
Gr. 10 or 11				46		
Male Female Total	9.9 9.0 9.3	50.5 59.2 56.3	34.2 28.8 31.4	24.3 27.0 25.7		
Gr. 12 or Better		:				
Male Female Total	11.0 13.1 12.3	50.1 55.7 53.7	30.2 32.6 31.5	25.5 33.1 29.7		

Note:

1. Successful completion of year includes partial success if student is eligible to be readmitted.

Source: Continuing Education Information System (CEIS), INAC.

Table 4.9
Successful Completion Rates
of Registered Indian CEIS Students, By Marital Status, Sex
and Assistance Type, Canada, 1979 - 1983 Period

Assistance Type and Success

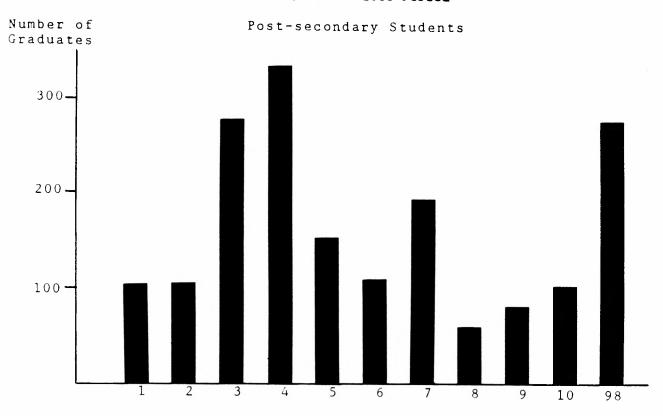
I	Post-Se	condary	Occupati	Occupational Skills			
Marital Status and Sex	Graduated Program	Completed Year	Graduated Program	Completed Year			
	%	%	%	%			
Married							
Male Female Total	11.0 11.0 11.0	53.6 64.2 60.2	34.6 31.0 33.0	26.5 31.9 28.9			
Single							
Male Female Total	10.2 10.9 10.7	47.0 53.8 51.6	31.5 28.2 29.6	20.6 25.6 23.5			
Total							
Male Female Total	10.5 11.0 10.8	49.3 57.1 54.4	32.8 29.0 30.8	23.1 27.5 25.4			

Note:

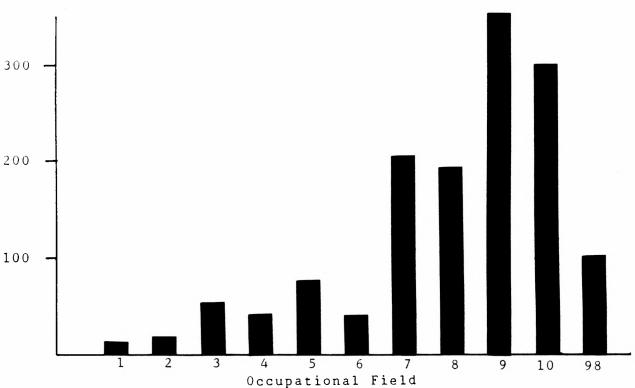
1. Successful completion of year includes partial success if student is eligible for readmission.

Source: Continuing Education Information System (CEIS), INAC.

Figure 4.11
Distribution of Registered Indian CEIS Post-Secondary and Occupational Skills Graduates By Field of Study,
Canada, 1979 - 1983 Period



Occupational Skills Students



Source: Continuing Education Information System (CEIS), INAC (Continued)

Notes to Figure 4.11:

- 1. CEIS data are incomplete. (See text).
- 2. Occupational Fields are as follows:
 - 1. Managerial, Administration
 - 2. Sciences, Engineering
 - 3. Social Sciences and Related
 - 4. Teaching and Related
 - 5. Medicine and Health
 - 6. Clerical
 - 7. Sales and Services
 - 8. Primary Economy, Construction, and Manufacturing
 - 9. Transportation, Handling, Crafts
 - 10. Miscellaneous
 - 98. General and Preparatory Courses

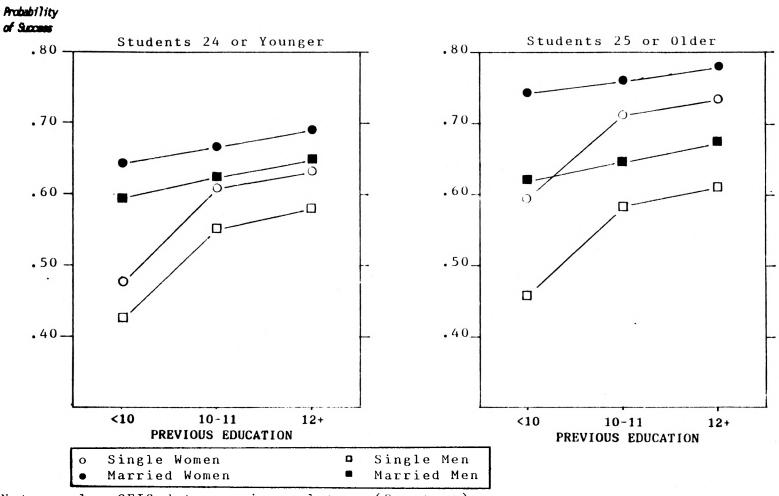
The largest group of graduates of occupational skills courses have been trained in the transportation and crafts area, with more than 300 graduates, followed by sales and service occupations, and construction, manufacturing, and primary economic occupations.

In order to assess the relative importance of the many factors affecting educational success, a regression analysis was carried out for both post-secondary students and occupational skills students. The regression model for post-secondary students looked at the possible effects of educational attainment, marital status, age, and sex on educational success (as defined above). The model explains 95 per cent of the variation among the post-secondary student population, and its predictions of education success are shown in Figure 4.12. (See Appendix C for further details on the regression model).

Several conclusions can be drawn from this model. It predicts that older post-secondary students are more likely to be successful than younger ones, married students are more likely to succeed than single students, and women are more likely to succeed than men. The model also suggests that previous educational attainment has an effect on success, although the effect is much greater for single students than for married students. Overall, older female students with at least a grade 10 education are the most likely to succeed.

What this model suggests is that in addition to a minimum level of education, and a difference in the behaviour of men and women, there is a "maturity" factor which is reflected in the greater success of older and married students. These students, it might be suggested, have more clearly identified their goals and directions in attending school and have a greater store of life experiences to draw upon. In the case of married students they may also have more support available as they attend school, in the form of practical or moral support from their spouses.

Figure 4.12
Probability of Educational Success Among Registered Indian Post-Secondary Students
By Age, Previous Education, Sex, and Marital Status, Canada, 1979 - 1984 Period



Notes:

- l. CEIS data are incomplete. (See text).
- . Educational Success includes completion of year or partial year as well as graduation.

Source: Logistic regression analysis using INAC Continuing Education Information System data.

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Figure 4.13 provides the results of a similar regression analysis carried out for occupational skills students. This model is successful in explaining only 58 per cent of the variation of the students' educational success, and only identifies two important variables as contributing to student success: marital status and educational attainment. As with the post-secondary analysis, married students with higher levels of schooling are predicted to be more successful in their training programs.

4.3 Conclusions

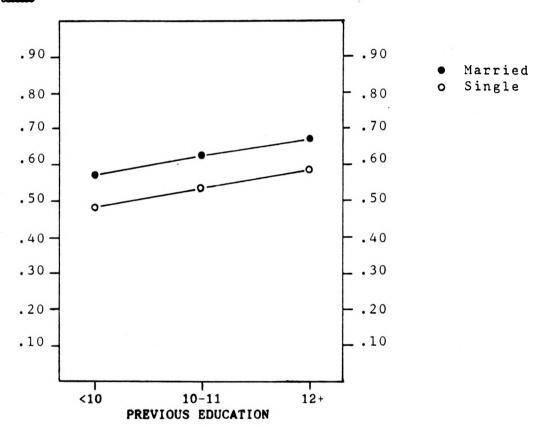
The material presented in this chapter shows that while Indian enrolments have been increasing in professional and university training programs, enrolment rates are still substantially below those of the general Canadian population. The fields in which Indian students are enrolled tend to be limited to a few occupational areas, with an emphasis on teaching, social work, sales and service, transportation, and trades. Moreover, enrolments show segregation of Indian men and women in stereotypical occupations.

The majority of CEIS students experience some level of educational success, although this varies a great deal from region to region. Relatively few students have graduated from their programs. The highest levels of educational success are found in university and community college programs, and the most frequent reasons for withdrawing from educational programs are in the area of social and personal problems. Among both post-secondary and occupational skills students, married students with grade 10 education or better have the greatest success. There are also strong age and sex effects on success for post-secondary students.

The major issue which may be addressed by improved educational programming, appears to be the provision of social support and counselling in some form to students, especially to younger students,

Figure 4.13
Probability of Educational Success Among Registered Indian CEIS
Occupational Skills Students By Previous Education and Marital Status,
Canada, 1979 - 1984 Period





Notes: 1. CEIS data are incomplete. (See text.)

Educational success includes completion of year or partial year as well as graduation.

Source: Logistic regression analysis using INVC Continuing Education Information System data. single students, and men. Academic support is also an issue for a significant number of post-secondary students. In addition, these findings imply that post-secondary training programs should not emphasize the need to have completed certain grade levels in their admissions policies, but should pursue "mature admissions" approaches.

5. ADULT EDUCATIONAL ATTAINMENT

Previous chapers of this study have focused on the registered Indian students enrolled in educational institutions. Chapter 5 will examine the educational attainment of the Indian population in Canada. The data in this section are based entirely on the 1981 Census of Canada, and the tables which are provided often show the educational characteristics of the non-Indian population for purposes of comparison. This non-Indian population is referred to as "All Others" in the tables for the sake of simplicity.

There is also a particular geographic breakdown of the population used in this chapter to analyze regional and sub-regional variations in educational attainment. First, provinces are used as the basis for regional comparisons, with Nova Scotia and Newfoundland, New Brunswick and Prince Edward Island, and Yukon and the Northwest Territories grouped in pairs because of their small populations. The Yukon and Northwest Territories are referred to as "Northern Canada". At times, the four eastern provinces are aggregated into one region which is referred to as the "Atlantic Provinces" in the tables. Population size and the degree to which empty cells begin to appear in the tables has dictated these groupings.

At the sub-regional level, data have also been presented for a set of eight cities with substantial registered Indian populations. These are usually referred to as Census Metropolitan Areas or CMAs in the tables. Readers interested in more detailed information concerning the Indian population of these and other cities are referred to <u>An Overview of Socio-Demographic Conditions of Registered Indians Residing Off-Reserve</u>, also being prepared as part of the INAC series.

Several other geographic categories have also been used which cut across provincial and regional categories. The major distinction is whether the sub-population lives "on reserve" (including those living on Crown lands) or "off reserve". Each of these two categories is further sub-divided. Those Indians living on reserve are categorized according to their degree of isolation from regional urban centres, as defined by INAC for its internal administrative purposes. In this report "Remote and Special Access" includes those living on Crown lands and refers to Indian bands who are more than 350 kilometers from the nearest urban centre, or who have no all-weather road access to their community; "Rural" bands are those between 50 and 350 kilometers from the nearest centre; and "Urban" bands are those within 50 kilometers of an urban centre.

For the off-reserve population, a set of categories has been used which is based on the size of the town or city of residence. These categories are: "Rural and Small Towns" (places with populations less than 5,000); "Small Cities" (populations of 5,000 to 99,999); and "Large Cities" (populations of 100,000 or more). The choice of these categories was dictated by a desire to have a substantial population in each category for purposes of statistical analysis.

One limitation on the data available from the 1981 Census is that when the number of individuals within a given cell of a table is less than 25, the data are suppressed. This has affected some of the tables below, and is denoted by an asterisk. Secondly, in order to further protect confidentiality, Statistics Canada follows a random rounding procedure. Population counts are all rounded to either the nearest multiple of five above the actual number or below it. Therefore, a 6 is equally likely to be rounded to 10 as it is to 5. This introduces an element of imprecision which doesn't affect larger numbers greatly, but can affect small numbers. Often, the sum of the sub-categories may disagree with the total by 5 or 10 as a result of random rounding. Percentages are also affected by this procedure. (Further discussion of methodological issues is provided in Section 1.2 of this study).

The information in this chapter is presented in a number of sections which focus on the relationship between educational attainment and other socio-economic characteristics. These are:

- o description of educational attainment;
- o employment;
- o income;
- o mobility;
- o language;
- o family status;
- o correlates of educational attainment.

Readers should also pay close attention to the specific population for which statistics are presented, since several populations are examined: total population 15 or older; population 15 or older not attending school full time; experienced labour force; those who have been employed since January, 1980; children aged 15 to 24 in census families; children aged 15 to 24 in economic families; and the population 15 or older in economic families.

5.1 Description of Educational Attainment

Educational attainment, as measured by highest level of schooling, is shown for the registered Indian and non-Indian populations of Canada in Table 5.1. These populations are further broken down into on and off-reserve residents, and their degree of isolation/urbanization. The percentages of each population group with a given level of education are shown.

First, it will be seen that the Indian population living on reserve has the lowest level of attainment. Almost half of the reserve Indian population (48 per cent) have less than a grade 9 education as compared to 24 per cent of off-reserve Indians and 20 per cent of others. At the other extreme, 4 per cent of the on-reserve population have had

Table 5.1 Educational Attainment of the Population 15 or Older, By Ethnicity, Residency, and Degree of Isolation/Urbanization, Canada, 1981 (row percentages)

Ethnicity, Residency &	1			J					
Urbanization/ Isolation	Less Than Grade 5	Grades 5-8	Grades 9-10	Grades 11-13 w/o Cert.	Grades 11-13 w. Cert.	Other Non-Univ.	Same Univ.	Univ. Degree	Total
	%	%	%	%	%	%	%	96	(N)
On-Reserve, R.I.							ĺ		
Remote & Sp. Access	26.5	32.2	21.0	6 . 8	2.6	8.2	2.1	0.7	34,865
Rural	16.0	33.9	24.2	9.0	2.7	10.3	3.4	0.6	38,895
Urban	10.4	27.7	24.6	10.7	6.5	14.8	4.0	1.2	42,035
Total	17.1	31.1	23.4	8.9	4.1	11.3	3.2	0.8	115,790
Off-Reserve, R.I.								Ì	
Rural & Small Towns	7 . 6	21.9	26.1	12.3	8.2	17.7	4.6	1.5	21,895
Small Cities	4.6	19.5	26.0	12 . 9	8.0	21.4	6.0	1.3	18,200
Large Cities	4.0	16.9	24.6	12.9	9.3	21.2	7.8	3.3	31,980
Total	5 . 3	19.1	25.4	12.7	8.7	20.2	6.4	2.3	72,070
Total R.I.	12.6	26.5	24.1	10.4	5.8	14.7	4.4	1.4	187,860
All Others									
Rural & Small Towns	4.7	20.9	17.9	12.5	12.3	21.4	5.7	4.6	5,185,910
Small Cities	3 . 5	15.7	16.6	13.1	13.4	24.4	7.1	6.3	3,273,850
Large Cities	3 . 9	13.1	13.4	12.4	13.4	23.8	9.5	10.5	9,864,670
Total	4.1	15.7	15.2	12.5	13.1	23.2	8.0	8.1	18,324,430

- Notes: 1. R.I. = Registered Indians.
 - 2. On-Reserve classifications are based on "Classification of Indian Bands by Geographic Zone", Housing and Band Support Branch, Indian and Northern Affairs Canada, December, 1983, revised August, 1984.
 - 3. Rural & Small Towns include places with population up to 4,999. Small Cities have populations of 5,000 to 99,999. Large Cities have populations of 100,000 or more.
 - 4. Grades 11-13 with Certificate refers to high school graduation certificate or diploma.
 - 5. Other Non-University includes only those with a non-university trades certificate or diploma.
 - 6. Less Than Grade 5 includes those with no formal schooling.
 - 7. Remote and special access includes those residing on Crown lands.
 - 8. All Others excludes non-Indians living on reserves.

university training, compared to 9 per cent of off-reserve Indians and 16 per cent of others. In most respects, the attainment of the off-reserve Indian population is closer to that of non-Indians, than to the on-reserve Indian population. The exceptions to this rule, however, are important: high school completion, and university graduation. These are important pre-requisites to obtaining increased access to employment as will be seen below.

Within each category there are also differences according to isolation and urban size. These follow the expected pattern, with higher levels of schooling in more urbanized areas and lower levels in more rural and isolated areas.

Table 5.2 examines the relationships among age, sex, and Indian educational attainment. Here, there are strong differences among age groups, with the major differences apparent for the less than grade 5, grades 11 - 13, and post-secondary categories of attainment. Few young people have left school at the early elementary level compared to older groups, although a substantial number continue to leave school prior to completing grade 9. Twice the proportion of 15 to 24 year olds have reached the grades 11 - 13 level compared to the 25 to 44 age group, and the younger group is also slightly more likely to have graduated from high school. Among the population 45 or older, almost 90 per cent of the on-reserve population and more than 70 per cent of the off-reserve population have less than grade 11 education.

At the post-secondary levels of schooling, the 25 to 44 year old age group has attained the greatest success. Presumably this reflects the fact that many 15 to 24 year olds are too young to have reached the post-secondary level. As was seen in the previous chapter, many post-secondary students are 25 or older. Among the on-reserve population about 25 per cent of the 25 to 44 year olds have some level of post-secondary attainment, while off-reserve, about 43 per cent of registered Indians in the same age group have some post-secondary standing beyond high school. (These aggregate figures for both sexes are not shown in the table).

Table 5.2 Educational Attainment of the Registered Indian Population 15 or Older By Age, Sex, and Residency, Canada, 1981 (row percentages)

	Highest Level of Schooling								
Residency, Age, Sex	Less Than Grade 5	Grades 5-8	Grades 9-10	Grades 11-13 w/o Cert.	Grades 11-13 w Certificate	Other Non-Univ.	Same Univ.	Univ. Degree	
On-Reserve	g .	8	%	%	%	%	q	q	
15 - 24 Years Old Men Women	2.7 1.9	31.1 27.4	36.4 38.4	14.6 14.6	5.1 5.8	8.2 9.3	1.7	0.2 0.2	
25 - 44 Years Old Men Women	10.5 11.4	29.8 32.1	20.6 20.0	7.9 7.2	4.1 5.0	20.0 16.1	5.5 6.3	1.7 1.9	
45 + Years Old Men Women	49.2 47.0	32.3 36.3	6.5 6.7	2.2 2.5	1.2 1.4	6.9 4.3	1.2	0.5 0.4	
Off-Reserve									
15 - 24 Years Old Men Women	1.0 0.8	13.7 12.7	37.8 36.3	21.3 18.9	9.4 11.0	11.6 14.9	4.8 4.5	0.5 0.9	
25 - 44 Years Old Men Women	3.4 2.7	14.2 18.5	17.6 20.7	8.7 9.3	8.1 9.4	32.7 27.0	10.5 9.0	4.6 3.4	
45 + Years Old Men Women	25.1 20.5	34.0 42.0	12.3 13.5	4. 3 5 . 2	3.2 4.4	15.9 11.0	2.8 2.2	2.5 1.2	

- Notes: 1. Less Than Grade 5 includes those with no formal schooling.

 - Grades 11 13 with Certificate refers to high school graduation certificate or diploma.
 Other Non-University includes only those with a non-university trades certificate or diploma.

For most sub-groups the differences between men and women are not large. Women in each category are somewhat more likely than men to have received a high school certificate. Among the on-reserve population women are also more likely to have some university education, however men have higher rates of university attainment off-reserve. Men are more likely to have trades certificates, especially in the 25 to 44 year old age group. Men are also more likely to have less than a grade 5 education. In general, sex is not as important a factor as age in affecting schooling.

Table 5.3 provides a comparison of the attendance patterns of the population 15 or older by sex and age groups. While the full-time attendance rate for the total Indian population, both male and female, is higher than for non-Indians, this is not true for each age group due to the younger age structure of the Indian population. Among the younger age groups non-Indians are more likely to be attending school full-time than Indians. For example more than 65 per cent of non-Indians aged 15 to 19 were full-time students, but only 50 per cent of Indians aged 15 to 19 were attending school full time. Indian women aged 20 or over are more likely to attend school than Indian men, while the reverse is true for the non-Indian population aged 20-34. Non-Indians are more likely than Indians to attend school part-time, especially among the age groups 20 or older.

The regional pattern of educational attainment is shown in Table 5.4. There is, in addition to a wide gap in attainment between on and off-reserve Indian populations, considerable variation in attainment from province to province. Among registered Indians the central and eastern provinces have the highest levels of attainment, while Manitoba and Saskatchewan have the lowest levels. Only 12 per cent of Manitoba's on-reserve Indian population and 26 per cent of the off-reserve Indian population have a high school certificate or better. In Quebec, these figures are 28 per cent and 48 per cent respectively. Moreover, there is much wider variation in attainment among regions for Indians than for non-Indians. (For a more detailed look at regional and sub-regional educational attainment, see Appendix D).

Table 5.3
School Attendance of the Population 15 or Older
By Ethnicity, Age, Sex, Canada, 1981
(row percentages by gender)

Attendance Status and Sex

	i							
Ethnicity &		-Time	Part-	•		ending		
Age Group	M	F	M	F	M	F	M	F
	%	%	%	%	%	%	1000s	1000s
Registered Indians								
15-19 20-24 25-34 35-44 45+ Total	50.1 10.7 4.6 1.7 0.6 15.0	49.5 11.3 5.6 3.5 0.8 14.3	2.2 4.0 4.0 2.7 0.6 2.6	2.6 4.3 6.2 4.5 1.3 3.8	47.7 85.4 91.3 95.5 98.8 82.4	47.9 84.4 88.2 92.0 98.0 81.9	20.5 14.7 19.7 12.4 19.9 87.1	20.9 17.0 25.6 15.7 21.5 100.7
All Others					i :			
15-19 20-24 25-34 35-44 45+ Total	65.8 20.9 4.2 1.1 0.4 12.3	66.5 16.4 2.9 1.6 0.5 11.0	2.6 9.0 10.3 6.8 2.1 5.7	2.8 8.9 10.2 8.5 2.5 6.0	31.6 70.0 85.6 92.1 97.5 82.0	30.6 74.7 86.9 89.9 97.1 83.1	1154.6 1152.2 2074.5 1477.3 3205.9 9064.5	1107.6 1150.5 2080.2 1451.5 3567.2 9357.0

Note:

1. School Attendance refers to the 1980-81 school year and includes elementary, secondary, and post-secondary institutions.

Table 5.4
Educational Attainment of the Population 15 or Older,
By Ethnicity, and Residency, Canada and Provinces/Regions, 1981
(row percentages)

Province/Region,						•			
Residency, Ethnicity	Less Than Grade 5	Grades 5-8	Grades 9-10	Grades 11-13 w/o Cert.	Grades 11-13 w. Cert.	Other Non-Univ.	Same Univ.	Urriv. Degree	Total
	8	%	7	%	8	%	8	%	N
Atlantic Provinces							-		
On-Reserve, R.I.	7.9	28.1	23.0	12.2	2.8	19.1	6.6	0.5	4,745
Off-Reserve, R.I.	2.1	22.4	21.0	10.7	7.0	22.1	10.3	4.4	2,145
Total, R.I.	6.1	26.3	22.4	11.8	4.1	20.0	7.8	1.7	6,890
All Others	5.1	20.2	20.0	10.9	9.4	20.3	7.7	6.2	1,637,630
Quebec									
On-Reserve, R.I.	20.0	25.5	18.7	8.1	7.7	14.5	3.4	2.2	17,180
Off-Reserve, R.I.	8.0	18.7	15.9	9.1	16.7	23.4	4.8	3.4	7,345
Total, R.I.	16.4	23.4	17.9	8.4	10.4	17.1	3.8	2.5	24,525
All Others	5.8	20.5	12.2	7 . 5	16.8	23.6	6.4	7.1	4,950,245
Ontario			Pilos						
On-Reserve, R.I.	16.7	27.5	24.8	9.2	4.4	13.8	2.9	0.7	26,335
Off-Reserve, R.I.	3.9	14.5	26.1	14.8	10.8	20.9	6.2	2.7	20,910
Total, R.I.	11.1	21.7	25.3	11.7	7.2	17.0	4.4	1.6	47,245
All Others	3.6	13.7	15.7	14.0	13.0	22.9	7.9	9.1	6,578,400
Mani toba				,					
On-Reserve, R.I.	20.1	37.4	23.1	7.2	1.3	6.9	3.1	0.9	16,335
Off-Reserve, R.I.	8.1	25.4	29.6	10.6	3.4	14.0	7.1	1.8	7,530
Total, R.I.	16.3	33.6	25.1	8.3	2.0	9.1	4.3	1.2	23,865
All Others	4.0	16.8	17.6	15.8	9.1	20.3	8.7	7.6	745,735
Saskatchevan						:			
On-Reserve, R.I.	18.0	39.9	22.1	6.0	1.7	7.5	4.2	0.7	14,090
Off-Reserve, R.I.	5.8	26.3	26.7	9.0	3.6	18.7	8.6	1.3	6,830
Total, R.I.	14.0	35.4	23.6	7.0	2.3	11.1	5.6	0.9	20,920
All Others	3.4	18.4	17.8	15.8	8.8	20.1	9.3	6.3	690,675
	1	ł	1	1	I	1	ı	1 (c	ontinued)

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Table 5.4 Continued Educational Attainment of the Population 15 or Older. By Ethnicity, and Residency, Canada and Provinces/Regions, 1981 (row percentages)

Highest Level of Schooling

Province/Region,	ł					•			
Residency, Ethnicity	Less Than Grade 5	Grades 5-8	Grades 9-10	Grades 11-13 w/o Cert.	Grades 11-13 w. Cert.	Other Non-Univ.	Same Univ.	Univ. Degree	Total
	q	8	%	%	%	8	%	%	N
Alberta		}		1					
On-Reserve, R.I.	14.0	34.8	23.9	10.4	3.1	10.0	3.3	0.5	13,810
Off-Reserve, R.I.	4.1	17.9	23.4	14.3	7.2	24.1	6.6	2.3	7,895
Total, R.I.	10.4	28.7	23.8	11.8	4.6	15.1	4.5	1.2	21,705
All Others	2.1	10.0	15.5	16.2	11.2	26.3	9.0	9.8	1,623,685
B.C.									
On-Reserve, R.I.	12.3	27.8	28.3	12.2	5 . 9	10.7	2.5	0.3	18,515
Off-Reserve, R.I.	4.5	18.8	28.0	14.1	8.2	19.1	5.8	1.5	17,790
Total, R.I.	8.5	23.4	28.2	13.1	7.0	14.8	4.2	0.9	36,305
All Others	2.4	10.3	15.2	16.0	12.0	25.1	10.6	8.3	2,066,060
Northwestern Canada		3.							
On-Reserve, R.I.	33.4	30.0	16.8	4.9	1.8	11.1	1.5	0.6	4,780
Off-Reserve, R.I.	14.0	23.3	21.4	8.4	6.5	21.7	3.7	0.9	1,610
Total, R.I.	28.5	28.3	18.0	5.8	3.0	13.8	2.0	0.7	6,390
All Others	10.8	12.7	13.7	10.1	9.4	24.6	- 9 . 6	9.1	32,010
Canada							Ŷ		
On-Reserve, R.I.	17.1	31.1	23.4	8.9	4.1	11.3	3.2	0.8	115,790
Off-Reserve, R.I.	5 . 3	19.1	25.4	12.7	8.7	20.2	6.4	2.3	72,070
Total, R.I.	12.6	26.5	24.1	10.4	5 . 8	14.7	4.4	1.4	187,860
All Others	4.1	15.7	15.2	12.5	13.1	23.2	8.0	8.1	18,324,430
			<u> </u>						

- Notes: 1. R.I. = Registered Indians.
 - 2. Other Non-University includes only those with a non-university trades certificate or diploma.
 - 3. Grades 11-13 with certificate refers to high school graduation certificate or diploma.
 - 4. Less Than Grade 5 includes those with no formal schooling.
 - 5. Northern Canada refers to the Yukon and Northwest Territories.
 - 6. All Others excludes non-Indians living on reserves.

Figure 5.1 provides a graphic comparison of off-reserve Indian and non-Indian attainment in eight cities with substantial Indian populations. In this comparison, the prairie cities, particularly Winnipeg and Regina, have the lowest levels of Indian educational attainment, while Montreal, Toronto, and Calgary have the highest levels. Differences between the Indian and non-Indian populations are most pronounced in the western cities.

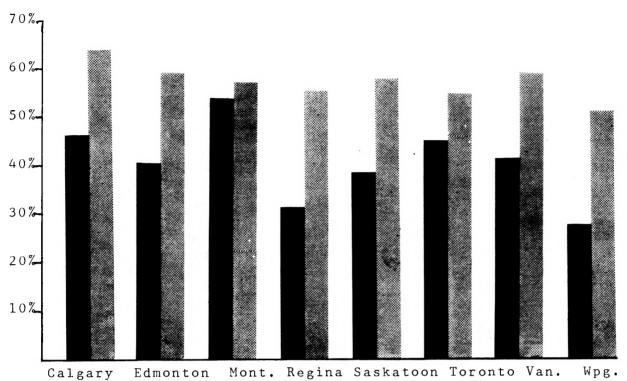
5.2 Education and Employment

There are a number of ways of measuring employment success using First there are the "labour force activity" indicators: unemployment rates. force participation labour rates. These terms are defined as in the 1981 Census employment rates. Dictionary. "Labour force participants" are those who are employed or actively looking for work. The labour force participation rate is the number of participants divided by the total population 15 or older, expressed as a percentage. The unemployment rate is the number of labour force participants who are unemployed divided by the total number of participants, expressed as a percentage. Therefore it excludes "discouraged workers" and those who have never held a job. For this reason, the use of unemployment rates is often considered particularly inappropriate for the Indian population on reserves, where job markets are extremely limited, and job skills are limited as well. Instead, the employment rate is often used, which is simply the number employed expressed as a percentage of the total population 15 or older. In this study these labour force variables have been examined only for the population 15 or older not attending school full time during the 1980-81 school year.

Tables 5.5 through 5.7 provide a comparison of unemployment, participation, and employment rates for different provinces and levels of education. It is clear from these tables that educational attainment is closely related to these labour force characteristics. Higher attainment is associated with higher participation and

Figure 5.1
Educational Attainment of the Adult Population 15 or Older By Ethnicity
For Selected Census Metropolitan Areas (Excluding Reserves), 1981

Proportion of Population with High School Certificate or Better



Proportion of Population with Less Than Grade 9

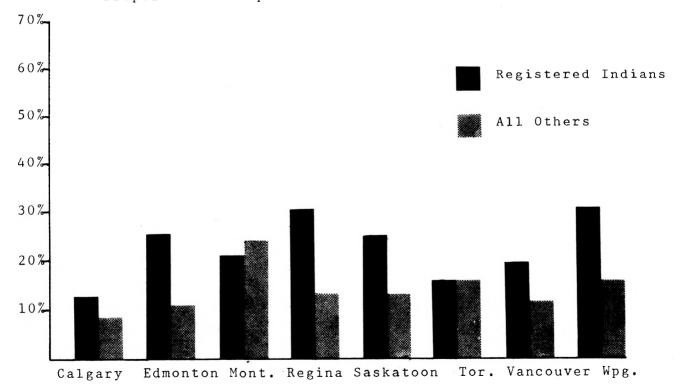


Table 5.5
Unemployment Rates of the Registered Indian Population 15 or Older
Not Attending School Full Time
By Educational Attainment, Canada and Provinces/Regions, 1981

Province/Region	Less Than Grade 9	Grades 9-10	Grades 11-13	Some Post Secondary	University Degree	Total
	%	g	9,	78	%	8
Nova Scotia & Newfoundland	31.6	35.1	16.7	15.4	*	21.4
New Brunswick & PEI	25.5	27.0	39.1	16.7	*	22.0
Quebec	20.1	20.6	15.2	10.1	2.2	15.0
Ontario	16.7	21.3	13.4	11.2	0.8	15.0
Manitoba	22.9	24.6	15.6	14.2	4.0	20.2
Saskatchewan	21.6	24.6	16.9	13.2	*	19.0
Alberta	18.0	14.5	8.2	6.7	*	11.8
B.C.	23.9	26.2	18.1	12.7	2.0	19.7
Northern Canada	20.4	24.0	14.3	15.4	*	20.1
Canada						
Registered Indians	20.8	23.1	15.0	11.7	1.9	17.0
All Others	9.1	10.0	7.3	5.2	2.6	6.6

Notes:

- 1. The Umemployment Rate is the number unemployed as a proportion of the number who are participating in the labour market, expressed as a percentage.
- 2. Grades 11-13 includes both those with and those without high school certificates.
- 3. Northern Canada refers to the Yukon and the Northwest Territories.
- * Data unavailable because of small cell counts.

Table 5.6 Labour Force Participation Rates of the Registered Indian Population 15 or Older Not Attending School Full-Time By Educational Attainment, Canada and Provinces/Regions, 1981

Highest Level of Schooling

Province/Region	Less Than Grade 9	Grades 9-10	Grades 11-13	Some Post Secondary	Uni v ersity Degree	Total
	q	8	%	8	%	%
Nova Scotia & Newfoundland	27.8	47.5	62.3	74.6	100.0	52.6
New Brunswick & PEI	26.2	33.3	32.4	81.6	100.0	43.6
Quebec	26.3	43.5	63.9	79.4	89.4	47.8
Ontario	32.9	53.0	66.8	79.6	89.1	54.2
Manitoba	29.8	43.8	59.1	73.6	92.6	41.7
Saskatchewan	28.3	43.6	66.0	72.4	96.9	42.3
Alberta	31.2	43.6	60.1	77.3	91.1	47.8
B.C.	37.0	54.0	67.6	78.5	87.3	55.4
Northern Canada	32.3	55.5	70.0	77.7	88.9	46.3
Canada						
Registered Indians	31.1	48.7	64.5	77.8	90.7	49.4
All Others	43.6	60.9	70.9	79.2	87.8	67.4

- Notes: 1. Labour Force Participants are those who are employed or actively seeking employment, as defined by the 1981 Census Dictionary. The Labour Force Participation Rate is the number of labour force participants as a proportion of the total population 15 or older, expressed as a
 - 2. Grades 11-13 include both those with and those without high school certificates.
 - 3. Northern Canada refers to Yukon and the Northwest Territories.

Table 5.7
Employment Rates of the Registered Indian Population 15 or Older Not Attending School Full-Time
By Educational Attainment, Canada and Provinces/Regions, 1981

Province/Region	Less Than Grade 9	Grades 9-10	Grades 11-13	Some Post Secondary	University Degree	Total
	%	g	g.	%	%	8
Nova Scotia & Newfoundland	19.0	30.0	51.9	63.2	100.0	41.2
New Brunswick & PEI	19.0	24.3	19.7	66.4	100.0	33.5
Quebec	21.0	34.5	54.3	71.2	86.5	40.7
Ontario	27.3	41.6	58.0	70.7	86.9	46.1
Manitoba	22.9	32.7	49.9	63.1	90.7	33.3
Saskatchewan	22.2	32.7	55.1	62.8	96.9	34.2
Alberta	25.5	37.0	55.0	72.5	91.1	42.2
B.C.	28.1	40.0	55.4	68.5	89.1	44.5
Northern Canada	25.8	41.9	55.6	62.9	88.9	37.1
Canada						
Registered Indians	24.6	37.4	54.9	68.7	89.2	41.0
All Others	39.6	54.8	65.7	75.1	85.5	63.0

Notes:

- 1. The Employment Rate is the number employed as a proportion of the total population 15 or older, expressed as a percentage.
- 2. Grades 11-13 includes both those with and those without high school certificates.
- 3. Northern Canada refers to Yukon and the Northwest Territories.

employment rates. Moreover, the gap between Indians and non-Indians for all of these characteristics decreases as educational levels increase. Indians with university degrees, in fact, have better employment prospects than non-Indians with degrees, at least as measured by these rates.

As might be expected there are regional variations in employment characteristics. However, the effects of education are similar in all provinces. Comparing those with less than grade 9 to those with grades 9 and 10, we find that there is an increase in labour force participation for the more educated group which results in an improvement in the employment rates, but which also increases the unemployment rates. However, unemployment rates fall after this point, as both labour force participation rates and employment rates climb, both reaching over 80 per cent for those with university degrees. Although the differences among education groups are less dramatic, the non-Indian population's labour force characteristics respond in exactly the same way to educational attainment as do those of the Indian population.

Provincial/regional employment rates are broken down by age groups in Table 5.8. The highest Indian employment rates are found in Ontario, British Columbia and Alberta. Higher educational attainment is generally associated with higher employment rates among all age groups, although there are exceptions. Younger age groups usually have lower employment rates within a given educational category and province or region.

Table 5.9 provides a comparison of labour force characteristics for eight selected cities and four levels of educational attainment. Employment rates are lowest among the Indian populations of Saskatoon, Regina, and Winnipeg. These same cities have the greatest gap between Indian and non-Indian employment rates, while for cities such as Montreal and Toronto the gap is much smaller.

Table 5.8
Employment Rates of the Registered Indian Population 15 or Older
Not Attending School Full-Time
By Age Group, Educational Attainment, Canada and Provinces/Regions, 1981

Descriptor/		Highe	st Level	of Schooli	ng	
Province/ Region & Age	Less Than Grade 9	9-10	11-13	Some Post Secondary	Univer. Degree	Total
Nova Scotia & Newfoundland 15-19 20-24	22.2 25.9	* 32.4	% 55.6 44.4	* 82.4	*	22.6 47.3
25-29 30+ Total (15+)	54.5 14.6 19.0	30.4 39.1 30.0	53.8 57.1 51.9	61.2 56.5 63.2	* 100.0 100.0	52.0 38.5 41.2
New Brunswick & PEI 15-19 20-24 25-29 30+ Total (15+)	* 33.3 * 20.7 19.0	* 33.3 * 31.9 24.3	* * 24.0 19.7	* 47.6 47.6 68.4 66.4	* * * 85.7 100.0	7.0 33.8 29.2 36.2 33.5
Atlantic 15-19 20-24 25-29 30+ Total (15+)	14.3 29.3 25.0 17.7 19.0	* 32.2 26.2 35.5 27.8	26.9 31.3 33.3 42.6 37.4	50.0 70.9 61.4 63.5 63.9	* * 100.0 100.0	15.3 42.9 44.6 37.9 37.6
Quebec 15-19 20-24 25-29 30+ Total (15+)	7.9 17.3 24.8 22.3 21.0	14.6 34.9 37.4 43.3 34.5	44.8 55.5 60.7 51.6 54.3	53.7 76.6 70.1 71.7 71.2	* 87.5 88.9 86.7 86.5	22.8 48.4 52.8 38.8 40.7
Ontario 15-19 20-24 25-29 30+ Total (15+)	14.1 23.6 27.1 29.1 27.3	24.2 37.8 48.6 50.1 41.6	43.4 58.2 62.4 60.8 58.4	41.7 67.2 67.9 73.9 70.7	* 66.7 94.7 86.0 86.9	25.6 49.6 56.4 46.4 46.1
Manitoba 15-19 20-24 25-29 30+ Total (15+)	13.5 19.6 25.1 25.0 22.9	20.5 31.1 35.1 43.8 32.7	28.8 48.6 53.1 61.3 49.9	23.1 62.1 59.5 66.1 63.1	* 100.0 91.9 90.7	17.7 34.7 40.7 35.4 33.3
Y					cont	inued

Table 5.8 Continued

Drawinco/		Highes	t Level	of Schoolin	g	
Province/ Region & Age	Less Than Grade 9	Grades 9-10	11-13	Secondary	Univer. Degree	Total
Saskatchewan	%	%	%	%	%	%
15-19	11.3	15.7	40.0	43.8	*	16.7
20-24	22.1	28.3	58.8	58.7	*	35.4
25-29 30+	26.5 24.5	40.9 44.7	61.4 53.7	64.0 64.4	100.0 93.8	45.2 36.4
Total (15+)	22.2	32.7	55.1	62.8	96.9	34.2
Alberta						
15-19	11.7	22.7	41.7	52.9	*	22.3
20-24 25-29	31.1 35.5	36.8 42.4	55.1 56.6	64.8 75.0	87.5	46.6 54.5
30+	26.5	47.0	65.5	75.3	85.2	43.4
Total (15+)	25.5	37.0	55.0	72.5	91.1	42.2
B.C.						
15-19	14.4	26.7	40.5 56.0	52.9	*	28.6
20-24 25-29	23.4 31.0	36.8 39.3	58.7	68.6 66.9	100.0	46.6 51.8
30+	29.5	49.2	58.1	70.0	80.0	45.0
Total (15+)	28.1	40.0	55.4	68.5	89.1	44.5
Northern						
Canada	22.2	20.6	46.0	*	*	06.0
15-19 20-24	22.3 25.0	32.6 39.1	46.2 52.2	64.7	*	26.3 41.5
25-29	27.7	44.8	60.0	60.9	*	46.9
30+	26.6	51.0	63.3	66.7	*	36.0
Total (15+)	25.8	41.9	55.6	62.9	88.9	37.1
Canada -						
Registered Indians						
15-19	13.1	21.9	40.7	45.6	*	22.5
20-24	23.3	34.9	55.8	67.4	94.1	44.4
25-29 30+	27.9 26.4	41.6 47.8	59.0 57.9	67.4 70.8	93.2 86.8	50.9 41.7
Total (15+)	24.6	37.4	54.9	68.7	89.2	41.0
Canada –						
All Others				_		
15-19	36.4	45.0	67.6	75.2	87.1	58.2
20-24 25-29	52.8 53.8	63.9 63.7	77.9 71.8	84.7 82.2	90.7 90.0	77.7 76.5
30+	38.8	53.6	59.8	71.5	83.9	58.5
Total (15+)	39.6	54.8	65.7	75.1	85.5	63.0

Notes:

- 1. Grades 11-13 includes both those with high school certificates and those without.
- 2. The Employment Rate is the number employed as a percentage of the total population 15 or older.
- 3. Northern Canada refers to the Yukon and the Northwest Territories.
- * Data unavailable because of small cell size.
 Source: INAC Customized Data Based on The 1981 Census of Canada.

Table 5.9
Labour Force Activity of the Population 15 or Older
Not Attending School Full-Time By Educational Attainment
and Ethnicity in Selected Census Metropolitan Areas, 1981

City (CMA) and Highest Level of Schooling	Regi UR	stered In ER	dians LFPR	UR	All Other ER	LFPR
Montreal Less Than Grade 9 Grades 9 - 10 Grades 11 - 13 (no cert.) H.S. Certificate or Higher	% 15.3 14.6 17.9 9.4	% 37.3 46.1 53.4 72.2	% 44.0 53.9 67.2 79.7	9.2 11.8 11.4 6.2	% 39.9 52.2 58.3 74.2	% 44.0 59.1 65.8 79.0
Toronto Less Than Grade 9 Grades 9 - 10 Grades 11 - 13 (no cert.) H.S. Certificate or Higher	0.0	41.3	44.9	4.1	50.4	52.5
	15.5	49.4	59.2	5.6	62.5	66.2
	10.3	67.0	72.3	4.3	68.1	71.2
	3.5	81.7	85.0	2.6	80.6	82.7
Winnipeg Less Than Grade 9 Grades 9 - 10 Grades 11 - 13 (no cert.) H.S. Certificate or Higher	32.1	26.8	39.5	6.4	39.9	42.6
	29.3	33.0	46.7	7.3	56.7	61.1
	13.3	52.0	60.0	5.3	69.0	72.9
	10.4	67.7	76.2	3.5	77.3	80.0
Regina Less Than Grade 9 Grades 9 - 10 Grades 11 - 13 (no cert.) H.S. Certificate or Higher	28.8	30.6	43.0	6.0	38.8	41.3
	35.1	28.4	42.0	6.4	62.1	66.3
	0.0	48.1	59.3	3.7	73.3	76.1
	13.9	63.8	75.2	2.8	79.0	81.2
Saskatoon Less Than Grade 9 Grades 9 - 10 Grades 11 - 13 (no cert.) H.S. Certificate or Higher	0.0	18.5	22.2	7.5	36.0	38.9
	38.9	22.2	40.0	8.1	58.7	63.9
	0.0	40.0	45.0	5.8	70.8	75.1
	25.5	54.3	72.9	4.3	76.8	80.3
Calgary Less Than Grade 9 Grades 9 - 10 Grades 11 - 13 (no cert.) H.S. Certificate or Higher	0.0	43.8	50.0	3.2	47.4	49.0
	17.0	48.1	59.5	5.1	65.0	68.5
	0.0	61.5	69.2	3.5	73.0	75.7
	4.1	79.6	83.7	2.2	82.0	83.9

continued

Table 5.9 Continued

Labour Force Activity of the Population 15 or Older Not Attending School Full Time By Educational Attainment and Ethnicity in Selected Census Metropolitan Areas, 1981

	Regi	stered	Indians		All Other			
City (CMA) and Highest Level of Schooling	UR	ER	LFPR	UR	ER	LFPR		
	%	%	%	%	%	%		
Edmonton			-5					
Less Than Grade 9	20.0	28.1	35.1	5.5	43.5	46.0		
Grades 9 - 10	18.2	41.8	49.3	6.0	64.1	68.3		
Gr. 11 - 13 (w/o cert.)	0.0	66.1	66.1	4.0	72.9	75.9		
H.S. Cert. or Higher	6.1	75.8	81.4	2.6	81.8	83.9		
Vancouver								
Less Than Grade 9	20.6	28.8	35.6	8.0	35.5	38.5		
Grades 9 - 10	34.9	33.9	52.1	8.3	53.0	57.8		
Gr. 11 - 13 (w/o cert.)	20.0	52.6	65.7	5.6	61.7	65.4		
H.S. Cert. or Higher	9.5	75.2	83.1	3.5	76.1	78.8		
n.s. cerc. or migher	J	73.2	03.1	1 3.3	/ / / /	'0.0		
		·	l		j .	l		

Notes:

- 1. UR = Unemployment Rate Employment Rate
 - LFPR = Labour Force Participation Rate
- 2. Unemployment Rate is the number who are unemployed as a percentage of the total labour force participants.
- 3. Labour Force Participation Rate is the number who are participating as a percentage of the population 15 or older.
- 4. Employment Rate is the number employed as a percentage of the population 15 or older.
- 5. Reserve residents are not included in this table.

While employment rates measure labour force activity during the Census reference week, the 1981 Census also allows for an assessment of the amount of time individuals have spent working during 1980. 5.10 compares the proportion of those who had worked at all since January, 1980 who were employed more than 40 weeks of the year. Those who had completed their high school education were most likely to have worked for 40 weeks or more, while those with less than grade 9 were also relatively likely to have worked 40 weeks or more. Indian residents were more likely than on-reserve residents to have worked 40 weeks at each level of education, although the gap between the two groups was larger for men than for women. Men, in general, were more likely to have worked 40 weeks or more than were women. Overall, it is clear that more than half of the Indian population who were employed were actually underemployed (as defined by this measure).

The same measure of employment is used in Table 5.11, showing the degree of isolation or urbanization of the three main population groups. As expected, the more urbanized the community, the greater likelihood of working 40 weeks or more per year. While this proportion is lower for the on-reserve population than for the off-reserve Indian population, "urban reserve" residents may work a larger portion of the year than Indians living in rural areas or small towns. This is true for levels of schooling less than high school graduation. The gap between the Indian and non-Indian populations is smallest for those with the greatest educational attainment.

Another way of looking at employment levels is provided by Table 5.12. Here the proportion of those who worked since January 1980, who were mainly employed full time, is given for men and women. For all groups, women were more likely to be part-time workers. Indian men were generally less likely to work full time than non-Indian men, while Indian women with grade 11 or better were more likely than non-Indian women to have worked full time.

Table 5.10
Percentage Who Worked 40 Weeks or More in 1980
(Of Those Who Had Worked Since January, 1980)
By Ethnicity, Sex, Residency, and Educational Attainment, Canada, 1981

	inighest tever or schooling							
Ethnicity and Residency	Less Than Grade 9		Grades 9 - 10		Grades 11 - 13 w/o Certificate		High School Certificate or Better	
Edition of and restocates	M F		M F		M F		M F	
Registered Indians	og .	ď	જ	g	q	ď	8	Ŷ,
On-Reserve	38.7	39.5	37.1	32.2	41.7	34.3	55.7	50.2
Off-Reserve	51.7	40.6	42.3	36.2	48.9	39.9	63.9	55.4
A11 Others	71.4	64.0	68.2	57.2	67 . 5	58. 3	77.7	64.8

Note: All Others excludes non-Indians living on reserves.

Table 5.11 Percentage Having Worked 40 Weeks or More in 1980 (Based on Population Who Had Worked Since January, 1980) By Ethnicity, Residency, Isolation/Urbanization, and Educational Attainment, Canada, 1981

	Highest Level of Schooling						
Ethnicity, and Degree of Isolation/Urbanization	Less Than Grade 9	Grades 9-10	Grades 11-13 (w/o Cert.)	H.S. Certificate or Higher	Total		
On-Reserve: Registered Indians	8	9	%	%	q		
Remote and Special Access Rural Urban Total	34.1 37.5 46.7 38.9	29.8 33.5 40.8 35.3	34.6 38.4 42.0 38.9	51.1 51.8 55.3 53.4	37.2 40.8 48.3 42.7		
Off-Reserve: Registered Indians							
Rural/Small Towns Small Cities Large Cities Total	43.3 42.9 51.7 46.4	36.3 37.4 42.9 39.4	34.9 43.9 50.7 44.4	57.6 55.9 61.6 59.2	46.8 48.1 55.2 51.0		
Total Registered Indians	41.0	37.1	41.7	56.6	46.4		
All Others							
Rural/Small Towns Small Cities Large Cities Total	61.9 69.1 74.6 69.0	59.3 63.2 67.3 63.9	58.1 62.3 66.4 63.4	68.6 71.2 73.8 72.1	64.6 68.7 72.3 69.6		

- Notes: 1. Reserve geographic codes are based on "Classification of Indian Bands by Geographic Zone", Housing and Band Support Branch, INAC, December, 1983, revised August, 1984.
 - 2. Off-reserve classifications are: Rural/Small Towns = Populations < 5,000; Small Cities = 50,000 99,999; Large Cities = 100.000+.
 - 3. Remote and Special Access includes Registered Indians living on Crown lands.
 - 4. All Others excludes non-Indians living on reserves.

Table 5.12
Percentage of Those Who Worked in 1980 Working Mostly Full-Time
By Ethnicity, Sex, Residency, and Educational Attainment, Canada, 1981

Ethnicity and Residency	Less Th	an Grade 9	Grades	9 - 10		11 – 13 tificate	High School Cert. or Higher	
	Men	Wamen	Men	Women	Men	Women	Men	Warnen
Registered Indians	8	%	%	%	%	%	%	%
On-Reserve	83.8	67.6	83.1	71.9	82.9	76.1	89.2	78 . 5
Off-Reserve	80.3	66.5	80.8	62.3	75 . 8	63.8	88.9	74.4
All Others	89.7	70.3	85.5	63.2	80.2	60.8	91.4	71.8

Note: 1. All Others excludes non-Indians living on reserves.

Lastly, rather than looking at employment rates at a point in time, we can identify the proportion of the population 15 or older and not attending school full time who worked at any time during 1980. This is done in Table 5.13, and might be considered a truer measure of the level of partication in the labour market than the labour force participation rates cited above. (See Table 5.6). Again, the level of employment is directly related to educational attainment for all groups, regardless of residence or ethnicity. In addition, the gap between Indian and non-Indian employment is slight within any given educational group. The gap between on-reserve and off-reserve Indian residents is somewhat greater than the gap between Indians and others, particularly for educational attainment at the high school level or below. There is no clear relation between this measure of employment, however, and the degree of isolation or urbanization of individual's place of residence. For the on-reserve population, those living in remote and special access communities and Crown lands are most likely to have worked in 1980. This, combined with the low employment rates in these communities, suggests that there is a high level of seasonal work in these communities.

5.3 Education and Income

Educational attainment is also closely related to income levels. Two ways of reporting income have been used in this chapter: average incomes; and income ranges. As shown in Table 5.14, which reports incomes of those living in census families, men's average 1980 incomes were substantially higher than women's for all residency and ethnic groups. The gap between men's and women's incomes is generally greatest for non-Indians and for those over the age of 25. Large gaps in average income are also evident between age groups and between on and off-reserve Indian residents. The difference in incomes between off-reserve Indians and non-Indians is relatively small.

Table 5.13 Proportion of the Population 15 or Older Not Attending School Full-Time, Who have Worked During 1980, By Ethnicity, Isolation/Urbanization, and Educational Attairment, Canada

Isolation/	inguse level of substing							
Urbanization	Less Than Grade 5	Grades 5-8	Grades 9-10	Grades 11-13 w/o Cert.	High School Certificate	Trades Certificate	Some Univ.	Univ. Degree
On-Reserve, R. I.	q	ą.	જ	96	%	8	q	%
Remote & Sp. Access Rural Urban Total	28.4 22.3 23.0 25.3	42.7 37.6 40.5 40.1	52.5 49.5 51.0 50.9	67.1 56.7 58.6 60.1	77.0 71.1 70.5 71.8	79.5 78.9 80.7 79.8	84.2 81.9 81.7 82.4	91.1 95.5 89.9 91.1
Off-Reserve, R. I.								
Rural/Small Towns Small Cities Large Cities Total	36.3 30.0 29.1 32.4	41.7 49.0 46.2 45.3	59.3 57.7 56.0 57.4	69.7 70.0 68.8 69.4	75.6 77.0 81.6 78.7	80.2 82.4 81.7 81.5	83.6 85.3 84.1 84.3	93.4 90.0 92.8 92.2
Total, R. I.	26.4	39.8	53.5	64.5	75.8	80.7	83.4	91.8
All Others			! :					
Rural/Small Towns Small Cities Large Cities Total	29.6 27.6 37.4 33.3	49.9 44.3 49.3 48.6	62.4 61.3 63.5 62.7	68.5 70.2 71.5 70.4	73.4 75.3 76.7 75.6	80.0 80.2 82.0 81.1	79.7 81.8 84.1 82.8	89.2 89.8 89.8 89.7

- Notes: 1. R.I. = Registered Indians.
 - 2. On-Reserve categories are based on "Classification of Indian Bands by Geographic Zone", Housing and Band Support Branch, INAC, December, 1983, revised August, 1984.
 - 3. Off-Reserve classifications are: Rural/Small Towns = Populations Less Than 5,000; Small Cities = 5,000 -99,999; Large Cities = 100,000+.
 - 4. Remote and Special Access includes those living on Crown lands.
 - 5. All Others excludes non-Indians living on reserves.

Table 5.14 Average 1980 Income of the Population 15 or Older In Census Families Who Had Income in 1980, By Age, Sex, Educational Attainment, Ethnicity, and Residency, Canada

Residency, Ethnicity,	Highest Level of Schooling						
Age, Sex	Less Than Grade 9		Grades 11-13 w/o Cert.				
_	\$	\$	\$	\$			
On-Reserve, R.I. Less Than 25							
Male	3,370	4,517	4,791	6,669			
Female 25 or Older	2,548	2,786	3,179	4,315			
Male	8,441	10,495	11,728	13,270			
Female	5,065	5,782	7,252	8,591			
Off-Reserve, R.I. Less Than 25							
Male	5,901	5,141	4,974	8,046			
Female	2,945	3,518	3,776	5,411			
25 or Older			,	-,			
Male	12,142	14,171	17,533	18,124			
Female	5,434	6,103	7,091	9,430			
All Others Less Than 25							
Male	6,710	6,066	6,204	8,138			
Female	4,195	3,529	4,006	6,109			
25 or Older	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	0,023	,,000	0,100			
Male	13,954	17,565	19,637	23,696			
Female	5,945	6,930	8,192	10,612			

R.I. = Registered Indians.
 All Others excludes non-Indians living on reserves.

While educational attainment has a consistent and sizable effect on average incomes, it is overshadowed by the effects of sex, age, and residency. Indian women with high school certificates living off reserve, for example, average less income than Indian men living off reserve with less than a grade 9 education.

Table 5.15 also looks at average incomes of members of census families, comparing the effects of isolation/urbanization and ethnicity and education on income. From this table it is clear that the attainment of a high school education has an impact on income levels. While non-Indians clearly have higher incomes in more urbanized environments, this pattern does not apply consistently for the Indian population. Indians living off reserve in small cities tend to have the highest average incomes. In any case, there is little difference in income levels among the Indian population with less than a high school certificate, and the same is true of the non-Indian population.

Table 5.16, which refers to the total population 15 or older who had any income in 1980, compares men's and women's average incomes in the eight selected cities. Generally, education has relatively little impact on income at the high school level or below. Those with post-secondary training, and particularly those with university degrees, have much higher average incomes. Indian income levels tend to be lower in Winnipeg, Regina, and Saskatoon, than in the other cities. The average incomes of Indian women with less than grade 11 are especially low in these cities.

The vast majority of the Indian population living in census families had incomes of less than \$5,000 in 1980. (See Table 5.17). Only Indian men with a high school certificate or higher education had better than a 50 per cent chance of having incomes above \$5,000. The great majority of non-Indian women also had incomes less than \$5,000. Only non-Indian men were likely to receive a higher income than \$5,000.

Table 5.15
Average 1980 Income of the Population 15 or Older
In Census Families Who Had Income in 1980,
By Educational Attainment, Isolation/Urbanization,
and Ethnicity, Canada

Ethnicity and	Hi	Highest Level of Schooling					
Isolation/Urbanization	Less Than Grade 9	Grades 9-10	Grades 11-13 w/o Cert.	H.S. Cert. or Higher			
On-Reserve, R.I.	\$	\$	\$	\$			
Remote & Special Access Rural Urban Total	6,189 5,754 7,453 6,389	5,517 5,301 7,433 6,175	6,162 6,151 7,400 6,682	9,478 8,937 10,048 9,591			
Off-Reserve, R.I.	,						
Rural & Small Towns Small Cities Large Cities Total	7,310 7,682 7,110 7,331	7,077 6,972 6,581 6,835	7,057 7,621 6,933 7,152	10,925 11,259 11,225 11,153			
All Others	,						
Rural and Small Towns Small Cities Large Cities Total	10,028 10,394 10,930 10,495	10,367 10,700 11,037 10,743	9,678 10,331 11,024 10,514	13,956 15,116 16,500 15,619			

- On-Reserve classifications are based on the "Classification of Indian Bands by Geographic Zone", Housing and Band Support Branch, INAC, December, 1983, revised August, 1984.
- Off-Reserve classifications are: Rural and Small Towns = Population Less Than 5,000; Small Cities = 5,000 - 99,999; Large Cities = 100,000+.
- 3. R.I. = Registered Indians.
- 4. All Others excludes non-Indians living on reserves.
- 5. Remote and Special Access includes those living on Crown lands.

Table 5.16 Average 1980 Income of the Population 15 or Older (Who Had Any Income) By Educational Attainment, Sex and Ethnicity For Selected Census Metropolitan Areas (Excluding Reserves)

Highest Level of Schooling City, Ethnicity, and Sex Less Than Grades | Grades Some Univ. Grade 9 9-10 11-13 Post-Sec. Degr. **Montreal** 11,204 R. I. Men 9,747 11,714 14,483 29,246 13,059 Other Men 13,755 15,534 17,056 29,762 7,087 12,501 R. I. Women 9,386 5,481 8,052 Other Women 16,744 6,281 7,105 8,810 10,162 **Toronto** R. I. Men 12,717 10,755 24,067 7,060 14,838 Other Men 14,602 14,487 15,519 19,479 30,549 10,863 16,433 R. I. Women 5,181 6,123 6,169 Other Women 7,276 7,602 8,991 10,755 15,819 Winnipeg R. I. Men 6,709 6,237 8,060 12,267 16,114 12,262 14,782 17,742 26,748 Other Men 12,924 4,148 R. I. Women 3,922 5,547 7,352 11,422 6,174 Other Women 9,178 14,231 6,408 7,578 Regina R. I. Men 6,838 6,421 9,159 9,604 16,030 Other Men 13,947 14,673 19,381 29,116 R. I. Women 5,162 5,026 5,828 8,343 Other Women 6,462 7,383 8,260 10,185 15,993 Saskatoon 10,380 15,574 8,980 * R. I. Men 6,907 13,921 15,312 13,109 18,453 27,532 Other Men 4,204 7,994 7,845 R. I. Women 4,122 Other Women 6,225 6,249 9,095 13,940 7,634 **Calgary** R. I. Men 11,897 7,228 14,517 11,057 32,998 Other Men 15,203 14,595 16,871 20,834 5,751 R. I. Women 5,113 7,869 9,299 10,058 Other Women 7,078 6,973 8,903 10,657 14,482

continued

Table 5.16 Continued

City (CMA),	Highest Level of Schooling							
Sex, and Ethnicity	Less Than Grade 9	Grades 9-10	Grades 11-13	Some PostSec.	Univ. Degr.			
Edmonton	\$	\$	\$	\$	\$			
R. I. Men	9,647	8,785	10,811	15,271	13,579			
Other Men	15,245	15,943	16,588	20,733	28,822			
R. I. Women	7,175	5,792		8,467	15,442			
Other Women	6,871	7,266	8,663	10,304	15,412			
Yancouver								
R. I. Men	10,723	8,269	9,521	15,309	20,329			
Other Men	13,986	15,225	17,007	20,617	30,558			
R. I. Women	5,588	4,831	6,581		12,099			
Other Women	6,822	7,357	8,925	10,718	15,702			

- 1. R.I. = Registered Indians.
- 2. Grades 11 13 includes both those with and those without high school certificates.
- * Data unavailable because of small cell counts. (Saskatoon average 1980 income for R.I. men and women combined with university degrees was \$16,090. Calgary average 1980 income for R.I. men and women combined with university degrees was \$17,328. Regina combined figures unavailable because of small cell counts.)

Table 5.17
Percentage of the Population 15 or Older in Census Families,
In Individual Income Groups, By Educational Attainment,
Residency, Sex, and Ethnicity, Canada, 1980
(column percentages)

Highest Level of Schooling

Residency,	In girest Level of Schooling							
Ethnicity, Income Group		Than de 9		ides 10		11-13 Cert.	H.S.Ce	
	M	F	M	F	M	F	M	F %
	%	8	8	%	%	%	%	%
On-Reserve, R.I.							ŀ	
0 - \$ 4,999	54.3	81.9	63.0	85.0	59.2	79.4	31.4	58.2
\$ 5,000 - \$ 9,999	24.5	13.4	15.3	9.6	15.8	11.0	20.5	18.1
\$10,000 - \$14,999	10.4	3.0	9.1	3.5	9.5	5.9	18.3	13.3
\$15,000 - \$19,999	5.3	0.9	6.3	1.3	7.1	2.8	13.8	6.5
\$20,000 +	5.4	0.8	6.2	0.7	8.4	0.9	15.9	3.8
Off-Reserve, R.I.								
0 - \$ 4,999	45.3	72.0	61.4	75.6	56.4	70.1	21.2	48.6
\$ 5,000 - \$ 9,999	18.2	19.0	12.7	15.3	15.0	16.3	17.3	21.8
\$10,000 - \$14,999	12.9	6.2	8.8	6.4	9.4	9.7	15.0	16.1
\$15,000 - \$19,999	9.3	2.0	6.7	1.9	7.7	2.6	14.5	8.1
\$20,000 +	14.4	0.7	10.4	0.8	11.3	1.0	32.0	5.4
All Others	<u> </u>							
0 - \$ 4,999	22.6	70.6	37.9	71.3	38.3	65.3	15.7	47.6
\$ 5,000 - \$ 9,999	23.1	18.8	12.9	16.1	12.2	16.5	11.0	18.8
\$10,000 - \$14,999	17.8	7.5	13.9	8.5	13.0	11.6	12.9	16.7
\$15,000 - \$19,999	16.4	2.0	14.0	2.7	13.1	4.3	15.6	8.9
\$20,000 +	20.1	1.1	21.3	1.4	23.4	2.3	44.8	8.1

Notes: 1. R.I. = Registered Indians.

2. All Others excludes non-Indians living on reserves.

Those with a high school certificate or higher education are likely to have significantly better income levels than those with less schooling.

Figure 5.2 isolates the proportion of the population living in census families with individual incomes of \$15,000 or more in 1980. For each sub-group it is only at the high school certificate level that incomes rise dramatically. At all levels of attainment, sex and ethnicity are the dominant factors affecting income.

Table 5.18 looks at income groups for the population 15 or older in seven selected cities. (Saskatoon was excluded because of limited data availability.) Again, the key level at which incomes rise is the post-secondary level. It is also again apparent that Indian income levels are lowest in Winnipeg and Regina, and these are also the cities where the gap between Indian and non-Indian incomes is greatest.

5.4 Education and Mobility

With regard to mobility the 1981 Census identifies several categories based on the respondent's place of residence five years prior to Census day, 1981. If the person lives at the same address he or she is a non-mover. Those who have moved are divided between those whose former address was within the same census subdivision (non-migrants) and those who lived in different subdivision (migrants). The migrants are further divided into those who lived in the same province, a different province, or a different country.

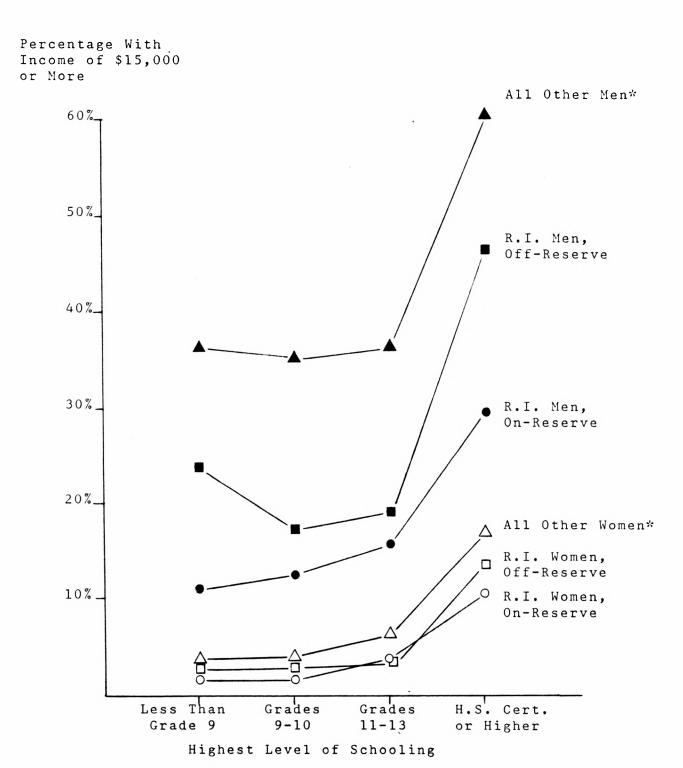
Table 5.19 groups all those who are not migrants together, and then subdivides the migrants into three groups, by province. The table is designed to identify differences among educational groups in the likelihood of being a migrant. As this table demonstrates, those with higher levels of education are generally more likely to be migrants, both within the provinces and from different provinces or countries.

Figure 5.2

Percentage of the Population 15 or Older in Census Families

With 1980 Individual Income of \$15,000 or More,

By Residency, Ethnicity, Sex, and Educational Attainment, Canada



Note: * Excludes an-reserve residents.

Table 5.18 Percentages of the Population 15 or Older in Individual Income Groups, By Educational Attainment and Ethnicity for Selected Census Metropolitan Areas (Excluding Reserves), 1980 (column percentages)

City and		Than	Grades 11-13			econdary	T-4-3		
Individual Income Group	R.I.	de 11 Others	R.I.	Others	Ed. or	Better Others	Tot R.I.	al Others	
	%	%	%	%	%	8	%	%	
Montreal #4 000	E4 2	40.0	42.6	41.2	22.0	20 1	44.0	20 7	
0 - \$4,999 \$5,000- \$9,999	54.3 23.3	49.2 20.8	42.6 25.2	41.3 17.1	33.8 19.4	28.1 14.3	44.0 22.6	38.7 17.3	
\$10,000-\$14,999	11.2	12.6	16.8	17.1	15.7	14.8	14.5	14.6	
\$15,000+	11.2	17.4	15.3	24.4	31.1	42.9	18.8	29.5	
Toronto									
0 - \$4,999	57.9	41.9	48.2	39.9	23.2	22.4	43.3	32.8	
\$5,000- \$9,999	25.5	22.0	21.2	16.3	21.7	14.1	23.1	17.0	
\$10,000-\$14,999	8.0	14.3	18.9	17.8	21.7	16.4	15.5	16.1	
\$15,000+	8.3	21.9	11.7	26.0	34.1	47.2	18.2	34.1	
Winnipeg								25. 2	
0 - \$4,999	74.0	47.7	58.6	40.0	41.1	24.4	64.2	35.9	
\$5,000- \$9,999	16.9	21.9	20.0	18.5 17.6	26.1 13.0	16.8 17.1	19 . 5	18.9 15.9	
\$10,000-\$14,999 \$15,000+	6.6 2.5	12.9 17.5	14.3 7.1	23.9	19.8	41.6	7.0	29.3	
\$10,000	2.0	17.5	/ •1	23.9	19.0	41.0	, . 0	29.5	
Regina									
0 - \$4,999	70.6	44.0	69.4	36.8	43.9	23.1	62.8	32.6	
\$5,000- \$9,999	17.3	22.1	11.3	16.8	20.3	14.6	17.3	17.3	
\$10,000-\$14,999 \$15,000+	8.1 4.0	13 . 0 21 . 0	9.7 9.7	18.8 27.7	18.7 17.1	15.3 47.2	11.3 8.8	15.6 34.4	
\$15,000	4.0	21.0	9./	2/•/	1/•1	4/ •2	0.0	J4 •4	
Calgary	50					•••	46.	•••	
0 - \$4,999	58.4	44.2	58.4	35.8	26.3	20.9	46.7	29.8	
\$5,000- \$9,999 \$10,000-\$14,999	18.8 11.4	21 . 0 12 . 8	13.5 15.7	17.6 18.6	23.4	14.8 15.9	19.2 15.5	16.9 16.0	
\$10,000 - \$14,999 \$15,000+	11.4	21.9	12.4	28.0	30.6	48.4	18.6	37.3	
	11.4	21.5	12.4	20.0		10.1	10.0	J/ •3	
Edmonton	F2 2	42.2		20.0	25.0	~ ^	40.4	20.0	
0 - \$4,999	53.3	43.3	57.4	36.6	35.9	20.8	48.4	30.6	
\$5,000- \$9,999 \$10,000-\$14,999	25.1 11.1	21.5 12.7	15.7 13.0	16.8 18.8	18.6 17.3	14.5 15.8	20.7 13.8	16 . 8 15 . 9	
\$15,000+	10.5	22.5	13.9	27.8	28.2	48.9	17.1	36.7	
)						_		
Vancouver ,	6E E	44.0	E2 4	20 1	2/1.0	22.2	E2 2	22.2	
0 - \$4,999 \$5,000- \$9,999	65.5 17.9	44.8 23.0	53.4 20.2	38.1 17.1	34.8 17.7	22.3 15.7	52.2 18.2	32.3 17.9	
\$10,000-\$14,999	7.7	10.8	14.4	15.9	19.2	14.6	13.0	14.0	
\$15,000+	8.9	21.4	12.5	28.9	28.4	47.4	16.4	35 . 8	
Ψ10,000	0.3	CT •4	16.0	د. د	20.4	7/ •4	10.4	30.0	

Notes: 1. R.I. = Registered Indians.

2. Grades 11 - 13 includes both those with and those without high school certificates.

Table 5.19
Percentages of the Registered Indian Population 15 or Older Who are Migrants
By Educational Attainment and Provinces/Regions, 1981
(column percentages)

Province/Region,]		Level of Schooli	ing	
Migrant Status	Less Than Grade 9	Grades 9-10	Grades 11-13 w/o Cert.	H.S. Cert. or Higher	Total
	%	3-10 %	%	nigita %	%
Nova Scotia & Newfoundland			·		v
Non-Movers/Non-Migrants	88.1	82.9	72.4	74.6	80.3
Migrants, Same Province	6.8	9.4	14.5	10.7	9.4
Migrants, Other Province	1.3	4.1	13.2	11.8	7.2
Migrants, Other Country	3.8	2.9	0.0	2.9	3.0
New Brunswick & PEI					
Non-Movers/Non-Migrants	85.6	83.9	89.4	82.5	84.9
Migrants, Same Province	10.5	10.9	3.5	8.2	8.9
Migrants, Other Province	*	4.4	*	7.1	4.2
Migrants, Other Country	*	0.6	*	2.2	2.1
Quebec					
Non-Movers/Non-Migrants	87 . 5	81.7	81.2	74.6	81.6
Migrants, Same Province	10.7	14.2	14.0	20.5	14.9
Migrants, Other Province	1.0	1.1	1.2	1.9	1.3
Migrants, Other Country	0.9	3.1	3. 6	3.1	2.2
Ontario (70.5		00.0
Non-Movers/Non-Migrants	88.0	80.5	78.5	71.9	80.2
Migrants, Same Province	9.8	17.0	18.0	23.5	16.7
Migrants, Other Province	1.4	1.6	2.0	3.0	2.0
Migrants, Other Country	0 . 8	0. 8	1.4	1.5	1.1
Mani toba	00.7	01.6	77.0	60.6	ດລຸລ
Non-Movers/Non-Migrants	89.7 9.5	81.6 14.7	77 . 9 17 . 6	69.6 25.5	83.3 14.2
Migrants, Same Province	0.8	3.5	4.1	4.9	2.4
Migrants, Other Province	0.0	0.2	0.4	0.0	0.1
Migrants, Other Country	0.0	0.2	0.4	0.0	0.1
Saskatchevan Non-Movers/Non-Migrants	88.1	78.0	71.5	67.0	80.3
Migrants, Same Province	9.7	18.4	23.7	25.2	15.8
Migrants, Other Province	2.2	3.6	4.5	7.4	3.7
Migrants, Other Country	0.0	0.0	0.3	0.4	0.2
engrants, outer wundy	0.0	0.0	0.5	U.T	0.2
					44

continued

Table 5.19 Continued Percentages of the Registered Indian Population 15 or Older Who Are Migrants By Educational Attainment and Provinces/Regions, 1981 (column percentages)

Province/Region,	Highest Level of Schooling						
Migrant Status	Less Than	Grades	Grades 11-13	H.S. Cert. or			
	Grade 9	9-10	w/o Cert.	Higher	Total		
	%	%	%	g	%		
Alberta	2021		<				
Non-Movers/Non-Migrants	86.1	76.0	72.4	59.3	75.2		
Migrants, Same Province	8.7	12.3	14.1	22.9	13.8		
Migrants, Other Province	5.2	11.1	12.9	16.3	10.3		
Migrants, Other Country	0.0	0.6	0.6	1.5	0.7		
British Columbia	l i						
Non-Movers/Non-Migrants	86.0	78.7	78 . 3	68.1	78.1		
Migrants, Same Province	12.1	18.6	17.3	25.0	18.1		
Migrants, Other Province	1.6	2.2	3. 8	6.0	3.2		
Migrants, Other Country	0.2	0.5	0.6	0.8	0.5		
Northern Canada							
Non-Movers/Non-Migrants	94.1	84.0	78.4	68.1	86.6		
Migrants, Same Province	4.0	10.0	13.5	14.7	7.7		
Migrants, Other Province	1.8	5.2	5.4	15.9	5.4		
Migrants, Other Country	0.1	0 . 8	3.7	1.3	0.3		
Canada							
Non-Movers/Non-Migrants	87.9	79.8	77 . 5	69.8	80.1		
Migrants, Same Province	9.8	16.0	16.8	22.7	15.4		
Migrants, Diff. Province	1.9	3.4	4.5	6.0	3.6		
Migrants, Diff. Country	0.5	0.8	1.3	1.4	0.9		
migrand, Diff. Couldy	0.5	0.0	1.5	1.47	0.5		

Notes:

- 1. Migrants are defined as those who lived in a different census subdivision on Census Day in 1976, than they did on Census Day, 1981. Movers include those who have moved within a census subdivision. Non-Movers/Non-Migrants are all those who are not Migrants.
- 2. Northern Canada refers to the Yukon and the Northwest Territories.
- * Figure unavailable because of small cell size.

Across Canada 30 per cent of the Indian population with a high school certificate or higher education were migrants, only 12 per cent of those with less than grade 9 had migrated. Most of the migration occurs within the same province, with only 22.6 per cent of all migrants coming from outside the province in which they lived in 1981.

Migration rates vary somewhat from province to province, with the highest proportions of migrants in Alberta and British Columbia, and the lowest proportions in New Brunswick and P.E.I., and Northern Canada. The effects of education on migration can be seen most dramatically in Alberta and Northern Canada. In Alberta, more than 40 per cent of the Indian population with high school or higher education were migrants, 16 per cent being from out-of-province. However, only 14 per cent of Alberta's Indian population with less than grade 9 were migrants. Northern Canada also had a high proportion (16 per cent) of out-of-province migrants among those with high school completion or higher education. At the other extreme, there was little difference in the proportion of migrants among education groups in New Brunswick and P.E.I.

Migration rates among Indian residents of selected cities are examined in Table 5.20. In this table, all migrants are grouped together, while the "non-migrants" are separated from the "non-movers". In contrast to the previous table, this table shows row percentages in order to indicate the likelihood of migrants having a given level of education in comparison with others. In Montreal, for example, 62 per cent of migrants had a high school certificate or higher, compared to 55 per cent of non-migrants and 50 per cent of non-movers.

The pattern shown in Montreal also applies in most other cities apart from Winnipeg, Regina, and Saskatoon. In these three cities there is relatively little difference in the educational attainment of migrants and others. These cities are located in the provinces with the lowest levels of Indian educational attainment across Canada, which may partially account for the differences from other cities.

Table 5.20
Comparison of the Educational Attainment of the Registered Indian Population 15 or Older,
By Mobility Status, Census Metropolitan Areas (Excluding Reserves), 1981
(row percentages)

	Hi	Total			
City (CMA) and Mobility Status	Less Than Grade 9	Grades 9 - 10	Grades 11 - 13 w/o Cert.	High Sch. Cert. or Higher	Popul'n 15 or Older
Mantucal	8	ч	g	8	N
Montreal Non-Movers Non-Migrants Migrants Total	25.2 21.7 12.8 21.2	15.8 14.9 11.5 14.6	9.0 8.9 13.5 10.0	49.6 54.9 62.2 54.2	1,330 1,175 740 3,250
Toronto Non-Movers Non-Migrants Migrants Total	15.0 17.9 14.8 16.1	26.7 23.9 21.7 24.2	17.9 14.1 10.8 14.3	39.9 44.1 52.7 45.5	1,365 1,735 1,385 4,480
Winnipeg Non-Movers Non-Migrants Migrants Total	28.6 34.2 29.1 31.4	29.5 31.5 28.7 30.3	17.7 9.0 11.5 11.7	24.5 25.4 30.3 26.5	1,100 2,225 1,220 4,540
Regina Non-Movers Non-Migrants Migrants Total	27.7 31.7 32.9 31.2	27.7 25.6 25.9 26.1	10.8 9.4 7.6 9.2	33.7 33.3 33.5 33.5	415 900 850 2,165
Saskatoon Non-Movers Non-Migrants Migrants Total	25.9 23.6 25.5 25.4	25.9 25.0 27.0 25.8	18.5 6.9 11.7 11.0	33.3 44.4 35.8 37.7	135 360 685 1,180
Calgary Non-Movers Non-Migrants Migrants Total	22.0 12.5 12.2 13.6	22.0 29.2 24.9 25.9	14.6 13.2 14.8 14.4	39.0 45.1 48.1 46.1	205 720 945 1,875
Edmonton Non-Movers Non-Migrants Migrants Total	34.9 26.7 19.4 25.3	18.1 21.0 14.6 17.7	16.9 16.5 14.6 15.6	30.1 35.2 51.0 41.5	415 880 1,030 2,315
				С	ontinued

Table 5.20 Continued Comparison of the Educational Attainment of the Registered Indian Population 15 or Older, By Mobility Status, Census Metropolitan Areas (Excluding Reserves), 1981 (row percentages)

	Hi	Total			
City (CMA) and Mobility Status	Less Than Grade 9	Grades 9 - 10	Grades 11 - 13 w/o Cert.	High Sch. Cert. or Higher	Popul'n 15 or Older
Vancouver Non-Movers Non-Migrants Migrants Total	23.1 20.7 15.3 19.7	% 20.8 25.6 25.0 24.0	15.8 13.4 11.9 13.8	% 40.3 39.9 47.5 42.7	N 1,515 1,640 1,600 4,755

Notes:

- 1. Mobility Status is based on place of residence five years previous to Census Day, 1981.
- 2. Non-Movers live at the same residence as they did five years before; Non-Migrants lived at a different residence within the same city; Migrants lived outside of the city.

It is important to emphasize, however, that this pattern of migration and education levels shows that recent migrants to these cities are more highly educated than the longer term residents. A variety of factors, such as age and the influx of Indian university and college students, may help explain such a pattern. Nevertheless, the emphasis of social planners during the 1970s on the needs of new Indian migrants to the cites may have been partially misplaced.

5.5 Education and Language Usage

Language usage was captured by the 1981 Census as home language, that is, the language currently spoken most often by the individual in the home. Table 5.21 examines this variable in relation to education, age, residency, and degree of urbanization or isolation. This table is based on the census family population 15 or older and therefore excludes those who are not living in census families. Two home language categories are used: those who speak an Amerindian language or Inuktitut in the home; and those who do not.

In general, those speaking an Amerindian language or Inuktitut have much lower educational attainment than others, being almost twice as likely to have less than a grade 9 education. Educational levels are higher off reserve than on reserve for both language groups. There is also a substantial gap in educational success between those under 25 and those 25 or older. An exception to this general pattern, however, is the high proportion (35 per cent) of young people, living in large cities, and speaking an Amerindian language who have completed high school.

The expected relationship between degree of isolation or urbanization and educational attainment holds up for most groups in this table. That is, the more urbanized population tends to be more highly educated.

Table 5.21 Educational Attainment of the Registered Indian Population
15 or Older in Census Families
By Home Language, Age, and Isolation/Urbanization, Canada, 1981
(row percentages)

Isolation/Urbanization, Age, and Home Language	Highest Level of Schooling						
Age, and nome canguage	Less Than Grade 9	9-10	w/o Cert.	H.S.Cert . or Higher			
	g	%	%	%			
On-Reserve, R.I.							
Remote & Special Access < 25 Years Old Amerindian H.L. Other H.L.	49.8 32.4	32.4 40.8	9.2 12.2	8.6 14.6			
25+ Years Old		,					
Amerindian H.L. Other H.L.	78.6 57.2	8.5 15.3	3.0 6.0	9.8 21.4			
Rural < 25 Years Old							
Amerindian H.L. Other H.L. 25+ Years Old	43.3 29.5	34.5 41.2	12.1 15.9	10.2 13.3			
Amerindian H.L. Other H.L.	70.4 49.2	11.1 18.5	3.6 6.7	14.8 25.7			
Urban < 25 Years Old							
Amerindian H.L. Other H.L. 25+ Years Old	28.5 16.5	38.8 39.4	15.3 19.3	17.4 24.8			
Amerindian H.L. Other H.L.	58.8 40.4	13.6 20.0	4.4 7.6	23.2 32.1			
Total < 25 Years Old							
Amerindian H.L. Other H.L. 25+ Years Old	43.3 24.9	34.4 40.4	11.5 16.4	10.9 18.3			
Amerindian H.L. Other H.L.	71.0 47.0	10.7 18.5	3.6 6.9	14.8 27.6			
			 continued	1			

Table 5.21 Continued

Isolation/Urbanization, Highest Level of Schooling Age, and Home Language Less Than Grades Grades 11-13 | H.S.Cert Grade 9 9-10 w/o Cert. or Higher Off-Reserve, R.I. Rural & Small Towns < 25 Years 01d Amerindian H.L. 48.0 29.3 6.7 14.7 26.7 Other H.L. 13.9 39.1 20.4 25+ Years 01d 20.7 Amerindian H.L. 68.0 8.9 2.4 Other H.L. 32.1 8.0 40.3 19.5 Small Cities < 25 Years 01d Amerindian H.L. 31.0 31.0 10.3 27.6 Other H.L. 12.8 40.4 20.5 26.5 25+ Years 01d Amerindian H.L. 39.8 21.3 3.7 35.2 Other H.L. 28.4 18.7 8.3 44.6 Large Cities < 25 Years 01d Amerindian H.L. 22.5 35.0 7.5 35.0 37.3 Other H.L. 11.6 20.7 30.4 25+ Years 01d Amerindian H.L. 14.1 4.7 29.7 51.6 Other H.L. 23.1 19.1 8.3 49.5 Total < 25 Years 01d Amerindian H.L. 38.2 31.3 8.3 22.9 Other H.L. 12.6 38.6 20.5 28.2 25+ Years 01d Amerindian H.L. 55.3 13.6 3.5 27.4 Other H.L. 27.2 19.1 8.2 45.4

Notes:

- 1. H.L. = Home Language. Amerindian Home Language includes Inuktitut. The home language is the language spoken predominantly by an individual in the home.
- 2. On-Reserve classifications are based on "Classification of Indian Bands by Geographic Zone", Housing and Band Support Branch, INAC, December, 1983, revised August, 1984.
- 3. Off-Reserve classifications are: Rural and Small Towns = Population less than 5,000; Small Cities = Population 5,000 99,999; Large Cities = Population 100,000+.
- 4. Remote & Special Access includes those living on Crown lands.

Table 5.22 is concerned with the average 1980 income of members of census families, again showing home language, education and isolation or urbanization. Here it is clear that education plays a more important direct role in affecting income levels than does home language (although home language plays an important indirect role through its influence on educational attainment). For most groups in this table, those who usually speak an Amerindian language at home have lower incomes than those who do not. Among the on-reserve population, however, this is not always the case. In urban reserves, and among those reserve residents with a high school or better education, the ability to speak an Amerindian language is able to command a higher income. Off reserve, however, the income gap between language groups favours those who use non-Indian languages at home, and is especially large for those with a high school certificate or higher education.

The results of these two tables suggest that those who use Amerindian languages at home may not be as fluent and comfortable in either of Canada's official languages, and that this lack of fluency is penalized within the schools and in the labour market. It may also be the case that language usage is associated with social networks which aid or impede educational and financial success.

5.6 Education and Family Status

The relationship between education and family status was also examined using census data. As shown in Table 5.23, lone parents tend to have lower levels of attainment than husbands, wives, or children. For example, 46 per cent of Indian lone parents have less than grade 9 education, compared with 42 per cent of Indian husbands and wives and 29 per cent of Indian children. The differences between husbands and wives and lone parents are not large, although there are substantial differences between these groups and children (15 or older) in census families. The major division in the table is between those living on reserve and those living off reserve. The pattern of educational attainment of those living off reserve is closer to that of the non-Indian population than to the on-reserve population.

Table 5.22

Average 1980 Income of the Registered Indian Population
15 or Older Who Have Income, In Census Families,
By Isolation/Urbanization, Home Language, and
Educational Attainment, Canada

Isolation	Highest Level of Schooling						
and	Less Than	Grades	Grades 11-13	H.S. Cert			
Home Language	Grade 9	9-10	w/o Cert.	or Higher			
	\$	\$	\$	\$			
On-Reserve, R.I.							
Remote & Special Access				4			
Amerindian H. L.	5,905	5,340	5,662	9,784			
Other H. L.	6,785	5,670	6,547	9,268			
Rural							
Amerindian H. L.	5,545	5,023	5,874	8,666			
Other H. L.	6,003	5,445	6,288	9,070			
Urban							
Amerindian H. L.	7,473	7,680	7,704	11,472			
Other H.L.	7,436	7,352	7,315	9,603			
Total			·				
Amerindian H. L.	6,130	5,885	6,346	10,062			
Other H. L.	6,726	6,323	6,832	9,388			
Off-Reserve, R.I.							
Rural & Small Towns							
Amerindian H. L.	5,555	5,328	8,587	7,953			
Other H. L.	7,643	7,149	7,030	11,046			
Small Cities							
Amerindian H. L.	6,984	6,026	*	9,768			
Other H. L.	7,740	7,025	7,708	11,322			
Large Cities			-				
Amerindian H. L.	5,159	5,682	7,553	7,394			
Other H. L.	7,270	6,607	6,926	11,326			
Total				-			
Amerindian H. L.	5,723	5,692	6,411	8,304			
Other H. L.	7,522	6,880	7,163	11,250			

- 1. On-Reserve classifications are based on "Classification of Indian Bands by Geographic Zone", Housing and Band Support Branch, INAC, December 1983, revised August, 1984.
- 2. Off-Reserve classifications are: Rural & Small Towns =
 Population less than 5,000; Small Cities = Population
 5,000 99,999; Large Cities = Population 100,000+
- 3. Amerindian Home Language (H.L.) includes Inuktitut. The Home Language is that language spoken predominantly in the home by an individual.
- 4. R.I. = Registered Indians.
- * Data unavailable because of small cell count.

Table 5.23
Educational Attainment of the Population 15 or Older In Census Families By Family Status, Residency, and Ethnicity,
Canada, 1981
(row percentages)

Residency, Ethnicity Highest Level of Schooling and Family Status Less Than | Grades | Grades 11-13 | H.S.Cert. Total w/o Cert. Grade 9 9-10 or Higher N On-Reserve, R.I. Husbands or Wives 52.4 18.3 6.6 22.7 56,025 Lone Parents 57.9 17.8 6.1 18.2 8,310 Children 35.3 35.9 14.1 14.7 31,400 Total 47.3 24.0 9.0 19.7 95,740 Off-Reserve, R.I. Husbands or Wives 23.5 20.9 9.6 46.0 34,050 Lone Parents 33.4 21.9 9.0 35.6 8,015 15,410 Children 16.3 40.6 21.0 22.1 Total 22.9 26.3 12.6 57,470 38.1 Total, R.I. Husbands or Wives 41.5 19.3 7.7 31.5 90,075 Lone Parents 45.9 19.8 7.5 26.7 16,325 Children 29.0 37.4 16.4 17.1 46,810 Total 38.1 24.9 10.4 26.6 153,210 All Others Husbands or Wives 21.5 10.4 13.5 54.6 11,071,005 Lone Parents 28.1 16.4 9.9 45.7 694,260 Children 6.6 23.8 22.5 47.0 3,275,555 Total 18.6 15.9 13.0 52.5 15,040,815

Notes: 1. R.I. = Registered Indians.

2. All Others excludes non-Indians living on reserves.

Table 5.24 is restricted to the population 15 or older living in census families, and provides a comparison of men and women at the highest and lowest levels of educational attainment (less than grade 9, and high school certificate or higher). The pattern among the Indian population is similar for those living on and off reserve. That is, female lone parents and children are more likely to have a high school certificate than male lone parents and children, while husbands are more likely to have completed high school than wives in husband-wife families. The pattern among non-Indians is different with respect to lone parents, in that male lone parents are more likely than female lone parents to have completed high school.

Table 5.25 looks at the average income levels of those living in census families by sex, education and family status. The wide gap in incomes between men and women is striking, particularly for Indians living off reserve and for non-Indians. In fact, there is little difference in incomes between Indian women living on reserve and those living off reserve. Indian men's incomes are substantially higher off reserve within the same educational and family category. Lone parents generally have lower incomes than husbands or wives. The gap between lone parents' and spouses' average incomes tends to be largest among Indian men living off reserve, and among those with a high school certificate or higher education.

5.7 Correlates of Educational Attainment

This chapter has explored the relationships between educational attainment and a number of other socio-economic variables. This section will examine these relationships in greater depth, first through an examination of the correlation between educational attainment and socio-economic status (SES) and then through a presentation of the results of several regression analyses.

Table 5.26 shows the relationship between SES as measured by the Blishen-McRoberts (1976) ranking of 1971 occupations, and educational attainment. There are sharp divisions among the three groups -

Table 5.24
Educational Attainment of the Population 15 or Older
In Census Families, By Family Status, Sex,
Residency, and Ethnicity, Canada, 1981
(row percentages)

Residency, Ethnicity, and Family Status	Highest Level of Schooling						
	Less Than Men	Grade 9 Women	H.S. Cert. Men	or Higher Women			
	%	%	%	%			
On-Reserve, R.I.							
Husbands or Wives	52.3	52.5	24.3	21.2			
Lone Parents	64.1	56.0	13.5	19.7			
Children	38.5	31.1	13.6	16.2			
Total in Census Families	47.6	47.0	19.8	19.6			
(N)	(22,365)	(22,890)	(9,295)	(9,565)			
Off-Reserve, R.I.							
Husbands or Wives	22.6	23.9	50.7	43.6			
Lone Parents	38.5	33.0	32.3	35.9			
Children	17.7	14.6	20.8	23.6			
Total in Census Families	21.1	24.0	38.0	38.2			
(N)	(4,375)	(8,805)	(7,880)	(14,040)			
All Others							
Husbands or Wives	22.3	20.8	56.7	52.5			
Lone Parents	31.4	27.4	46.8	45.4			
Children	7.7	5.2	45.5	48.9			
Total in Census Families	18.8	18.3	53.8	51.3			
(N)	(1,414,525)	(1,378,960)	(4,036,090)	(3,863,420)			
(11)	1 (1,717,020)	(1,0/0,500/	(+,000,000)	1 (0,000,420)			

Notes: 1. R.I. = Registered Indians.

2. All Others excludes non-Indians living on reserves.

Table 5.25 Average 1980 Income of the Population 15 or Older Who Had An Income In Census Families, By Family Status, Sex, Educational Attainment,
Residency, and Ethnicity, Canada

Residency, Ethnicity,	Highest Level of Schooling					
Family Status, and Sex	Less Than Grade 9	Grades 9-10	Grades 11-13 w/o Cert.	H.S. Cert or Higher		
	\$	\$	\$	\$		
On-Reserve, R.I.						
Husbands	8,784	10,554	11,416	13,455		
Wives	4,882	5,098	6,318	8,183		
Male Lone Parents	6,887	10,456	11,080	10,860		
Female Lone Parents	5,132	5,342	6,258	7,052		
Male Children	3,371	3,444	4,088	5,903		
Female Children	2,685	2,465	2,897	4,559		
Off-Reserve, R.I.						
Husbands	12,572	13,564	15,253	17,562		
Wives	5,154	5,582	6,229	8,968		
Male Lone Parents	11,041	10,526	20,510	15,387		
Female Lone Parents	5,470	5,665	6,554	8,465		
Male Children	5,511	4,005	3,983	6,782		
Female Children	2,209	2,503	3,060	4,419		
All Others						
Husbands	14,167	17,477	19,396	23,567		
Wives	5,866	6,583	7,751	9,995		
Male Lone Parents	12,389	16,151	18,874	23,137		
Female Lone Parents	6,224	7,292	8,810	12,074		
Male Children	6,664	5,139	5,438	7,777		
Female Children	4,617	3,025	3,265	6,035		
	,,02,	7,020	5,200	,,,,,		

R.I. = Registered Indians.
 All Others excludes non-Indians living on reserves.

Table 5.26 Proportion of the Experienced Labour Force 15 or Older In Socio-economic Categories By Residency, Educational Attainment, and Ethnicity, Canada, 1981 (row percentages)

Education, Residency, and	l .			SES		_
<u>Ethnicity</u>	No Code	1	2	3	4	5
	%	8	%	%	%	%
Less Than Grade 5	16.5	50 T	47.0		7.0	
On-Reserve, R.I.	16.5	53.7	17.8	3.2	7.2	1.6
Off-Reserve, R.I.	14.6	52.6	20.7	5.6	5.2	1.4
All Others	9.2	50.3	24.3	9.4	5.3	1.4
Grades 5 - 8	16.0	47.4	00.6			
On-Reserve, R.I.	16.0	47.1	20.6	6.4	7.0	2.9
Off-Reserve, R.I.	8.4	48.0	23.8	9.9	6.7	3.1
All Others	5.9	42.6	27.4	14.3	7.7	2.2
Grades 9 - 10						
On-Reserve, R.I.	18.1	40.8	18.8	7.9	9.9	4.5
Off-Reserve, R.I.	8.0	42.0	25.4	14.2	7.5	2.9
All Others	4.8	33.5	25.7	20.0	12.1	4.0
Grades 11-13 w/o Cert.			_			
On-Reserve, R.I.	23.3	31.4	16.4	7.9	14.8	6.2
Off-Reserve, R.I.	7. 7	32.0	19.8	20.9	14.4	5.2
All Others	3.8	25.4	19.6	24.8	18.9	7.5
Grades 11-13 w. Cert.						
On-Reserve, R.I.	33.7	23.1	11.7	9.3	14.7	7.8
Off-Reserve, R.I.	4.2	22.5	16.6	25.5	24.6	6.5
All Others	3.0	18.2	15.6	25.5	27.1	10.6
Other Non-Univ.						
On-Reserve, R.I.	19.8	24.7	16.9	9.3	17.6	11.5
Off-Reserve, R.I.	3.9	22.4	19.8	19.0	23.5	11.4
All Others	2.6	14.8	17.3	22.2	28.7	14.4
Some University						
On-Reserve, R.I.	21.3	9.9	5.2	7.1	25.0	31.5
Off-Reserve, R.I.	5.6	12.4	10.8	15.0	29.6	26.8
All Others	2.7	12.1	9.3	17.2	29.9	28.8
University Degree						
On-Reserve, R.I.	45.7	*	*	*	6.4	42.8
Off-Reserve, R.I.	5.6	4.5	3.8	6.9	18.8	60.8
All Others	2.0	3.4	3.1	6.2	18.4	66.8
Total				1		
On-Reserve, R.I.	20.0	35.4	16.9	7.3	12.2	8.2
Off-Reserve, R.I.	6.3	30.2	19.7	16.6	16.9	10.2
All Others	3.5	21.1	17.3	19.3	21.5	17.3

- SES = Socio-economic Status based on the Blishen-McRoberts classification of 1971 occupations. Index 1 is the lowest quintile and Index 5 is the highest. Those who have had jobs not classified by Blishen-McRoberts are categorized under "No Code". 2. R.I. = Registered Indians.
- 3. All Others excludes non-Indians living on reserves.
- Data unavailable because of small cell counts.

Indians living on reserve, Indians living off reserve, and others - in their distribution among SES quintiles. More than 30 per cent of both Indian groups fall into the lowest quintile (index 1) compared to 21 per cent of non-Indians, for example. When education is taken into account the differences among the three groups are substantially. The general pattern is that those Indians living on-reserve tend to have the lowest rankings, while non-Indians have the highest SES rankings. There are, however, exceptions to this pattern.

Tables 5.27 and 5.28 examine the effects of age, in combination with residency and education, on SES, looking at the lowest and highest socio-economic quintiles respectively. Younger adults are more likely to be in the lowest quintile and much less likely to be in the highest quintile. When both age and education are kept constant, the differences among the three groups tend to become quite small.

Over the course of Chapter 5 a number of interactions between educational attainment and other variables have been identified. It is often difficult to determine in the above tables which of the variables is of greatest significance. For example, does age, sex, place of residence, or ethnicity have the greatest effect on education? order to assess the relative effects of all the major variables several regression analyses were carried out using census data. provides the results of the first of these regressions, in which the dependent variable was whether or not the individual was employed. of educational attainment, age. sex. and urbanization, and ethnicity were estimated in this analysis. The population included all those over the age of 15 who were not full-time (Appendix E provides details on the results of this students. analysis).

The two most important variables affecting the likelihood of being employed were sex and educational attainment. In this case two

Table 5.27
Proportion of the Experienced Labour Force 15 or Older
In the Lowest Socio-economic Quintile
By Age, Residency, and Educational Attainment, Canada, 1981

	Residency, Ethnicity, Age							
Educational	On-Reser	ve, R.I.	Off-Reser	ve, R.I.	All Others			
Attainment	< 25	25 +	< 25	25 +	< 25	25 +		
	%	ď	8	%	%	%		
Less Than Gr. 5	56.5	64.5	*	63.9	54.5	55.5		
Grades 5 - 8	58.7	55.4	60.5	50.3	58.3	44.2		
Grades 9 - 10	56.8	44.9	53.4	39.4	48.8	29.9		
Gr. 11-13 w/o Cert.	44.1	38.7	42.0	25.0	36.5	19.7		
Gr. 11-13 w. Cert.	46.4	26.3	29.8	18.6	25.1	15.2		
Trades Certificate	34.6	29.6	27.6	21.8	20.9	13.5		
Some University	19.7	11.0	17.9	11.5	22.0	8.6		
University Degree	*	*	*	3.4	9.0	2.9		
Total	48.9	42.5	39.5	28.5	29.5	19.4		

- 1. R.I. = Registered Indians.
- 2. Socio-economic Quintiles are based on the Blishen-McRoberts classification of 1971 occupations.
- 3. Those without Blishen codes are excluded from these calculations.
- 4. All Others excludes non-Indians living on reserves.
- * Data unavailable because of small cell counts.

Table 5.28
Proportion of the Experienced Labour Force 15 or Older
In the Highest Socio-economic Quintile
By Age, Residency, and Educational Attainment, Canada, 1981

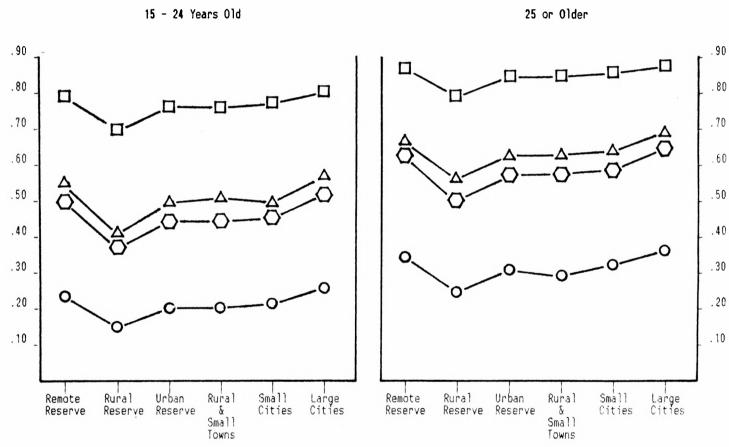
Residency, Ethnicity, Age							
Educational	On-Reser	ve, R.I.	Off-Reser	ve, R.I.	All Others		
Attainment	< 25	25 +	< 25	25 +	< 25	25 +	
	%	%	%	%	%	%	
Less Than Gr. 5	*	2.0	*	2.4	0.6	1.6	
Grades 5 - 8	2.1	3.8	0.9	4.2	0.7	2.51	
Grades 9 - 10	2.9	7.5	1.0	4.9	0.9	5.5	
Gr. 11-13 w/o Cert.	4.3	11.0	2.3	10.1	2.0	11.8	
Gr. 11-13 w. Cert.	4.0	17.6	2.4	10.4	3.5	15.1	
Trades Certificate	6.2	16.9	6.1	13.8	7.8	16.9	
Some University	19.7	44.5	14.5	33.5	12.1	36.7	
University Degree	*	80.9	50.0	66.4	42.4	71.1	
Total	4.3	12.4	4.1	14.4	6.6	21.6	

- 1. R.I. = Registered Indians.
- 2. Socio-economic Quintiles are based on the Blishen-McRoberts classification of 1971 occupations.
- 3. Those without Blishen codes are excluded from these calculations.
- 4. All Others excludes non-Indians living on reserves.
- * Data unavailable because of small cell counts.

Figure 5.3

Probability of Being Employed Among the Registered Indian Population 15 or Older
Not Attending School Full Time, By Age, Sex, Educational Attainment,
and Degree of Isolation/Urbanization, Canada, 1981





DEGREE OF ISOLATION OR URBANIZATION

Men with H.S. Cert. ▲ Men without H.S. Cert. ♦ Women with H.S. Cert. ♦ Women

educational attainment groups were compared - those with a high school certificate or higher, and those with less than a high school certificate. Differences between men and women explained more than 50 per cent of the variation in employment among the population, while differences in educational attainment explained almost 40 per cent of the variation. Age and degree of isolation were also statistically significant but accounted for less of the variation in employment. Ethnicity (not shown here) was also significant, but accounted for less than 1 per cent of the variation. Overall, the model was successful in accounting for 96 per cent of the total variation in the population.

It is clear from the figure that Indian women's employment success is severely curtailed compared to men's success. Women with a greater amount of education are less likely to be employed than men with less education. Although not shown in the figure, the 15 - 24 year old age group is less likely to be employed than those over 25. In terms of place of residence, those living on rural reserves have the poorest chances of being employed, and those living at the two extremes - in remote reserves or in large cities have the greatest likelihood of being employed. Within this context, educational attainment has a major impact on employment opportunities. Indian high school graduates have employment rates which are 20 to 30 percentage points higher than those of non-graduates, other things remaining constant.

In interpreting this information it should be remembered that what is being measured is employment at a point in time: June, 1981. Seasonal and cyclical employment patterns will have influenced these results. Moreover, the quality of employment is not measured here. Both full-time and part-time employment is included, and of course, pay levels and other job characteristics vary greatly from job to job.

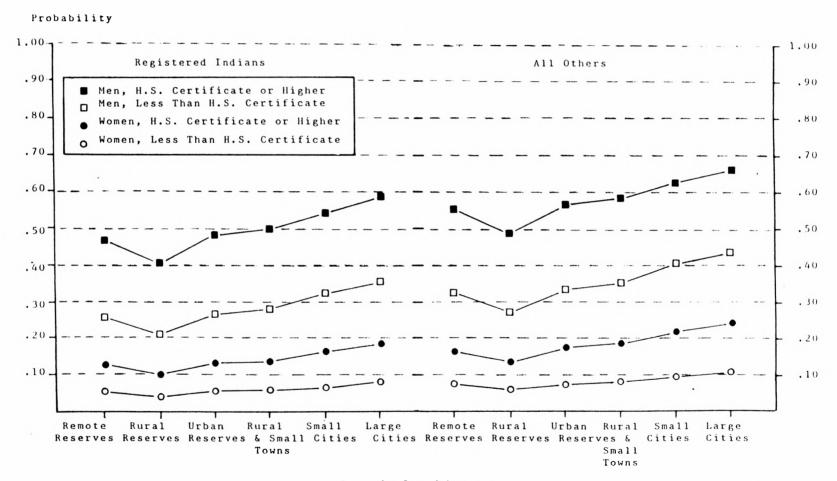
Figures 5.4 and 5.5 provide the results of a second regression analysis, examining the effects of education and other factors on income. The dependent variable, individual income in 1980, was defined in two categories: less than \$5,000; and \$5,000 or more. The figures show the proportion of each group estimated to have an income of \$5,000 or more. Only members of census families were included in this analysis.

The most important factor influencing income as defined was the individual's sex. Women (represented by circles) are much less likely than men to have had an income over \$5,000, even when they are better educated. Age is also an important factor, as may be seen by comparing Figure 5.4 (those aged 15 - 24) with Figure 5.5 (those aged 25 or older). For example, registered Indian men over 25 with at least a high school certificate are between 30 and 40 per cent more likely to have an income of at least \$5,000 than are younger registered Indian men in the same category. Age and sex, taken together, explain about 75 per cent of the variation in this model.

Educational attainment is also an important factor, as may be seen by comparing the shaded symbols with the open ones. For the younger men (Figure 5.4) having a high school certificate has a dramatic impact on probability of having an income of \$5,000 or more. This difference amounts to about 20 percentage points. For younger women, the effect of education is much smaller. Among the older population, and especially among older women, (Figure 5.5) education has a large impact on incomes.

Figure 5.4

Probability of Having 1980 Income of \$5,000 or More,
Population 15 to 24 Years Old Living in Census Families, By Ethnicity,
Sex, Degree of Isolation/Urbanization, and Educational Attainment, Canada

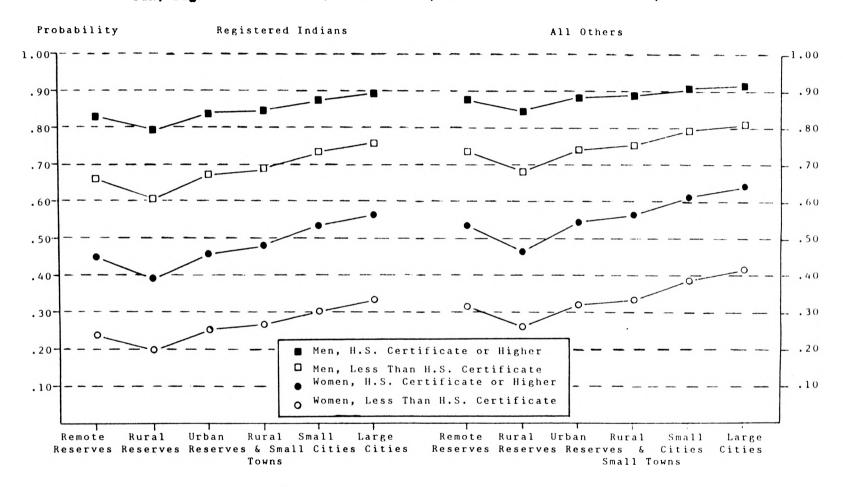


Degree of Isolation/Urbanization

Source: Logistic Regression Analysis of INAC Oustonized Data Based on The 1981 Census of Canada. (See Appendix E.)

Figure 5.5

Probability of Having 1980 Income of \$5,000 or More,
Population 25 or Older Living in Census Families, By Ethnicity,
Sex, Degree of Isolation/Urbanization, and Educational Attainment, Canada



Degree of Isolation/Urbanization

Source: Logistic Regression Analysis of BMC Oustonized Data Based on The 1901 Census of Canada. (See Appendix E.)

The other variables, ethnicity and isolation/urbanization, are relatively less important in these regressions. The differences in probability of having \$5,000 income or more between registered Indians and all others are usually in the range of 5 to 10 per cent, other factors being the same. Degree of isolation/urbanization also has an impact on income. The impact of isolation/urbanization is largest among younger Indian men and older Indian women. Younger Indian men living in large cities are almost 20 percentage points more likely to have incomes over \$5,000 than younger Indian men on rural reserves.

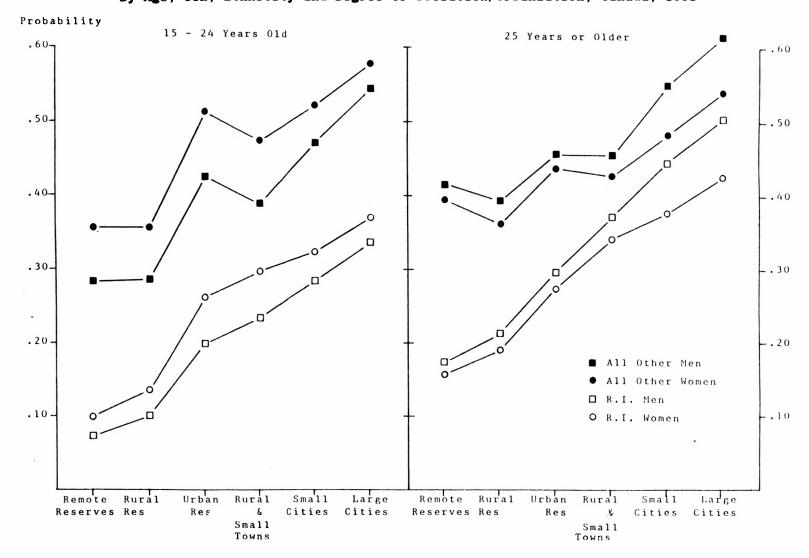
It should be noted that the choice of the individual income level used as a cutoff may have a large impact on the results of the analysis. This study did not explore all the possibilities in this regard. Therefore, these results may be seen as a first attempt to explore the relationships between income and the other variables. However, the conclusion here is that sex, age and educational attainment are the most important of the five variables affecting income, although isolation and ethnicity also have an impact.

We also need to ask how educational attainment itself is affected by other factors. In Chapter 3 it has been shown that parents' income and status, and home language affected success in elementary and secondary schools. It was also shown in Chapter 4 that marital status, age, sex, and previous educational success have an impact on post-secondary educational success. Figure 5.6 adds another dimension to this analysis by looking at the educational attainment of the adult population 15 or older in terms of isolation/urbanization variables as well as age, sex, and ethnicity.

It will be apparent immediately that isolation/urbanization has a major impact on attainment (defined as having completed high school or higher levels of education). There is almost a linear relationship between the change in isolation/urbanization and the probability of having a high school education, at least for registered Indians. Among

Probability of the Population 15 or Older Having Completed High School or Higher Levels of Schooling By Age, Sex, Ethnicity and Degree of Isolation/Urbanzation, Canada, 1981

Figure 5.6



Degree of Isolation/Urbanization

Source: Logistic Regression Analysis of INAC Customized Data Based on The 1981 Canada. (See Appendix E.)

the younger Indian population (aged 15 to 24), those in large cities are more than 20 percentage points more likely to have completed high school than those living on remote reserves. Among the older Indian population (25 or older) the differences are even greater between the more isolated and more urbanized populations.

Non-Indians tend to show a similar but less pronounced effect. However, the likelihood of high school completion among non-Indians is much greater than among Indians. The gap between Indians and non-Indians is smallest for those 25 or older living off reserve.

For both ethnic categories, younger women are more likely to have completed high school than younger men; but older men are more likely to have completed high school than older women. In other words, the effect of age on educational attainment is much greater for men than it is for women.

The interpretation of these results presents some problems. The effects of isolation/urbanization on the educational attainment of registered Indians are probably a combination of selective migration, the influence of local labour markets, and the influence of local social and educational institutions on the education of the local population. Both migration to seek employment and migration to obtain secondary and post-secondary education are important factors drawing Indian high school graduates to more urbanized areas. As has been shown above, urban migrants tend to have higher levels of education than longer term urban residents. (See Table 5.20).

The three regression analyses taken together show that the three major factors (at least among those examined) affecting Indian well-being are sex, age, and educational attainment. Isolation/urbanization variables are less important but have an impact on educational attainment as well as on income. Once other factors are taken into account, ethnicity is also a relatively less important factor in employment and income. On the other hand ethnicity seems to play an important indirect role through its impact on educational attainment. Of these factors, educational attainment is the one which is most subject to change through public policies and programs. detailed and localized studies are required to pin down the nature of the programs required to address educational problems. To some extent, such studies have already been done, though usually not in the context of Indian communities or students. The present study can only point to the major issues which should be addressed:

- * How should educational institutions and programs be structured in the context of a low-income high-risk student population?
- * How should educational programs be adjusted to allow students from culturally different backgrounds to succeed?
- * How should schools respond to the employment needs of Indian students and to the structure of local and regional labour markets?
- * What are the inter-relationships between educational activities and community or economic development? How can the educational system maximize the potential benefits of these inter-relationships?

These issues are not new; this study has merely confirmed and elaborated previous findings.

5.8 Conclusions

The educational attainment of the registered Indian population continues to lag far behind that of non-Indians. In terms of access to employment and increased income, educational attainment is important, particularly for those who complete high school or who obtain post-secondary training. Nevertheless, other elements are also very important in gaining employment and income, particularly an individual's sex, age, degree of isolation, and ethnic group.

As a "barrier to employment" therefore, educational attainment is only one of a number of factors to be considered. While educational levels among the Indian population must be improved, other measures will also be required to allow registered Indians to actually gain equity with the rest of the population in jobs and income. These will range from special measures to improve employment access among Indian women (for example, pay equity and affirmative action programs and regulations), to the economic development of Indian communities.

6. INAC EDUCATIONAL EXPENDITURES

A detailed review of the expenditures of Indian and Northern Affairs Canada (INAC) on education would be a major study in itself. To properly analyze these expenditures, detailed criteria of need would have to be developed which would take into account regional and sub-regional variations, and differences between grade levels, school types, and programs would have to be assessed. Moreover, the different budget categories used in different years and for different types of schools (band-operated vs. federal) would need to be untangled.

For the purposes of the present study a brief overview of INAC educational expenditures is provided for the 1980-81 through 1983-84 fiscal years (Table 6.1). It should be noted that capital expenditures are not included in these figures including operation and maintenance of educational facilities. Several of the enrolment trends identified in Chapters 2 and 3 are reflected in these expenditure trends. University and professional training (that is, "post-secondary" assistance) has experienced a steady increase over the four year period, while occupational skills training expenditures plummeted. (It should be remembered that responsibility for the occupational skills program was transferred out of INAC's Education Branch in 1983-84 - see Chapter 4, page 69). The proportion of expenditures allocated to bandoperated schools has been increasing while the proportion expenditures for "non-federal" (provincial and private) schools has been decreasing. Federal school expenditures, however, have remained nearly constant over the period, even though federal school enrolments have been falling as a proportion of Indian enrolments over this time period (See Table 2.4, Chapter 2).

The overall expenditures for education have experienced growth in excess of inflation during the four-year period, with most of the real growth occurring in 1982/83. Important factors in the growth of the budget in 1982/83 were: the \$26 million increase in

Table 6.1 INAC Education Expenditures, 1980/81 - 1983/84 Fiscal Years, Canada (column percentages)

	Fiscal Years					
Budgetary Categories	1980/81	1981/82	1982/83	1983/84		
	%	%	8	%		
Activity Administration	3.3	3.5	4.2	3.4		
Federal Schools	20.9	18.1	19.0	19.9		
Non-Federal Schools	((60.3	49.0	40.6	40.5		
Band Operated Schools	(60.3	14.1	15.5	16.0		
Elem/Sec. Counselling & Student Support	2.8	2.4	8.5	8.1		
University/Professional Training	6.7	8.4	8.7	9.9		
Occupational Skills Training	2.4	1.5	1.4			
Adult Education	0.8	0.3	0.2	0.1		
Adult Counselling & Referral	0.7	0.6	0.3	0.2		
Cultural Centres & Development	2.1	2.2	1.6	1.8		
TOTAL (\$1,000's)	270,054.9	301,814.4	390,140.7	426,242.6		
Annual Increase in Expenditures, percentage		11.8	29.3	9.3		
Annual Increase in Cost of Living, percentage		12.7	11.3	6.6		
Real Change in Expenditures, percentage		-0.8	+16.1	+2.5		

Notes: 1. Band Operated Schools were included with Non-Federal Schools in 1980/81.

- 2. Increase in cost of living is based on the Statistics Canada cost of living index for Canada as of April 1 for the years 1980, 1981, 1982 and 1983.
- 3. Real change in expenditures is calculated by increasing the previous year's expenditures by the percentage increase in the cost of living, and comparing this to the current year's actual expenditures.
- 4. These figures do not include capital costs.

Source: INAC Expenditure Accounting System.

elementary/secondary counselling and student support; the \$18 million increase in the band-operated schools expenditure category; and the \$19.5 million increase in the federal schools expenditure category.

Table 6.2 provides a comparison of costs per student, although it ignores budget areas such as administration and elementary/secondary student counselling and support. Expenditures per student have been highest in non-federal schools, and lowest in federal schools. In part, these differences in expenditures may reflect the proportion of each student group that is enrolled at the high school level. As noted in Chapter 2, the grades 10 through 13 enrolments amounted to 3 per cent of federal school enrolments, 9 per cent of band-operated school enrolments, and 20 per cent of provincial school enrolments.

Table 6.2
INAC Elementary and Secondary School Enrolments, Expenditures and Costs Per Student By School Type and Year,
Canada, 1980-81 to 1982-83
(1980 Constant Dollars)

School Type and Cost	Fiscal Year					
School Type and Cost Element	1980/81	1981/82	1982/83			
Federal Schools						
Enrolment Expenditures Cost/Student	26,574 \$ 56,359,200 \$ 2,121	22,526 \$ 48,567,100 \$ 2,156	21,825 \$ 59,204,600 \$ 2,713			
Non-FederalSchools			-			
Enrolment Expenditures Cost/Student	56,215 \$162,919,900 \$ 2,898	44,802 \$131,129,900 \$ 2,927	39,671 \$126,238,800 \$ 3,182			
Band-Operated Schools						
Enrolment Expenditures Cost/Student	(included in Non-Federal Schools)	13,133 \$ 37,706,300 \$ 2,871	15,911 \$ 48,195,300 \$ 3,029			

- 1. Non-Federal Schools include provincial and private schools (as well as band-operated schools in 1980/81).
- 2. INAC administrative costs, counselling, student support services, etc. are not included in these figures.
- 3. Dollars have been converted to 1980 dollars by using the Statistics Canada cost of living index for Canada as of April 1, 1980, 1981, and 1982.
- 4. Enrolments as of October of 1980, 1981 and 1982. (See Table 2.5, Chapter 2, page 31).
- 5. Expenditures are for fiscal years ending March 31, 1981, 1982 and 1983.

Source: Nominal Roll and INAC Expenditure Accounting System, INAC.

7. CONCLUSIONS

The foregoing chapters, taken together, paint a picture of Indian education in a period of rapid change. Enrolments have been growing and shifting dramatically, and the educational attainment of younger adults among the Indian population is improving. Nevertheless, there continue to be substantial differences in educational levels between the Indian and non-Indian segments of the Canadian population. Moreover, these differences have major impacts on the lives of the two groups in terms of employment, income, family structure, migration, and in turn, the education of the subsequent generations.

The factors influencing this pattern of change may be seen as falling into two groups: those factors affecting all Canadians, and those factors related to the unique history and circumstances of the Indian population in Canada. In general, the underlying set of forces influencing Indian educational attainment are much the same as those affecting other Canadians. The children of the poor do less well in school than children from more economically advantaged families. Those with lower levels of schooling do not have access to many types of employment. Other aspects of life (not documented in this study) are also affected such as health, housing or other circumstances. This pattern of interrelationships, which has a tendency to perpetuate disadvantage and social stratification in Canada, is well documented.

The registered Indian population, however, experiences a unique set of circumstances. They live primarily in geographically isolated and economically dependent communities. Linguistic and cultural differences act as barriers to Canadian social institutions, to jobs, and to education. The educational services being provided to Indians are still in the process of catching up with these unique needs and circumstances. This set of difficulties has worked in combination with the more general social structures of Canada to limit Indian access to education and other social goods.

The present study has identified many positive changes which show that progress can be and is being made. Educational attainment and direct Indian control of the educational systems affecting the reserve population are increasing. Moreover, there are a number of specific areas which the results of this study suggest can be usefully addressed by educational planners, program managers, teachers, band councils, and school boards responsible for educating Indian students. These include:

- * addressing the issue of effectively educating students with non-English linguistic backgrounds;
- * reducing the levels of age-grade deceleration and absenteeism among Indian students;
- * helping Indian students with the transition from high school to post-secondary education through counselling and other measures which address social and personal problems;
- * encouraging mature student admissions to post-secondary programs, and providing special entry mechanisms for these students;
- * addressing issues of sex role stereotyping and, generally, career and employment education and awareness, in order to broaden Indian students' educational and career goals;
- * addressing the problems of schooling in poor or depressed communities through such measures as increased local control, community participation, and community education;
- * developing alternative paths for post-secondary training and employment, such as community-based educational programs and job access programs similar to the New Careers model in Manitoba.

In conclusion, the present state of Indian education is one that shows limited progress, but which offers the opportunity for more effective initiatives in the future. It is to be hoped and expected that in the present era of Indian control and heightened awareness of Indian educational needs, the issues raised above will continue to receive the attention and effort they require.

APPENDICES

Appendix A:

Status/Ethnicity of
Students Included in the Nominal Roll
Data Base, 1978 - 1982

Table A.1
Status/Ethnicity of
Students Included in the Nominal Roll Data Base
Canada, 1978 - 1982

Type of Student	1978	1979	1980	1981	1982
Registered Indians	69,367	68,008	68,806	68,603	70,347
Inuit	1,595	1,779	1,840	1,976	1,962
Off-Reserve	7,352	8,434	9,041	6,527	1,871
Other Native Students	1,835	1,854	1,832	2,010	2,338
Non-Native Students	1,205	1,162	1,279	1,350	888
Unknown	5	Ø	3	Ø	6
Total	81,359	81,237	82,801	80,466	77,412
% Non-Native	1.5	1.4	1.5	1.7	1.1

- Other Native students include those who have lost their registered Indian status, non-Indian children of Indian mothers, non-Indian adopted children of Indian parents, among others.
- 2. Off-Reserve students are those registered Indian students who are temporarily living off reserve but are considered reserve residents. Some permanent off-reserve Indian students were also included prior to 1982.
- 3. Non-Native students are usually children of teachers and other band and federal government employees.

Source: Nominal Roll, Education Branch, INAC, 1978-82.

Appendix B:

INAC Regional Tables of Registered Indian Elementary/Secondary School Enrolments By Grade Level and School Type, 1978 - 1982

(Based on the INAC Nominal Roll)

1

Table B.1
Atlantic Region

Registered Indian Student Enrolments By Grade Level and School Type, 1978 - 1982

Grade Level & School Type	1978	1979	1980	1981	1982
K - 6					
Federal Provincial Band Private Total	1,395 749 6 24 2,174	1,348 700 7 29 2,084	891 734 463 46 2,134	843 694 510 32 2,079	608 623 772 26 2,029
7 - 9			,		
Federal Provincial Band Private Total	295 536 Ø Ø 831	301 505 Ø Ø 806	176 550 155 2 881	171 537 151 1 860	129 495 231 Ø 855
10 - 13					
Federal Provincial Band Private Total	18 321 Ø 1 340	10 332 Ø Ø 342	9 408 Ø 1 418	Ø 438 Ø 1 439	7 449 7 1 464
Special Education					
Federal Provincial Band Private Total	9 14 Ø 3 26	8 21 Ø 3 32	Ø 24 8 4 36	Ø 23 18 3 44	Ø 30 23 Ø 53
TOTAL					_
Federal Provincial Band Private Total	1,717 1,620 6 28 3,371	1,667 1,558 7 32 3,264	1,076 1,716 626 53 3,471	1,014 1,692 679 37 3,422	744 1,597 1,033 27 3,401

- 1. Enrolment as of October each year.
- 2. Provincial school enrolments include joint school and tuition students.
- 3. Students whose grade or school type are unknown are not included in these figures.
- 4. A small number of non-Indian students are included in the Nominal Roll. (See Appendix A).

Quebec Region

Registered Indian Student Enrolments By Grade Level and School Type, 1978 - 1982

Table B.2

Grade Level & School Type	1978	1979	1980	1981	1982
K - 6					
Federal Provincial Band Private Total	2,841 4,196 Ø 5 7,042	2,621 4,275 102 15 7,013	2,389 4,339 292 19 7,039	1,660 4,597 1,026 26 7,309	1,500 4,212 1,203 37 6,952
7 - 9				-	
Federal Provincial Band Private Total	203 1,777 173 63 2,216	134 1,937 109 80 2,260	153 1,853 107 101 2,214	44 1,804 241 96 2,185	69 1,719 249 83 2,120
10 - 13					
Federal Provincial Band Private Total	Ø 622 119 23 764	Ø 551 122 23 696	Ø 627 86 31 744	721 87 27 835	0 1,286 150 75 1,511
Special Education					
Federal Provincial Band Private Total	43 469 Ø 3 515	15 298 19 Ø 332	152 651 10 17 830	35 311 26 23 395	32 381 4 22 439
TOTAL				ā I	
Federal Provincial Band Private Total	3,087 7,064 292 94 10,537	2,770 7,061 352 118 10,301	2,694 7,470 495 168 10,827	1,739 7,433 1,380 172 10,724	1,601 7,598 1,606 217 11,022

Notes:

- 1. Enrolment as of October each year.
- 2. Provincial school enrolments include joint school and tuition students.
- 3. Students whose grade or school type are unknown are not included in these figures.
- 4. A small number of non-Indian students are included in the Nominal Roll. (See Appendix A).

Table B.3
Ontario Region

Registered Indian Student Enrolments By Grade Level and School Type, 1978 - 1982

Grade Level & School Type	1978	1979	1980	1981	1982
K - 6	(4)				
Federal Provincial Band Private Total	5,791 2,548 135 173 8,647	5,682 2,453 166 167 8,468	5,478 2,286 351 197 8,312	5,360 2,318 610 75 8,363	5,446 2,312 578 59 8,395
7 - 9	,				
Federal Provincial Band Private Total	1,145 2,050 24 120 3,339	1,246 1,905 27 96 3,274	1,173 1,801 52 112 3,138	1,130 1,800 132 65 3,127	1,263 1,712 143 69 3,187
10 - 13				÷	
Federal Provincial Band Private Total	21 1,781 18 55 1,875	25 1,884 29 75 2,013	22 1,882 24 71 1,999	18 1,916 22 59 2,015	20 2,049 53 58 2,180
Special Education					
Federal Provincial Band Private Total	47 234 Ø 3 284	57 161 Ø 4 222	67 151 Ø 6 224	88 141 11 4 244	91 211 3 6 311
TOTAL			-		
Federal Provincial Band Private Total	7,004 6,613 177 351 14,145	7,010 6,403 222 342 13,977	6,740 6,120 427 386 13,673	6,596 6,175 775 203 13,749	6,820 6,284 777 192 14,073

- 1. Enrolment as of October each year.
- 2. Provincial school enrolments include joint school and tuition students.
- 3. Students whose grade or school type are unknown are not included in these figures.
- 4. A small number of non-Indian students are included in the Nominal Roll. (See Appendix A).

Table B.4

Manitoba Region

Registered Indian Student Enrolments By Grade Level and School Type, 1978 - 1982

Grade Level & School Type	1978	1979	1980	1981	1982
K - 6					
Federal Provincial Band Private Total	5,078 3,633 1,302 4 10,017	4,960 3,692 1,421 1 10,074	5,011 3,701 1,664 Ø 10,376	3,664 2,490 3,371 Ø 9,525	3,638 2,264 3,498 Ø 9,400
7 - 9					
Federal Provincial Band Private Total	1,143 1,104 379 Ø 2,626	1,232 1,276 435 Ø 2,943	1,259 1,265 562 1 3,087	1,049 895 868 Ø 2,812	1,051 903 1,109 Ø 3,063
10 - 13					
Federal Provincial Band Private Total	231 552 186 Ø 969	189 657 189 Ø 1,035	201 734 226 Ø 1,161	190 722 322 Ø 1,234	209 747 407 Ø 1,363
Special Education					
Federal Provincial Band Private Total	1 224 5 Ø 230	5 226 65 Ø 296	12 190 113 Ø 315	Ø 115 94 Ø 209	Ø 66 115 Ø 181
TOTAL	a	:			
Federal Provincial Band Private Total	6,453 5,513 1,872 4 13,842	6,386 5,851 2,110 1 14,348	6,483 5,890 2,565 1 14,939	4,903 4,222 4,655 Ø 13,780	4,898 3,980 5,129 Ø 14,007

- 1. Enrolment as of October each year.
- 2. Provincial school enrolments include joint school and tuition students.
- 3. Students whose grade or school type are unknown are not included in these figures.
- 4. A small number of non-Indian students are included in the Nominal Roll. (See Appendix A).

Table B.5
Saskatchewan Region

Registered Indian Student Enrolments By Grade Level and School Type, 1978 - 1982

Grade Level & School Type	1978	1979	1980	1981	1982
K - 6					
Federal Provincial Band Private Total	4,213 4,991 1,314 10 10,528	3,974 5,006 1,211 5 10,196	3,755 5,007 1,203 18 9,983	2,887 4,332 2,048 14 9,281	2,256 2,627 2,805 6 7,694
7 - 9	-				
Federal Provincial Band Private Total	878 1,820 323 21 3,042	873 1,876 302 29 3,080	809 2,108 288 34 3,239	713 1,779 494 3 2,989	542 1,248 734 1 2,525
10 - 13					
Federal Provincial Band Private Total	196 591 93 17 897	207 703 76 22 1,008	220 751 95 25 1,091	244 584 198 3 1,029	195 582 387 6 1,170
Special Education					
Federal Provincial Band Private Total	299 102 15 416	39 334 91 7 471	64 369 42 4 479	31 269 211 Ø 511	60 183 150 Ø 393
TOTAL					
Federal Provincial Band Private Total	5,287 7,701 1,832 63 14,883	5,093 7,919 1,680 63 14,755	4,848 8,235 1,628 81 14,792	3,875 6,964 2,951 20 13,810	3,053 4,640 4,076 13 11,782

- 1. Enrolment as of October each year.
- 2. Provincial school enrolments include joint school and tuition students.
- 3. Students whose grade or school type are unknown are not included in these figures.
- 4. A small number of non-Indian students are included in the Nominal Roll. (See Appendix A).

Table B.6 Alberta Region Registered Indian Student Enrolments By Grade Level and School Type, 1978 - 1982

Grade Level & School Type	1978	1979	1980	1981	1982
K - 6					
Federal Provincial Band Private Total	2,692 4,439 121 9 7,261	2,516 4,340 176 4 7,036	2,615 4,596 299 5 7,515	2,487 4,556 472 Ø 7,515	2,581 3,715 733 Ø 7,029
7 - 9					
Federal Provincial Band Private Total	777 1,735 2 2 2,516	830 1,664 31 1 2,526	734 1,687 60 5 2,486	626 1,733 158 1 2,518	784 1,400 173 Ø 2,357
10 - 13					
Federal Provincial Band Private Total	260 831 81 2 1,174	270 767 53 Ø 1,090	237 852 67 1 1,157	249 822 115 Ø 1,186	261 793 115 Ø 1,169
Special Education					
Federal Provincial Band Private Total	133 103 5 16 257	143 106 Ø 16 265	74 142 Ø 19 235	58 120 Ø 5 183	101 116 3 2 222
TOTAL					
Federal Provincial Band Private Total	3,862 7,108 209 29 11,208	3,759 6,877 260 21 10,917	3,660 7,277 426 30 11,393	3,420 7,231 745 6 11,402	3,727 6,024 1,024 2 10,777

- 1. Enrolment as of October each year.
- Provincial school enrolments include joint school and tuition students.
- Students whose grade or school type are unknown are not included in these figures.
- 4. A small number of non-Indian students are included in the Nominal Roll. (See Appendix A).

Table B.7 British Columbia Region Registered Indian Student Enrolments By Grade Level and School Type, 1978 - 1982

Grade Level & School Type	1978	1979	1980	1981	1982
K - 6					
Federal Provincial Band Private Total	962 5,014 1,061 679 7,716	885 5,180 1,286 598 7,949	879 5,175 1,285 530 7,869	818 5,108 1,491 464 7,881	797 4,135 1,687 482 7,101
7 - 9					
Federal Provincial Band Private Total	186 2,872 181 214 3,453	124 2,822 236 190 3,372	146 2,744 191 151 3,232	122 2,650 204 126 3,102	145 2,308 211 135 2,799
10 - 13					
Federal Provincial Band Private Total	0 1,617 122 55 1,794	0 1,721 145 75 1,941	2 1,855 195 85 2,137	3 1,830 212 80 2,125	6 1,618 305 68 1,997
Special Education					
Federal Provincial Band Private Total	7 276 43 2 328	4 307 12 2 325	13 341 40 6 400	310 41 44 395	9 305 63 28 396
TOTAL					
Federal Provincial Band Private Total	1,155 9,779 1,407 950 13,291	1,013 10,030 1,679 865 13,587	1,038 10,115 1,711 772 13,636	943 9,898 1,948 714 13,503	948 8,366 2,266 713 12,293

- 1. Enrolment as of October each year.
- 2. Provincial school enrolments include joint school and tuition students.
- Students whose grade or school type are unknown are not included in these figures.
- 4. A Small number of non-Indian students are included in the Nominal Roll. (See Appendix A).

Appendix C:

Results of Regression Analyses of CEIS Data

Logistic Regression Model Estimates

Of Registered Indian CEIS Post-Secondary Students'

Probability of Success, Canada, 1979-1984 Period

Table C.1

Previous Grade Level Attained						
< 9	10 - 11	12+				
.4769 .4246	.6059 .5544	.6307 .5803				
.6399 .5899	.6672 .6188	.6916 .6449				
.5943 .4538	.7118 .5836	.7330 .6089				
.7407 .6184	.7631 .6464	.7828 .6716				
	.4769 .4246 .6399 .5899	.4769 .6059 .5544 .6399 .6672 .6188 .5943 .7118 .5836 .7407 .7631				

Source: Logistic Regression Analysis of INAC CEIS Data.

Table C.2 Results of Logistic Regression Analysis of Registered Indian CEIS Post-Secondary Students, Canda, 1979-1984 Period

		2		2			2	190
Step	Term Entered	X	d.f.	Change in X	Change in d.f.	R	% of Total X	
Ø	-	448.638	24	2	-	-		
1	Marital Status	316.279	23	132.359	1	.295	29.5	
2	Age	239.302	22	76 . 977	1	. 467	17.2	
3	Previous Educational Attainment	179.914	20	59.383	2	.599	13.2	
4	Sex	65.378	19	114.539	1	.854	25.5	
5	Sex and Age Interaction	38.628	18	26.758	1	.914	6.0	
6	Previous Education and Marital Status Interaction	24.467	16	14.188	2	. 945	3.2	

- Notes: 1. All effects significant at $\alpha = .001$ or better.
 - X² refers to the chi-square statistic.
 d.f. = degree of freedom.

 - 4. R = correlation coefficient.
 - 5. The Bio-med stepwise logistic regression analysis program was used in this analysis.

Source: Logistic Regression Analysis of INAC CEIS data.

Table C.3
Logistic Regression Model Estimates
Of Registered Indian CEIS Occupational Skills Students'
Probability of Succes, Canada, 1979-1984 Period

Marital Status	Previous Grade Level				
	≤ 9	10 - 11	12+		
Single Students	.4800	.5380	.5817		
Married Students	.5737	.6294	.6708		

Source: Logistic Regression Analysis of INAC CEIS Data.

Table C.4 Results of Logistic Regression Analysis of Registered Indian CEIS Occupational Skills Students, Canada, 1979–1984 Period

		2	_	2			2	
Step	Term Entered	X	d.f.	Change in X	Change in d.f.	R	% of Total X	
Ø	- (105.630	24	-	-	-		
1	Marital Status	72.173	23	32.456	1	.317	31.7	
2	Previous Educational Attairment	44.934	21	27 . 240	2	. 575	26.2	

- Notes: 1. Effects significant at $\ll = .001$.
 - X² refers to the chi-square statistic.
 d.f. = degrees of freedom.

 - 4. R = correlation coefficient.
 - 5. The Bio-med stepwise logical regression analysis program was used in this analysis.

Source: Logistic Regression Analysis of INAC CEIS Data.

Appendix D:

Provincial/Regional Tables of Educational Attainment
By Residency, Isolation/Urbanization, and
Ethnicity, 1981

Table D.1 Nova Scotia and Newfoundland Educational Attainment of the Population 15 or Older by Residency, Isolation/Urbanization, and Ethnicity, 1981

(row percentages)

Ethnicity and Isolation/Urbanization	Less Than Gr. 5	5 - 8	9 - 10	11 - 13 No Cert.	11 - 13 With Cert.	Trades Cert.	Univ. No Degree	Univ. Degree
	g	%	%	a a	ą	%	g	%
Total R.I.	5 . 5	25.6	22.3	10.0	4.3	22.0	8.8	1.4
On-Reserve, R.I.	7.0	28.6	23.1	9.3	2.1	22.0	7.8	0.2
Rural Urban	8.3 5.6	31.6 25.3	18.6 27.5	9.1 9.4	1.2 3.0	22.1 21.9	9.1 6.4	0.0 0.9
Off-Reserve, R.I.	2.9	20.2	20.9	11.2	8 . 3	22.0	10.5	3 . 6
Rural and Small Towns Small Cities Larger Cities	5.1 * *	24.8 21.7 14.1	23.1 11.7 24.2	3.4 23.3 13.1	12.0 1.7 8.1	20.5 28.3 21.2	7.7 6.7 16.2	5.1 * *
All Others	5.0	19.2	21.2	10.8	8.8	20.9	7 . 8	6.3
Rural and Small Towns Small Cities Larger Cities	6.7 3.8 2.2	23.5 17.9 11.1	22.9 21.5 17.3	9.9 11.8 11.8	8.5 9.2 9.1	18.9 22.2 24.0	5.6 8.1 12.3	4.0 5.5 12.2

Notes: 1. On-reserve residence categories are as defined in INAC's "Classification of Indian Bands by Geographic Zone" (1983, revised 1984).

2. Off-reserve categories are as follows: Rural and Small Towns = Less Than 5,000 population 5,000 to 99,999 Small Cities = Larger Cities = 100,000 or Greater.

4. R.I. = Registered Indians.

^{3.} All Others excludes non-Indians living on reserves.

^{5.} There were no reserves in Newfoundland in 1981; On-Reserve pertains only to Nova Scotia.

Data not available because of small cell size.

New Brunswick and PEI

Educational Attainment of the Population 15 or Older by Residency, Isolation/Urbanization, and Ethnicity, 1981 (row percentages)

Table D.2

Pahadada, and			0.1		14må.			
Ethnicity and Isolation/Urbanization	Less Than Gr. 5	5 - 8	9 - 10	11 - 13 No Cert.	11 - 13 With Cert.	Other Non-Univ.	Univ. No Degree	Umiv. Degree
	%	%	8	%	q	q	8	8
Total R.I.	6.5	27.3	22.4	13.8	3 . 9	17.5	6.3	2.3
On-Reserve, R.I.	8.6	27.4	22.9	15.1	3. 7	16.0	5.2	1.1
Rural Urban	10.0 7.5	24.0 31.5	26.0 18.8	18.0 11.7	2.4 5.6	15.2 16.9	3.6 7.0	0.8 0.9
Off-Reserve, R.I.	0.0	26.8	20.9	9.8	4.6	22.2	9.8	5 . 9
Rural and Small Towns Small Cities	* *	29.4 23.9	25.9 16.4	8.2 11.9	*	22 . 4 22 . 4	7.1 14.9	3.5 9.0
All Others	5.3	21.9	18.0	11.2	10.6	19.3	7.7	6.1
Rural and Small Towns Small Cities	6.7 3.3	25.6 16.6	18.9 16.7	10.7 11.8	9.9 11.5	17.7 21.5	6.0 10.1	4. 3 8. 5

Notes

- On-reserve residence categories are as defined in INAC's "Classification of Indian Bands by Geographic Zone" (1983, revised 1984).
- 2. Off-reserve categories are as follows: Rural and Small Towns = Less Than 5,000 population

Small Cities = 5,000 to 99,999

Larger Cities = 100,000 or Greater.

- 3. All Others excludes non-Indians living on reserves.
- 4. R.I. = Registered Indians.
- * Data not available because of small cell size.

Atlantic Region

(Newfoundland, Nova Scotia, PEI, and New Brunswick)

Educational Attainment of the Population 15 or Older by Residency, Isolation/Urbanization, and Ethnicity, 1981 (row percentages)

Fabricit, and		Highest Level of Schooling								
Ethnicity and Isolation/Urbanization	Less Than Gr. 5		9 - 10	11 - 13 No Cert.	11 - 13 With Cert.	Other Non-Univ.	Univ. No Degree	Univ. Degree		
	8	%	%	%	%	%	a,	8		
Total R.I.	6.1	26.3	22.4	11.8	4.1	20.0	7 . 8	1.7		
On-Reserve, R.I.	7 . 9	28.1	23.0	12.2	2.8	19.1	6.6	0.5		
Remote and Spec. Acc Rural Urban	- 9.2 6.5	- 27.8 28.5	- 22.5 23.5	13.7 10.5	- 1.6 4.3	- 18.5 19.7	- 6.6 6.7	- 0.2 0.2		
Off-Reserve, R.I.	2.1	22.4	21.0	10.7	7.0	22.1	10.3	4.4		
Rural and Small Towns Small Cities Larger Cities All Others	3.0 1.6 1.0 5.1	26.6 22.1 14.0 20.2	23.7 13.4 24.0 20.0	5.4 18.1 13.0 10.9	8.9 3.1 8.0 9.4	20.7 25.2 21.0 20.3	6.9 11.0 16.0	4.4 5.5 3.0 6.2		
Rural and Small Towns Small Cities Larger Cities	6.7 3.5 2.2	24.3 17.2 11.1	21.3 19.0 17.3	10.2 11.8 11.8	9.0 10.4 9.1	18.5 21.8 24.0	5.7 9.1 12.3	4.1 7.1 12.2		

Notes: 1. On-reserve residence categories are as defined in INAC's "Classification of Indian Bands by Geographic Zone" (1983, revised 1984).

2. Off-reserve categories are as follows: Rural and Small Towns = Less Than 5,000 population

Small Cities = 5,000 to 99,999

100,000 or Greater. Larger Cities =

3. All Others excludes non-Indians living on reserves.

4. R.I. = Registered Indians.

Quebec

Educational Attainment of the Population 15 or Older by Residency, Isolation/Urbanization, and Ethnicity, 1981 (row percentages)

Table D.4

Ethnicity and				Highest Level o	of Schooling	Othora	16-2	11-2
Ethnicity and Isolation/Urbanization	Less Than Gr. 5			11 - 13 No Cert.	11 - 13 With Cert.	Other Non-Univ.	Univ. No Degree	Umiv. Degree
	%	%	8	%	ď	%	%	8
Total R.I.	16.4	23.4	17.9	8.4	10.4	17.1	3.8	2.5
On-Reserve, R.I.	20.0	25.5	18.7	8.1	7.7	14.5	3.4	2.2
Remote and Spec. Acc. Rural Urban	30.9 31.2 13.1	26.0 28.5 24.6	19.2 17.0 18.9	6.8 6.3 9.1	4.4 2.7 10.1	9.1 11.3 17.4	2.2 2.5 4.1	1.4 0.9 2.8
Off-Reserve, R.I.	8.0	18.7	15.9	9.1	16.7	23.4	4.8	3.4
Rural and Small Towns Small Cities Larger Cities	13.0 6.9 5.3	21.6 20.3 16.7	16.2 18.1 15.3	8.4 9.1 9.4	11.9 13.8 20.2	24.4 23.7 22.9	3.0 4.7 5.8	1.5 3.5 4.4
All Others	5 . 8	20.5	12.2	7 . 5	16. 8	23.6	6.4	7.1
Rural and Small Towns Small Cities Larger Cities	7.2 5.5 5.3	25.7 21.1 18.0	13.6 12.5 11.5	7.8 7.9 7.3	16.2 17.8 16.8	22.2 25.4 23.9	3.7 4.9 8.1	3.7 4.9 9.2

Notes: 1. On-reserve residence categories are as defined in INAC's "Classification of Indian Bands by Geographic Zone" (1983, revised 1984).

2. Off-reserve categories are as follows: Rural and Small Towns = Less Than 5,000 population

Small Cities = 5,000 to 99,999

Larger Cities = 100,000 or Greater.

3. All Others excludes non-Indians living on reserves.

4. R.I. = Registered Indians.

Educational Attainment of the Population 15 or Older by Residency, Isolation/Urbanization, and Ethnicity, 1981 (row percentages)

				Highest Level o	of Schooling	-		
Ethnicity and Isolation/Urbanization	Less Than Gr. 5		9 - 10	11 - 13 No Cert.	11 - 13 With Cert.	Other Non-Univ.	Univ. No Degree	Umiv. Degree
	8	%	8	q	g	%	~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~	%
Total, R.I.	11.1	21.7	25.3	11.7	7.2	17.0	4.4	1 . 6
On-Reserve, R.I.	16.7	27.5	24.8	9.2	4.4	13.8	2.9	0.7
Remote and Spec. Acc Rural Urban	31.2 13.0 8.3	28.1 26.9 27.3	21.1 26.8 26.3	5.6 11.4 10.7	3.0 3.3 6.1	8.2 15.2 17.1	2.2 2.9 3.4	0.7 0.7 0.9
Off-Reserve, R.I.	3.9	14.5	26.1	14.8	10.8	20.9	6.2	2.7
Rural and Small Towns Small Cities Larger Cities All Others	6.1 3.8 3.0 3.6	18.4 14.7 12.5	25.7 26.6 26.0 15.7	15.5 14.8 14.5	11.1 11.5 10.3 13.0	17.0 22.2 22.4 22.9	4.3 4.5 8.0 7.9	2.0 1.8 3.5
Rural and Small Towns Small Cities Larger Cities	2.6 2.9 4.1	17.8 14.1 12.3	18.5 17.7 14.3	14.1 14.3 13.9	13.5 13.7 12.7	22.5 23.6 22.9	5.7 6.6 9.1	5.3 7.0 10.9

Notes: 1. On-reserve residence categories are as defined in INAC's "Classification of Indian Bands by Geographic Zone" (1983, revised 1984).

2. Off-reserve categories are as follows: Rural and Small Towns = Less Than 5,000 population Small Cities = 5,000 to 99,999

Larger Cities = 100,000 or Greater.

4. R.I. = Registered Indians.

Ontario

^{3.} All Others excludes non-Indians living on reserves.

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Educational Attainment of the Population 15 or Older by Residency, Isolation/Urbanization, and Ethnicity, 1981 (row percentages)

Table D.6

	- 0			Highest Level o	of Schooling			
Ethnicity and Isolation/Urbanization	Less Than Gr. 5			11 - 13 No Cert.	11 - 13 With Cert.	Other Non-Univ.	Univ. No Degree	Umiv. Degree
	· · · · · · · · · · · · · · · · · · ·	%	8	q	g	q	ag.	8
Total, R.I.	16.3	33.6	25.1	8.3	2.0	9.1	4.3	1.2
On-Reserve, R.I.	20.1	37.4	23.1	7.2	1.3	6.9	3.1	0.9
Remote and Spec. Acc Rural Urban	23.9 17.9 9.0	38.4 35.7 40.0	21.3 25.1 23.5	7.0 7.8 5.5	1.3 0.9 3.8	5.0 8.1 11.0	2.1 3.7 5.5	0.9 1.0 1.0
Off-Reserve, R.I.	8.1	25.4	29.6	10.6	3.4	14.0	7.1	1.8
Rural and Small Towns Small Cities Larger Cities All Others Rural and Small Towns Small Cities	14.7 5.8 6.7 4.0 5.3 3.8	27.4 25.0 24.9 16.8 24.5 17.7	29.0 27.4 30.5 17.6 20.1 18.0	8.6 9.3 11.7 15.8 16.2 15.2	3.2 2.7 3.6 9.1 7.7 8.4	13.7 17.5 13.0 20.3 16.3 22.8	2.9 11.0 7.3 8.7 6.0 7.8	0.6 1.4 2.3 7.6 4.1 6.3
Larger Cities	3.4	12.5	16.3	15.7	10.0	22.0	10.4	9.8

Notes: 1. On-reserve residence categories are as defined in INAC's "Classification of Indian Bands by Geographic Zone" (1983, revised 1984).

2. Off-reserve categories are as follows: Rural and Small Towns = Less Than 5,000 population

Small Cities = 5,000 to 99,999

Larger Cities = 100,000 or Greater.

3. All Others excludes non-Indians living on reserves.

4. R.I. = Registered Indians.

Table D.7 Educational Attairment of the Population 15 or Older by Residency, Isolation/Urbanization, and Ethnicity, 1981 (row percentages)

Ethnicity				Highest Level o	of Schooling	Others	16-4	16-2
Ethnicity Isolation/Urbanization	Less Than Gr. 5	5 - 8		11 - 13 No Cert.	11 - 13 With Cert.	Other Non-Univ.	Univ. No Degree	Univ. Degree
	%	%	8	%	%	8	8	- g
Total, R.I.	14.0	35.4	23.6	7.0	2.3	11.1	5.6	0.9
On-Reserve, R.I.	18.0	39.9	22.1	6.0	1.7	7.5	4.2	0.7
Remote and Spec. Acc. Rural Urban	31.6 15.6 15.9	39.5 40.7 35.3	14.4 23.2 25.0	4.6 6.3 5.9	1.0 1.7 2.7	6.0 7.6 8.5	2.2 4.4 5.6	0.8 0.6 0.9
Off-Reserve, R.I.	5 . 8	26.3	26.7	9.0	3.6	18.7	8.6	1.3
Rural and Small Towns Small Cities Larger Cities	9.1 4.0 4.5	29.3 26.1 24.6	27.6 26.8 26.0	6.9 10.5 9.9	3.8 1.4 4.3	16.4 21.4 19.1	5.5 9.4 10.2	1.2 0.4 1.8
All Others	3 . 4	18.4	17.8	15.8	8.8	20.1	9.3	6.3
Rural and Small Towns Small Cities Larger Cities	4.2 3.8 2.2	23.6 17.6 11.4	20.2 17.5 14.5	16.2 16.3 15.1	7.5 9.4 10.3	17.1 22.5 23.3	7.5 7.6 12.7	3.6 5.4 10.5

- Notes: 1. On-reserve residence categories are as defined in INAC's "Classification of Indian Bands by Geographic Zone" (1983, revised 1984).
 - 2. Off-reserve categories are as follows: Rural and Small Towns = Less Than 5,000 population Small Cities = 5,000 to 99,999 Larger Cities = 100,000 or Greater.

3. All Others excludes non-Indians living on reserves.

4. R.I. = Registered Indians.

Alberta

Educational Attainment of the Population 15 or Older by Residency, Isolation/Urbanization, and Ethnicity, 1981 (row percentages)

Table D.8

Estados.				Highest Level o	of Schooling	044	102	
Ethnicity Isolation/Urbanization	Less Than Gr. 5	5 - 8	9 - 10	11 - 13 No Cert.	11 - 13 With Cert.	Other Non-Univ.	Univ. No Degree	Univ. Degree
	g .	8	%	q	ď	8	8	8
Total, R.I.	10.4	28.7	23.8	11.8	4.6	15.1	4.5	1.2
On-Reserve, R.I.	14.0	34.8	23.9	10.4	3.1	10.0	3.3	0.5
Remote and Spec. Acc Rural Urban	22.1 18.2 10.1	34.7 42.0 31.7	23.3 20.9 25.4	8.2 6.8 12.4	0.7 2.1 4.2	7.5 8.2 11.4	3.0 1.6 4.1	0.5 0.2 0.6
Off-Reserve, R.I.	4.1	17.9	23.4	14.3	7.2	24.1	6.6	2.3
Rural and Small Towns Small Cities Larger Cities All Others Rural and Small Towns Small Cities Larger Cities	4.5 4.3 4.0 2.1 2.4 2.0 1.9	21.7 16.3 16.2 10.0 14.7 10.7 7.5	26.3 24.0 21.6 15.5 19.4 16.8 13.3	13.0 14.7 14.8 16.2 17.3 17.0 15.5	6.6 6.0 7.9 11.2 10.8 11.3 11.3	19.1 28.0 25.5 26.3 23.5 27.5 27.3	6.6 6.0 6.8 9.0 6.4 7.8 10.6	2.3 0.7 3.0 9.8 5.6 7.0 12.6

Notes: 1. On-reserve residence categories are as defined in INAC's "Classification of Indian Bands by Geographic Zone" (1983, revised 1984).

2. Off-reserve categories are as follows: Rural and Small Towns = Less Than 5,000 population

Small Cities = 5,000 to 99,999 Larger Cities = 100,000 or Greater.

3. All Others excludes non-Indians living on reserves.

4. R.I. = Registered Indians.

Table D.9
British Columbia

Educational Attainment of the Population 15 or Older by Residency, Isolation/Urbanization, and Ethnicity, 1981 (row percentages)

Ethnici ty	Highest Level of Schooling					Other	Univ.	Univ.
Isolation/Urbanization	Less Than Gr. 5	5 - 8	9 - 10	11 - 13 No Cert.	11 - 13 With Cert.	Non-Univ.	No Degree	
	%	%	%	%	%	%	8	8
Total, R.I.	8 . 5	23.4	28.2	13.1	7.0	14.8	4.2	0 . 9
On-Reserve, R.I.	12.3	27.8	28.3	12.2	5 . 9	10.7	2.5	0.3
Remote and Spec. Acc Rural Urban	12.0 14.0 10.5	32.7 28.3 23.5	27.6 27.2 30.0	10.3 12.2 13.6	4.5 6.0 7.1	10.7 9.6 12.0	2.0 2.2 3.3	0.2 0.5 0.1
Off-Reserve, R.I.	4.5	18.8	28.0	14.1	8 . 2	19.1	5 . 8	1.5
Rural and Small Towns Small Cities Larger Cities	5.7 4.4 3.1	20.0 20.9 14.8	29.3 29.2 24.9	14.8 13.6 13.6	8.0 7.8 8.9	16.8 18.5 22.8	4.5 5.5 8.1	0.9 0.2 4.1
A11 Others	2.4	10.3	15.2	16.0	12.0	25.1	10.6	8.3
Rural and Small Towns Small Cities Larger Cities	1.9 2.5 2.6	12.2 11.8 8.8	18.0 17.4 13.0	16.6 16.4 15.6	11.6 12.0 12.1	25.1 25.8 24.8	8.7 8.6 12.3	5.9 5.5 10.8

Notes: 1. On-reserve residence categories are as defined in INAC's "Classification of Indian Bands by Geographic Zone" (1983, revised 1984).

2. Off-reserve categories are as follows: Rural and Small Towns = Less Than 5,000 population Small Cities = 5,000 to 99,999

Larger Cities = 100,000 or Greater.

4. R.I. = Registered Indians.

^{3.} All Others excludes non-Indians living on reserves.

Educational Attairment of the Population 15 or Older by Residency, Isolation/Urbanization, and Ethnicity, 1981 (row percentages)

				Highest Level o	of Schooling			
Ethnicity Isolation/Urbanization	Less Than Gr. 5			11 - 13 No Cert.	11 - 13 With Cert.	Other Non-Univ.	Univ. No Degree	Univ. Degree
	%	%	%	%	%	ą.	q	R .
Total, R.I.	28.5	28.3	18.0	5.8	3.0	13.8	2.0	0.7
On-Reserve, R.I.	33.4	30.0	16.8	4.9	1.8	11.1	1.5	0.6
Remote and Spec. Acc	33.4	30.0	16.8	4.9	1.8	11.1	1.5	0.6
Off-Reserve, R.I.	14.0	23.3	21.4	8.4	6.5	21.7	3.7	0.9
Rural and Small Towns Small Cities	18.4 11.2	28.0 20.8	22.4 21.3	9.6 7.1	4.0 8.1	14.4 26.4	4.0 3.6	0.0 1.5
All Others	10.8	12.7	13.7	10.1	9.4	24.6	9.6	9.1
Rural and Small Towns Small Cities	21.4 1.4	19.8 6.3	14.3 13.2	6.8 13.0	6.0 12.4	19 . 9 28 . 9	6.0 12.8	5.7 12.2

- Notes: 1. On-reserve residence categories are as defined in INAC's "Classification of Indian Bands by Geographic Zone" (1983, revised 1984).
 - 2. Off-reserve categories are as follows: Rural and Small Towns = Less Than 5,000 population

Small Cities = 5,000 to 99,999

100,000 or Greater. Larger Cities =

- 3. All Others excludes non-Indians living on reserves.
- 4. R.I. = Registered Indians.

Source: INAC Customized Data Based on The 1981 Census of Canada.

Appendix E:

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Table E.1
Logistic Regression Model Estimates of
Probability of Being Employed Among the Population 15 or Older
By Ethnicity, Age, Sex, Education, and Isolation/Urbanization Canada, 1981

Group		Isolation/Urbaniz	ation			
(Registered Indians)	Remote and Special Access Reserves	Rural Reserves	Urban Reserves	Rural	Small Cities	Large Cities
Ages 25+						
Men		1				
With High School Certificate Without High School Certificate	.8622 .6627	.7923 .5451	.8386 .6201	.8364 .6163	.8454 .6321	.8725 .6825
Wamen						
With High School Certificate Without High School Certificate	.6163 .3354	.4949 .2353	.5717 .2954	.5677 .2920	.5842 .3062	.6374 .3558
Ages 15 - 24						
Men		:				
With High School Certificate Without High School Certificate	.7866 .5366	.6922 .4140	.7539 .4904	.7508 .5032	.7633 .4863	.8014 .5589
Women						
With High School Certificate Without High School Certificate	.4864 .2293	.3661 .1536	.4403 .1982	.4363 .1956	.4530 .2064	.5089 .2456

Continued

Table E.1 Continued Logistic Regression Model Estimates of Probability of Being Employed Among the Population 15 or Older By Ethnicity, Age, Sex, Education, and Isolation/Urbanization Canada, 1981

Group		Isolation/Urbaniz				
(All Others)	Remote and Special Access Reserves	Rural Reserves	Urban Reserves	Rural	Small Cities	Large Cities
Ages 25+						
Men						
With High School Certificate Without High School Certificate	.9137 .7688	.8659 .6697	.8979 .7342	.8964 .7310	.9025 .7441	.9205 .7844
Wamen						
With High School Certificate Withut High School Certificate	.7310 .4606	.6237 .3424	.6931 .4150	.6896 .4110	.7039 .4275	.7484 .4830
Ages 15 - 24						
Men						
With High School Certificate Without High School Certificate	.8618 .6621	.5444 .7919	.8382 .6195	.8360 .6156	.8451 .6315	.8722 .6819
Wamen						
With High School Certificate Without High School Certificate	.6157 .3348	.4942 .2348	.5710 .2948	.5670 .2914	.5835 .3056	.6368 .3551

Notes: 1. Remote and Special Access Reserves includes residents of Crown lands.

2. Rural (off-reserve) includes small towns (less than 5,000 population).

Table E.2
Results of Logistic Regression Analysis: Probability of Employment

		2		2			2
Step	Term Entered	X	d.f.	Change in X	Change in d.f.	R	% of Total X
Ø	-	590,235.9	93	-	-	-	-
1	Education	357,090.1	92	233,140.0	1	.395	39.5
2	Sex	58,708.2	91	298,380.0	1	.901	50.6
3	Age	36,562.1	90	22,148.0	1	.938	3.8
4	Ethnicity	33,795.1	89	2,768.0	1	.943	0.5
5	Isolation/ Urbanization	22,145.7	84	11,646.0	5	.962	2.0

Notes: (See Appendix C, Table C.1).

Table E.3 Logistic Regression Model Estimates of Probability of Having 1980 Individual Income of \$5,000 or More Among the Population 15 or Older By Age, Sex, Ethnicity, Education, and Isolation/Urbanization

	Group	1					
	•	Remote	Rural	ree of Isolatio Urban	Rural and	Small Small	Large
		Reserves	Reserves	Reserves	Small Towns	Cities	Cities
R.I., 1 Men	5 - 24						
	With H.S. Certificate Without H.S. Certificate	.4660 .2554	.4046 .2109	.4800 .2663	.4956 .2787	.5486 .3234	.5826 .3543
Wamen					=		
	With H.S. Certificate Without H.S. Certificate	.1246 .0530	.0998 .0418	.1308 .0559	.1381 .0593	.1654 .0723	.1854 .0821
R.I., 2 Men	5+						
	With H.S. Certificate	.8334	.7958	.8411	.8493	. 8745	.8889
	Without H.S. Certificate	. 6629	.6051	. 6754	.6889	.7326	.7588
Wamen			•				
	With H.S. Certificate	.4493	.3885	.4632	.4788	.5319	.5661
	Without H.S. Certificate	.2428	.1999	.2533	.2653	.3088	.3390
All Oth Men	ers, 15 - 24						
	With H.S. Certificate	.5507	.4884	•5646	•5799	.6307	.6622
	Without H.S. Certificate	.3252	.2729	. 3376	.3518	. 4017	.4353
Women							
	With H.S. Certificate	.1666	.1347	.1745	.1837	.2178	.2422
	Without H.S. Certificate	.0729	.0577	. 0767	.0813	. 0987	.1117
All Oth Men	ers, 25+	£.					
	With H.S. Certificate	.8754	. 8455	. 8814	. 8878	. 9073	. 9183
	Without H.S. Certificate	.7343	.6828	. 7451	.7568	. 7938	. 8155
Women							
	With H.S. Certificate	.5340	.4716	.5479	.5634	. 6149	. 6470
	Without H.S. Certificate	.3106	.2598	.3228	.3366	.3856	. 4188

Note: Remote Reserves includes residents of Special Access reserves and Crown lands.

Source: Logistic Regression Analysis of INAC Customized Data Based on The 1981 Census of Canada.

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Table E.4
Results of Logistic Regression Analysis: Probability of Having 1980 Individual Income of \$5,000 or More

	2			2	2		
Step	Term Entered	X	d.f.	Change in X	Change in d.f.	R	% of Total X
0	, -	5,130,707	93	-	-	-	-
1	Education	4,498,927	92	631,780	1	.123	12.3%
2	Sex .	2,228,537	91	2,270,390	1	.566	44.3%
3	Age	589,309	90	1,639,228	1	.885	31.9%
4	Ethnicity	580,115	89	9,194	1	.887	0.2%
5	Isolation/Urbanization	514,773	84	65,345	5	.900	1.3%
<u></u>		·					

Notes: (See Appendix C, Table C.1).

Table E.5
Logistic Regression Model Estimates of
Probability of the Population 15 or Older Having Completed
High School or Higher Levels of Schooling, by Age, Sex,
Ethnicity and Isolation/Urbanization, Canada, 1981

	Remote Reserves	Rural Reserves	Urban Reserves	Rural	Small Cities	Large Cities
15 - 24						
R.I. Men	.0726	.1007	.1991	.2328	.2848	.3375
R.I. Women	.0991	.1341	.2621	.2974	.3237	.3703
Other Men	.2818	.2840	.4253	.3887	.4724	.5398
Other Women	.3588	. 3578	.5179	.4740	.5222	.5790
25+				!		
R.I. Men	.1748	.2131	.2967	.3728	.4463	.5071
R.I. Women	.1572	.1903	.2744	.3423	.3781	.4270
Other Men	.4179	.3935	.4593	.4573	.5508	.6158
Other Women	.3911	.3638	.4361	.4283	.4844	.5410

Notes:

- 1. Remote reserves include residents of special access reserves and Crown lands.
- 2. Rural (off-reserve) includes small towns.

Table E.6
Results of Logistic Regression Analysis: Probability of Having High School or Higher Educational Attainment

Step	Term Entered	X ²	d.f.	Change in X ²	Change in d.f.	R	% of Total X ²
0	-	395,583.188	47	-	-	_	-
1	Sex	380,622.063	46	14,962	1	.038	3.8%
2	Age	374,828.375	45	5,794	1	.052	1.5%
3	Age & Sex	330,520.375	44	44,300	1	.164	11.2%
4	Ethnici ty	279,413.375	43	51,110	1	.294	12.9%
5	Ethnicity & Sex	279,208.250	42	214	1	.294	0.1%
6	Ethnicity & Age	277,991.688	41	1,224	1	.297	0.3%
7	Geography (Isolation/ Urbanization)	14,496.937	36	263,484	5	.963	66.6%
8	Geography & Sex	6,825.547	31	7 , 676	5	.983	1.9%
9	Geography & Age	6,077.207	26	752	5	.985	0.2%
10	Geography & Ethnicity	4,059.517	21	2,022	5	.990	0.5%

Notes: (See Appendix C, Table C.1).

BIBLIOGRAPHY

- Adams, Michael; Buckland, Federic L. <u>Post-Secondary Educational</u>
 <u>Opportunity for the Ontario Indian Population</u>. Ontario
 <u>Commission on Post-Secondary Education</u>. Ontario: 1972.
- Alberta Department of Education. <u>Study of School Programs for Alberta Natives: Inventory.</u> Calgary: August, 1982.
- Alberta Department of Education. Study of School Programs for Alberta Natives: Technical Report. Calgary: September, 1982.
- Allison, Derrick. "Fourth World Education in Canada and the Faltering Promise of Native Teacher Education Programs" in <u>Journal of Canadian Studies</u>, Volume 18, No. 3, Fall 1983.
- Assembly of First Nations. The Key. AFN. Ottawa: 1982.
- Assembly of Manitoba Chiefs, All-Chiefs Budget Committee. Our Tomorrows . . . TODAY; Different paths to quality Indian education in Manitoba. Winnipeg, 1984.
- Assheton-Smith, Marilyn. "The child called Indian: stigma, stereotype or cultural identity" in <u>Canadian Journal of Native Education</u>, Volume 7, No. 3, pp 16 27, Spring 1980.
- Balfour, M. Problems of Post-Secondary Education For Manitoba Indians and Metis. Manitoba Task Force on Post Secondary Education.

 Manitoba: 1973.
- Barnett, Don C. "Principles and issues underlying the Indian teacher education programs at the University of Saskatchewan", 1975.
- Belsher, Gayle. Evaluation of the Plains Indians Cultural Survival School. Calgary Board of Education, 1983.
- Bienvenue, Rita M. "Self-Evaluation of Native and Euro-Canadian Students" in <u>Canadian Ethnic Studies</u>, Volume 10, No. 1, pp 97 105, 1978.
- Blanar, Michael. "Native Studies at Brandon: A History and More" in Canadian Journal of Native Studies, Volume 1, No. 1, 1981.
- Blinkhorn, Kenneth. "Peguis adult high school program, an experiment in local control". Unpublished paper, Western Adult Education Conference, Red River Community College. Winnipeg: 1981.
- Blishen, Bernard R. and McRoberts, Hugh A., "A revised socio-economic index for occupations in Canada," <u>Canadian Review of Sociology and Anthropology</u>, Vol. 13, No. 1, February, 1976, pages 71 79.
- Blowers, E.A. "The economically disadvantaged and/or geographically isolated and/or Indian pupil: an identification problem?" in Canadian Journal of Native Education, Volume 8, pp 13 18, 1981.

- Brecher, Tom; Gauvin, Pierre; Klein, Sheila; and Larocque, Gilles.

 1981 Census Highlights On Registered Indians: Annotated Tables.
 Research Branch, Corporate Policy, Indian and Northern Affairs
 Canada, 1985.
- Brenner, Lynne. Report on the Second Year of the Kumtuks Alternative Rehabilitation Program of Templeton Secondary School: Research Report 78 06. Vancouver Board of School Trustees. Vancouver: 1978.
- British Columbia Ministry of Education. New Strategies in Indian Education: Utilizing the Indian Child's Advantages in the Elementary Classroom. British Columbia: February 1981.
- Brooks, Ian R.; Moore-Eyman, E. Native Students Services: Fourth
 Evaluation Report, 1976-77. Calgary University Office of
 Educational Development: 1977.
- Burnaby, Barbara J. <u>Language in Education Among Canadian Native</u>
 Peoples, 1982.
- Calgary Institute for Research. A Study of Brandon University Northern Teacher Education Project. Calgary, 1981.
- Canada. Indian Education in Canada. Department of Indian Affairs and Northern Development, Indian and Inuit Affairs Program, Education and Cultural Support Branch: 1973.
 - Canada. Indian Education Post School Highlights Regional Continuing Education Programs. Department of Indian and Northern Affairs, Indian and Eskimo Affairs Program: 1975.
 - Canada. <u>Indian Education Native Bilingual-Bicultural Education</u>

 <u>Programs.</u> <u>Department of Indian and Northern Affairs, Indian and Eskimo Affairs Program: 1976.</u>
 - Canada. <u>Issues in Indian Education</u>. Department of Indian Affairs and Northern Development, Education and Cultural Development Branch: 1976.
 - Canada. Summary Report of the Task Force on the Educational Needs of Native Peoples of Ontario. Canada: 1976.
 - Canada. Out of School Into the Labour Force. Ottawa: Statistics Canada, 1978.
 - Canada. Results of a Manitoba Reading and Assessment Study Conducted in Federal and Provincial Schools. Department of Indian Affairs and Northern Development: May, 1980.
 - Canada. Indian Demographic Workshop: Implications for Policy and
 Planning. Department of Indian Affairs and Northern Development
 and Statistics Canada. Ottawa: June, 1980.

- Canada. <u>Indian Conditions: A Survey.</u> Ottawa: Indian and Northern Affairs, 1980.
- Canada. <u>Indian Education Paper Phase I.</u> Department of Indian Affairs and Northern Development, Indian and Inuit Affairs Program, Education and Social Development Branch: 1982.
- Canada. Indian Education Project Volume Five: Results of a Survey of Indian School Principals. Department of Indian and Northern Affairs: February, 1983.
- Canada. Schedule of Indian Bands, Reserves and Settlements Including Membership and Population. Ottawa: Indian and Northern Affairs Canada, April, 1983.
- Canada. Indian Self-Government in Canada: Report to the Special Committee. Special Committee on Indian Self-Government: 1983.
- Canada. "Classification of Indian Bands by Geographic Zone," Housing and Band Support Branch, Indian and Northern Affairs, December, 1983, revised August, 1984.
- Canada. Annual Statistical Bulletin, 1982-83, National Training
 Program. Ottawa: Employment and Immigration Canada, Program
 Analysis and Information Directorate, March, 1984.
- Cardinal, Douglas J. <u>Indian Education in Alberta, A Working Philosophy.</u> Edmonton: Douglas Cardinal, Architect, 1974.
- City of Calgary, Social Services Department. <u>Native Needs Assessment.</u> Calgary, 1984.
- Clatworthy, S.J. Effects of Education on Native Behaviour in the Urban Labour Market. Canada Department of Employment and Immigration Task Force on Labour Market Development: 1981.
- Clatworthy, S.J. <u>Patterns of Native Employment in the Winnipeg Labour</u>
 <u>Market.</u> Winnipeg: Institute of Urban Studies, January 1981.
- Clatworthy, J.S. <u>Issues Concerning the Role of Native Women in the Winnipeg Labour Market</u>. Task Force on Labour Market Development: 1981.
- Clatworthy, S.J.; Hull J. <u>Native Economic Conditions in Regina and Saskatoon</u>. Winnipeg: Institute of Urban Studies, 1983.
- Cohnstaedt, Martin L. Northern Opportunities Training and Economic Development through Community-Centered Education: Report on Meadow Lake's Vocational Centre. Regina: June, 1973.
- Committee on Tolerance and Understanding. <u>Native Education in Alberta;</u>
 Discussion Paper No. 2. The Committee, Calgary, 1984.
- Conry, R. The Dropout Study. Task Force on Saskatchewan Indian Education, 1973.

- Couture, J.E. Secondary Education for Canadian Registered Indians

 Past, Present and Future: A Commentary. Department of Indian

 Affairs and Northern Development, Policy, Research and

 Evaluation Group, Research Branch: 1979.
- Couture, J.E. "Native Training and Political Change: A Personal Reflection: in <u>Canadian Journal of Native Studies</u>, Volume 2, No. 1. 1982.
- Cropley, A.J.; Cardey, R.M. "Contact with the dominant culture and cognitive competence in Canadian Indians and Whites", n.d.
- Cundick, Bert P.; Gottfredson, Douglas K; Wilson, Linda. "Changes in Scholastic Achievement and Intelligence of Indian Children Enrolled in a Foster Placement Program" in Developmental Psychology, Volume 10, No. 6, pp 815-820, 1974.
- Darnell, Frank. Education in the North. Selected Papers of the First International Conference on Cross-Cultural Education in the Circumpolar Nations and Related Articles. University of Alaska: 1982.
- Decore, A.M.; and others. <u>Native People in the Curriculum</u>. Alberta Department of Education. Edmonton: September, 1981.
- Department of Northern Saskatchewan. A Report to the Minister of Northern Saskatchewan on Education for the 1980s. Regina, 1981.
- Deprez, Paul. Education and Economic Development: The Case of Indian Reserves in Canada. University of Manitoba Centre for Settlement Studies: 1973.
- The DPA Group, Inc. <u>Post-Secondary Education Assistance Evaluation Study, Final Report.</u> Ottawa: Evaluation Branch, Corporate Policy, Indian and Northern Affairs Canada, 1985.
- Dumont, F.J. Alberta North Needs Assessment Task Force Interim Report
 Number One. Alberta Department of Education. Edmonton: June,
 1975.
- Elliott, John. Educational and Occupational Aspirations and Expectations: A Comparative Study of Indian and Non-Indian Youth. Antigonish: St. Francis Xavier University. 1970.
- Evaluation and Strategic Management Associates Ltd. "A Review of Previous Education Program Evaluation" in Evaluation Assessment: Elementary and Secondary Instruction Component of the Indian Education Program. March, 1982.
- Federation of Saskatchewan Indians. <u>Indian Education in Saskatchewan:</u>
 A Report by the Federation of Saskatchewan Indians, 1973.
- Federation of Saskatchewan Indians. <u>Task Force Report on Indian</u>
 <u>Education</u>. (3 vols.). Saskatoon: Saskatchewan Indian Cultural
 College, 1973.

- Foss, F.J.; Miller, W.S. A Study of Age/Grade Retardation of Indian Students in Manitoba. Education Branch, Indian and Inuit Affairs Program, Manitoba Region: 1981.
- Foss, F.J.; Miller, W.S. <u>A Study of Non-Attendance at Indian Schools.</u> Education Branch, Indian and Inuit Affairs Program, Manitoba Region: 1981.
- Grindstaff, Carl F. "An Evaluation of Summer Programs for Native Students on Campus: in <u>Indian Ed: Canadian Journal of Native Education</u>, Volume 7, No. 1, Fall 1979.
- Henson, Jane E. "Pedagogy and Politics in Native Literacy Projects:
 The Case of the Native Adult Learning Group" in <u>Canadian</u>
 <u>Journal of Native Studies</u>, Volume 2, No. 1, 1982.
- Hobart, Charles W. "Performance of Native Trainees in an Apprenticeship Training Program" in <u>Canadian Journal of Native Studies</u>, Volume 1, No. 1, 1981.
- Hudson, Grace. "Participatory Research by Indian Women in Northern Ontario Remote Communities: in <u>Convergence</u>, Volume 13, No. 1/2. pp 24 33, 1980.
- Hull, J. and McLaren, R. "Joint Socio-economic Comparison Study," unpublished report prepared for the Federation of Saskatchewan Indians, Saskatoon, 1975.
- Hull, J. <u>Human Resources for Northern Flood Development</u>. Prepared for the Northern Flood Committee, Winnipeg, WMC Research Associates, 1984.
- Hull, J. The State of Federal Schools in the Prince Albert District.
 Prince Albert: Department of Indian Affairs, Education Branch,
 1978.
- Hull, J. "Education, Training and the Disadvantaged". Unpublished paper, available from the author, October, 1981.
- Hull, J. <u>Natives in a Class Society</u>. Saskatoon: One Sky Cross-Cultural Centre, 1982.
- Hunter, Susanne; Kettle, Helen. Report on the Third Year of the Kumtuks Alternative Rehabilitation Program: Research Report 79-04. Vancouver Board of School Trustees, Department of Evaluation and Research: July, 1979.
- Hurlburt, Graham; Henjum; Eide, Lyle. "A Comparison of Academic, Career and Social Patterns of American Indian Students" in Journal of American Indian Education, pp 17-21, January, 1983.
- Indian-Eskimo Association of Canada. <u>Canadian Indian in Ontario's</u>
 School Texts: A Study of Social Studies Textbooks, Grades 1
 Through 8. Canada: 1972.

- Ingram, E.; McIntosh, G.; Peters, F.; Young, D. "Education North: A Case Study of a Strategy for Building School-Community Relationships: in <u>Canadian Journal of Native Education</u>, Volume 8, No. 4, Summer 1981.
- Ingram, E.J.; McIntosh, R.G. <u>The Education North Evaluation Project:</u> <u>Final Report.</u> University of Alberta: February 1983.
- Kay, Patrick. "Education of the Canadian Indian" in Multiculturalism, Volume 6, No. 4, 1983.
- Kirkness, V. <u>Evaluation Report: Education of Indians in Federal and Provincial Schools in Manitoba.</u> Ottawa: Department of Indian Affairs, 1978.
- Klein, Sheila and Wright, Wendy. The Development of Customized Status
 Indian Variables Using 1981 Census Data. Ottawa: Research
 Branch, Corporate Policy, INAC, 1985.
- Lenton, Sheila D. The Education of Indian Children Long Plain, Dakota
 Plains, Dakota Tipi Bands, Manitoba, 1965 1979: An
 Exploratory Study. September 1979.
- Loughton, John A. <u>Indian Metis Project for Careers in Teacher</u>

 <u>Education (I.M.P.A.C.T.E.): An Internal Evaluation.</u> Brandon:
 October 1974.
- Mackenzie, John. <u>New Careers: An Alternative Post-Secondary Education</u>
 <u>System.</u> Winnipeg, New Careers Program, n.d.
- MacKenzie, John. New Careers Competency Based Training and Education System. Winnipeg: Manitoba Department of Labour and Manpower, November, 1982.
- Macknak, Dennis A. "The Future of the University in Community Knowledge Settings," in <u>The Other Natives: The Metis,</u> Vol. III, MMF, 1982.
- Manitoba Audit Services Bureau. Operational Review: Manitoba, 1981.
- Manitoba Department of Education. Native Peoples: Department of Education Resources Pertaining to Indians, Inuit and Metis. Manitoba: 1982.
- Manitoba Indian Brotherhood. An Evaluation of IMPACTE Indian Metis Project for Careers in Teacher Education, August 1976.
- Manitoba Indian Brotherhood. The Shocking Truth About Indians in Textbooks. Winnipeg: 1977.
- Manitoba Indian Education Association. Manitoba Indian University Graduates. Winnipeg: 1983.
- Manitoba Indian Education Association, "An Action Plan for Special Education Funding and Service Development in Band-Controlled Schools," Winnipeg: M.I.E.A., June, 1984.

- Maracle, Shirley. "Native Students in Urban Schools" in ATA Magazine, Volume 60, No. 4, May 1980.
- Martin, D.G. <u>Patterns and Trends of University Achievement of Indian</u>
 <u>Graduates.</u> Department of Indian Affairs, Research Branch:
 <u>October 1979.</u>
- McCue, Harvey. "Native Values and Northern Education" in <u>Journal of Canadian Studies</u>, Volume 16, No. 2, Summer 1981.
- McDiarmid, G.L. <u>DINA Kindergartens in Ontario</u>. Ontario Institute for Studies in Education: 1978.
- National Committee of Indian Cultural Educational Centres. For Us to Decide Our Culture, Our Survival, Our Future: A Report on the Findings of Consultation on Indian Control of the Cultural Education Centres Program. March 1982.
- National Council of Welfare. <u>Poor Kids.</u> Ottawa: National Council of Welfare, March, 1975.
- National Council of Welfare. 1984 Poverty Lines. Ottawa: National Council of Welfare, March, 1984.
- National Indian Brotherhood. <u>Indian Control of Indian Education</u>.

 Policy paper presented to the Minister of Indian Affairs and Northern Development, 1972.
- Noonan, Anne. "A Review of the Adaptation-Not Assimilation (ANA) Program", 1978.
- Norton, Ken. <u>Bilingual Education: An Overview and Recommendations.</u> Yellowknife: Northwest Territories Department of Education, Programs and Evaluation Branch, June 1981.
- Owston, Ronald D. The Indian Students B. Ed Program How the University of New Brunswick Responded to the Needs of the Indian Community. New Brunswick: November, 1978.
- Owston, Ronald D.; MacIver, Donald A. An On-Campus, Off-Campus Model for Native Indian Teacher Education. Los Angeles: April, 1981.
- Owston, Ronald D. "A Cooperative Model for the Evaluation of Indian Community Schools: in <u>Canadian Journal of Native Education</u>, Volume 10, No. 3, Spring 1983.
- Parnell, Ted. "Barriers to Education", Yukon Association of Non-Status Indians, 1976.
- Perreault, J., Paquette, L. and George, M.V. <u>Population Projections of Registered Indians, 1982 to 1996.</u> Ottawa: Indian and Northern Affairs Canada, 1985.

- Pieternella, Gail. "Early school leaving and school progress of Native students in the Northwest Territories: an exploratory study" in Canadian Journal of Education, Volume 7, No. 4, Summer 1980.
- Price, John A. "Native Studies Versus the Academic Establishment" in Canadian Journal of Native Studies, Volume 1, No. 1, 1981.
- Read, Edith J. "Education Programs for Disadvantaged Adults: A Case Study Project Morning Star" in <u>Canadian Journal of Native</u>
 <u>Education</u>, Volume 10, No. 2, Winter 1983.
- Regnier, R.; Legg, P.J. <u>Our Children Are Waiting</u>: A Study of Federal and Band Operated Reserve Schools in Saskatchewan. Saskatoon: Saskatchewan Indian Cultural College, 1977.
- Robertson, Don A.; Loughton, A.J. BUNTEP: THE PROFILE OF A TEACHER EDUCATION PROJECT. Brandon: 1976.
- Robertson, Don A. "The Native child in the school system: in Manitoba Association of School Trustees Journal, Volume 8, No. 2, 1981.
- Saigaonkar, D.G. A Report on the Achievement and Destination of School Leaving Indian Students 1974-75. Departmental Statistics
 Division, Department of Indian Affairs and Norther Development: 1975.
- Saskatchewan Audit Services Bureau. <u>Operational Review: Education</u> Program. November 1979.
- Saskatchewan University Native Law Centre. <u>Program of Legal Studies</u> for Native People, 1978 Report. Saskatoon: 1978.
- Sealy, D. Bruce. The Education of Native Peoples in Manitoba, 1980.
- Senate of the University of Alberta. Report of the Task Force on Native Students. Calgary: 1978.
- Siggner, A.J.; and others. An Overview of Demographic, Social and Economic Conditions Among (Canadian Provinces') Registered Indian Population. Ottawa: Indian and Northern Affairs Canada, Research Branch, 1979 1982.
- Sloan, Leroy R. Morning Star Cycle Two (1977-1979): Evaluation. Edmonton: 1979.
- Sloan, Leroy R. Morning Star Cycle Two: Follow-up Study. Edmonton: 1980.
- Sloan, Leroy R. Morning Star Students: A Follow-Up Study. Edmonton: 1981.
- Stanbury, W.T. "The Education Gap: Urban Indians in British Columbia"in BC Studies, No. 19, Autumn 1973.
- Stanbury, W. Success and Failure: Indians in Urban Society.
 Vancouver: University of British Columbia Press, 1975.

- Stanbury, W.T.; and others. "B.C. Indians in an Urban Environment: Income, Poverty, Education and Vocational Training".
- Stevens, Harvey. A Review of the Living Conditions of Registered Indians in Manitoba in the 1970s. Winnipeg: Winnipeg Social Planning Council, 1982.
- Sulis, N.S. "Gitksan-Carrier Tribal Council Report on Education", 1974.
- Thomas Owen & Associates Ltd. <u>Barriers to Native Labour Entry and Employment</u>. Western Regional Office, Canada Department of Regional Economic Expansion: May 1976.
- University of British Columbia. "Indian Education Projects in B.C. Schools", June 1981.
- University of New Brunswick. <u>Bachelor of Education Indian Students</u>
 Program: Evaluation Report, 1979 1980.
- Van Der Keilen, Marguerite. "Some effects of a special Indian culture oriented program on attitudes of White and Indian elementary school pupils", 1977.
- Victoria Native Indian Education Commission. Final Report to the Greater Victoria School Board. January, 1980.
- Walker, Lilly Schubert. "University success for Canadian Indians", 1977.
- Werner, Walter; and others. Whose Culture? Whose Heritage? Ethnicity within Canadian Social Studies Curricula. Vancouver:
 University of British Columbia Centre for the Study of Curriculum and Instruction, 1977.
- WMC Research Associates. <u>Southeast Resource Develoment Council, Indian</u>
 <u>Human Resource Development Strategy Winnipeg</u>, Southeast Resource
 <u>Development Council</u>, 1983.
- Wyatt, June Deborah. "Native involvement in curriculum development; the Native teacher as cultural broker" in INTERCHANGE, Volume 9, No. 1, 1978-79.
- Zyp, John W.; Campbell, Leith R. <u>Native Students in Edmonton Catholic Schools: A Study of the Implications for School Administrators.</u>
 University of Alberta: April 1978.