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## **Aboriginal Post-Secondary Education and Labour Market Outcomes in Canada, 1996**

*Jeremy Hull*

### **Introduction**

The following paper is taken from a longer study commissioned by the Department of Indian Affairs and Northern Development (DIAND). It is based mainly on 1996 Census data and focuses on the Registered Indian population, while also providing data for the other Aboriginal and non-Aboriginal populations. The body of the paper has five sections which provide information on:

- educational trends
- educational success indicators
- labour force participation
- unemployment
- transfer payment income

A final section offers some conclusions based on these findings. The complete version of this paper covers additional topics and provides greater detail, such as data for other Aboriginal groups (Métis, Inuit and others). It is available from the Indian Affairs website at: [www.inac.gc.ca](http://www.inac.gc.ca) (under Research & Analysis).

Readers should also keep in mind that different sections of the study have used different populations and definitions. The two major factors are the definition of the “other Aboriginal” population and the inclusion or exclusion of students in various tables and figures. Readers should review these definitions carefully before making comparisons to other studies. (Definitions are provided as the figures are presented.)

The study has several purposes. First, it provides various measures of changes in Indian post-secondary educational attainment over time. Second, the study looks at measures of students’ progress through the educational system. Specifically, three stages are identified: completion of secondary

school, continuation from secondary school to post-secondary studies, and completion of post-secondary school. Third, labour market and income characteristics have been documented in relation to educational attainment, focusing on those with various levels of post-secondary education. It is hoped that this information can assist various policy-makers concerned with Aboriginal education and that it provides a basis for further research and analysis.

Throughout the study, comparisons have been made among three population groups: Registered Indians, others with Aboriginal identity, and “other Canadians.” Comparisons are also provided between men and women and those in different age groups. Some comparisons are made between the findings from the 1996 Census and those from previous Censuses. When looking at these comparisons, readers should keep in mind that the Registered Indian population increased between 1986 and 1996, not only through natural increase but also with the addition of a number of individuals newly registered under amendments to the *Indian Act* that took place in 1985.<sup>1</sup> It is felt that these differences are not so large as to invalidate the comparisons and trend analysis provided here. However, statistics concerning the “other Aboriginal” population are less comparable between Censuses for a number of reasons and caution should be exercised when interpreting such comparisons.<sup>2</sup>

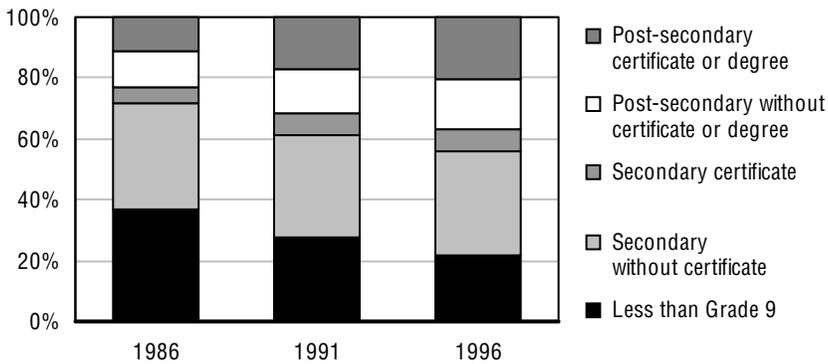
## **Post-Secondary Educational Attainment**

Since 1986 the proportion of the Registered Indian population with some level of post-secondary<sup>3</sup> attainment has increased dramatically. This increase is especially large for the proportion with a post-secondary degree, certificate or diploma, which has increased from 11% of the Registered Indian population in 1986 to 20% in 1996. The proportion with some post-secondary education but no certificate or degree also increased slightly during the period with the result that the total proportion with some level of post-secondary education increased from 23% of the Registered Indian population in 1986 to 37% in 1996. The trend is reversed at lower levels of educational attainment. The proportion of Registered Indians with less than a Grade 9 education declined rapidly from 37% of the population in 1986 to 22% in 1996 (see Figure 1). Figure 2 provides a comparison of the trends in post-secondary attainment among Registered Indians, others with Aboriginal ancestry, and other Canadians. It can be seen that there was an increase in post-secondary attainment among all groups, but that the increase was more rapid among Registered Indians than among other Canadians. This resulted in a smaller gap between Registered Indians and “other Canadians” in the proportions with post-secondary attainment. The reduction in this gap, however, is mainly due to changes in the proportion who have attained some

level of post-secondary education,<sup>4</sup> but do not have a degree, certificate or diploma. The difference between Registered Indians and others with a post-secondary degree, certificate or diploma has remained almost constant over this time period at about fifteen percentage points, although this segment of the population has grown among both groups (see Figure 3).

These changes over time suggest that two factors may be at work. In 1996, people within a given age group were more likely to have some post-secondary education than were people of the same age in 1986. For example, among Registered Indians aged 15 to 24, the proportion with a post-secondary certificate or degree increased from 15% in 1986 to 20% in 1996. However, it also appears that many individuals are continuing their education over many years. For example, between 1986 and 1996 the proportion of Registered Indians aged 25 to 44 with post-secondary education increased from 15% to 49%.

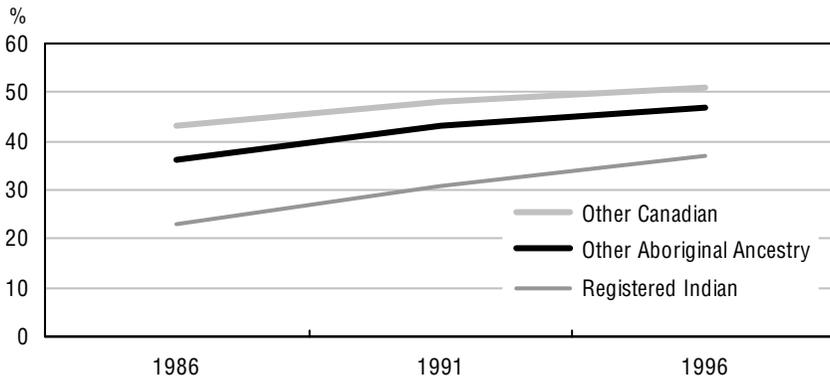
**Figure 1: Highest level of schooling among the Registered Indian population 15 years or older, Canada, 1986, 1991 and 1996**



**Note:** "Post secondary" includes programs at public or private colleges, institutes or universities.

**Sources:** Department of Indian Affairs and Northern Development, custom tabulations, 1986, 1991 and 1996 Censuses of Canada.

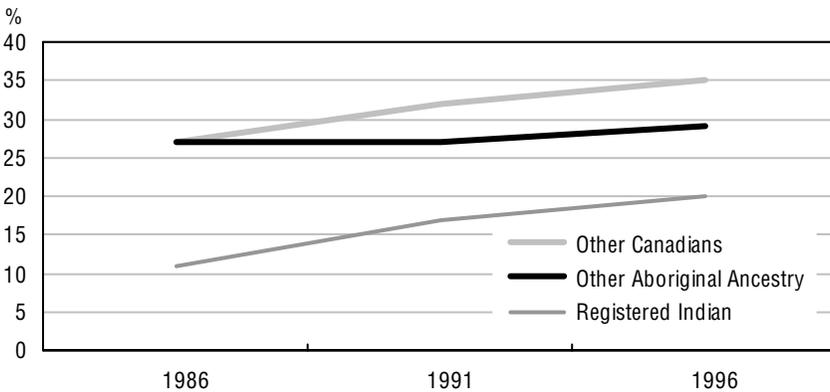
**Figure 2: Proportion of the population 15+ with any post-secondary education by ethnic group, Canada, 1986, 1991 and 1996**



**Note:** “Any post-secondary” includes enrolment in or completion of programs at public or private colleges, institutes or universities.

**Sources:** Department of Indian Affairs and Northern Development, custom tabulations, 1986, 1991 and 1996 Censuses of Canada.

**Figure 3: Proportion of the population 15+ with post-secondary certificate, diploma or degree by ethnic group, Canada, 1986, 1991 and 1996**



**Note:** “Post-secondary” includes programs at public or private colleges, institutes or universities.

**Sources:** Department of Indian Affairs and Northern Development, custom tabulations, 1986, 1991 and 1996 Censuses of Canada.

## Educational Success Indicators

In addition to highest level of schooling, three indicators of educational success have been used in this study, which correspond to the possible stages in a student’s educational progress. These indicators and their definitions are as follows:

*Secondary school completion rate*

The number completing high school divided by the number who enrolled in high school.

*Continuation to post-secondary rate*

The number enrolled in post-secondary programs divided by the number with a high school education.

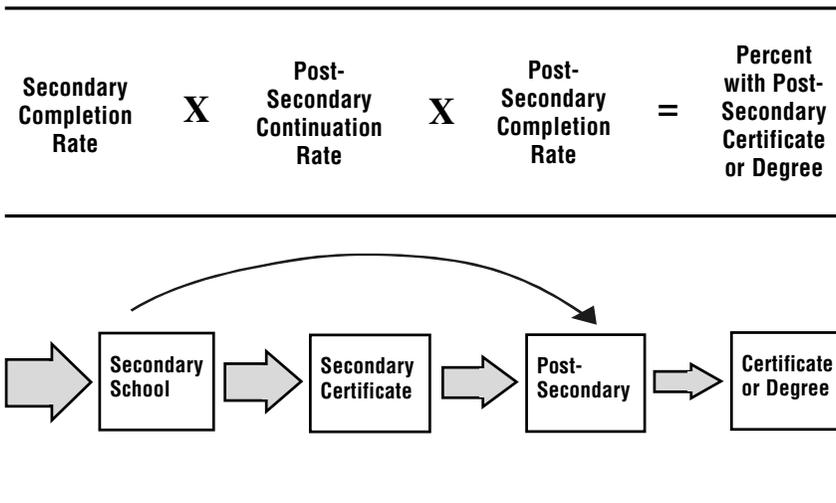
*Post-secondary completion rate*

The number who completed a post-secondary degree, certificate or diploma divided by the number enrolled in post-secondary programs.

The post-secondary rate is further subdivided into the non-university completion rate and the university completion rate in order to look at the success of students in these two streams of post-secondary education. (See Appendix on page 173 for more precise definitions.)

The relationship between these indicators and the usual “highest level of education” measures is illustrated in Figure 4. In theory, the proportion completing high school times the proportion continuing to post-secondary studies times the proportion completing post-secondary certificates or degrees should equal the proportion of the population with a post-secondary certificate or degree. Of course, this will be affected by age and time-period variables. In addition, some students enrol in post-secondary studies without completing a high school certificate, as illustrated in the lower part of Figure 4. The definition of the post-secondary continuation rate has taken this into account by assuming that the pool of eligible post-secondary students includes all those with some level of high school education (Grades 9 to 13).

**Figure 4: Conceptual relationship of educational progress indicators and educational attainment**



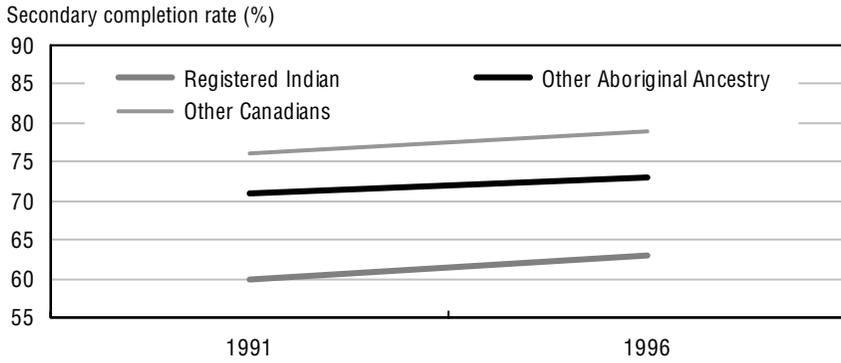
Figures 5 through 7 show the changes in each of these indicators between 1991 and 1996 for the three population groups. Figure 5 focuses on secondary completion rates and shows that the rate of high school completion has increased among all population groups at about the same rate. Among Registered Indian students, the secondary completion rate increased from about 60% to 63%. However, the gap between Registered Indians and other Canadians remained about the same, approximately sixteen percentage points. For the other Aboriginal ancestry population, the secondary completion rates were much closer to the rates for other Canadians, and they also increased at about the same rate.

As Figure 6 illustrates, there is less difference among the population groups in their rates of continuation to post-secondary programs. Among Registered Indians who have completed any level of high school, 50% had gone on to post-secondary studies in 1991. By 1996, this proportion had increased to about 53%. Among other Canadians, these proportions were about 59% in 1991 and 62% in 1996, so that the gap between the two groups remained at about nine percentage points. The other Aboriginal ancestry population followed a similar trend, with the post-secondary continuation rate increasing from about 56% in 1991 to about 59% in 1996.

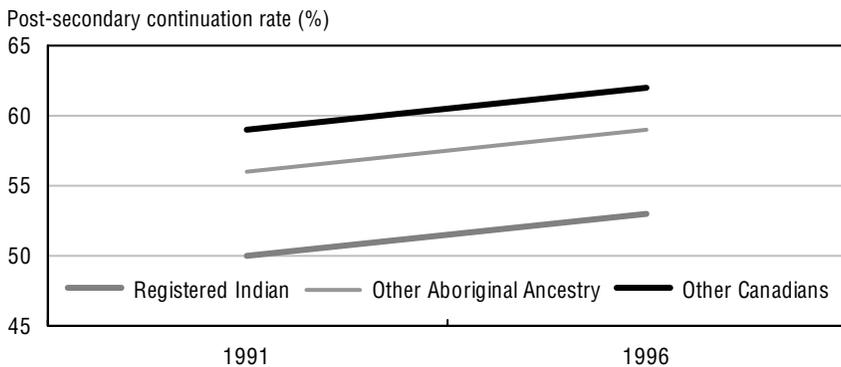
As shown in Figure 7, post-secondary completion rates also increased over the five-year period for all groups, although it did not increase as rapidly as the other rates. Among the Registered Indian population in 1991, about 62% of students who had enrolled in post-secondary studies had completed their programs, and by 1996, this proportion had increased to about 64%. Among others with Aboriginal ancestry the proportions were about five percentage points higher (67% and 69%), and among the other Canadian population the proportions were about ten percentage points higher (72% and 74%).

It can be concluded that there was improvement in all three indicators of educational success among all groups over the 1991 to 1996 period, but that the gaps between groups did not change very much, if at all. All population groups appear to reflect a general increase in educational attainment and success within the Canadian population. The definitions of the indicators means that these figures reflect the attainment of those who return to continue their education later in life, as well as those who proceed directly through their educational careers.

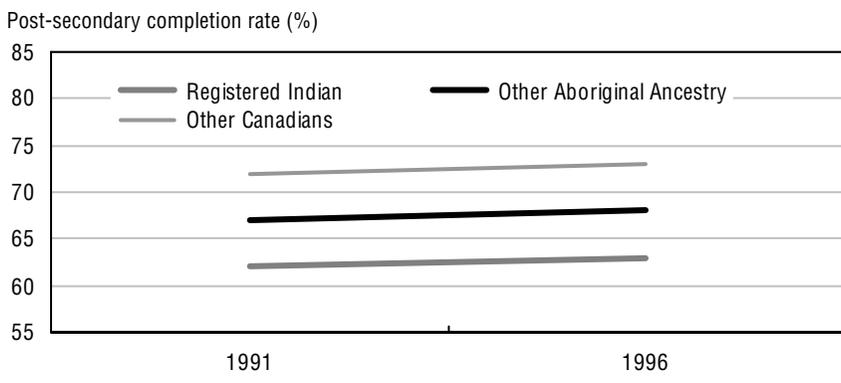
**Figure 5: Secondary school completion rates by ethnic group, Canada, 1991 and 1996**



**Figure 6: Post-secondary continuation rates by ethnic group, Canada, 1991 and 1996**



**Figure 7: Post-secondary completion rates by ethnic group, Canada, 1991 and 1996**



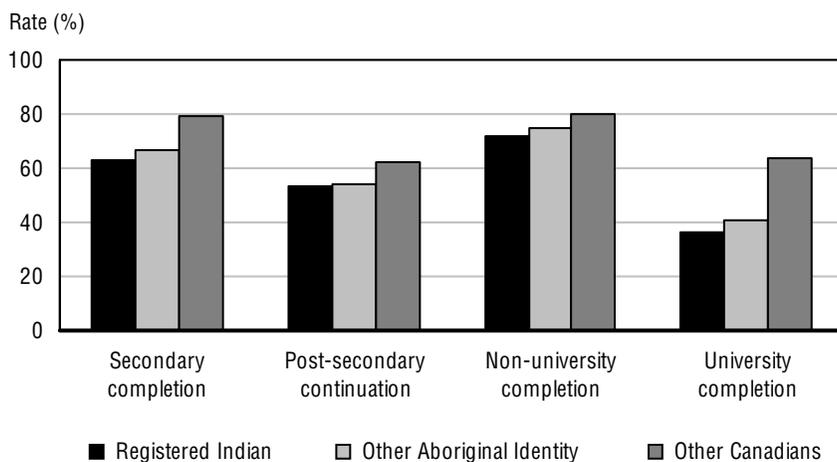
## Aboriginal Identity Population

In the previous figures the “other Aboriginal” population was defined in terms of their ancestry. This was done for reasons of comparability between Censuses. However, some of those with Aboriginal ancestry do not define themselves as culturally or ethnically Aboriginal. For example, in the 1996 Census there were about 1,100,000 people who said they had Aboriginal ancestry, but only 800,000 who said that they themselves were Aboriginal. As a result, the size of the other Aboriginal population is different according to which definition is used, and the socioeconomic characteristics of the other Aboriginal population also depend on the definition that is used. The Aboriginal identity population tends to have socioeconomic characteristics that are less like those of the general Canadian population, while the Aboriginal ancestry population tends to be more like the general Canadian population.

All of the remaining tables and figures in this article use the concept of Aboriginal identity to define the other Aboriginal population. It was felt that the main interest of policy-makers would be with the population that is more culturally distinct within Canada and that tends to have a greater need for educational development, at least as indicated by Census statistics. In order to alert readers as to which definition is being used, the phrase “Aboriginal identity” is used in the titles and legends of the various figures. It should be noted that the difference in definitions does not affect the Registered Indian population, which is based on legal status, but it has a major impact on the residual “other Aboriginal” population.<sup>5</sup>

Figure 8 shows four educational indicators for the three identity groups. (For definitions of these indicators see Appendix on page 173.) As shown in the first set of bars in the figure, Registered Indians are much less likely than other Canadians to complete secondary school. While approximately 63% of Registered Indians who enrolled in secondary school completed it, almost 80% of other Canadians have done so. With a 67% completion rate, others with Aboriginal identity are less likely than other Canadians, but somewhat more likely than Registered Indians, to have completed secondary school.

As shown in the second set of bars in Figure 8, the gap between the two Aboriginal groups and other Canadians is not as great for the post-secondary continuation rates. Still, both Registered Indians and others with Aboriginal identity have post-secondary continuation rates which are about ten percentage points less than those of other Canadians. There is little difference in continuation rates between Registered Indians and others with Aboriginal identity.

**Figure 8: Educational indicators by identity group, Canada, 1996**

*Source:* Department of Indian Affairs and Northern Development, custom tabulations, 1996 Census of Canada.

Figure 8 divides the post-secondary completion rate into two components—completion of non-university post-secondary programs, and completion of university programs. At more than 70%, the non-university completion rates of the two Aboriginal groups are not much below those of other Canadians, which are just over 80%. The non-university completion rate of others with Aboriginal identity is slightly higher than among Registered Indians.

On the other hand, a much larger gap between Aboriginal groups and others is found in university completion rates (fourth set of bars in Figure 8). While Registered Indians have university completion rates of less than 40%, and others with Aboriginal identity have completion rates of slightly more than 40%, other Canadians have completion rates of more than 60%. The figure, therefore, suggests that Aboriginal people experience problems achieving academic success throughout their educational careers, but have greater difficulty completing secondary school and university, as opposed to entry into post-secondary studies or completion of non-university programs.

## Educational Indicators by Gender

Figures 9 to 12 look at the relationship of gender and age to each of the four educational indicators. As shown in Figure 9, there is a large gap in secondary school completion rates between the two Aboriginal groups (Registered

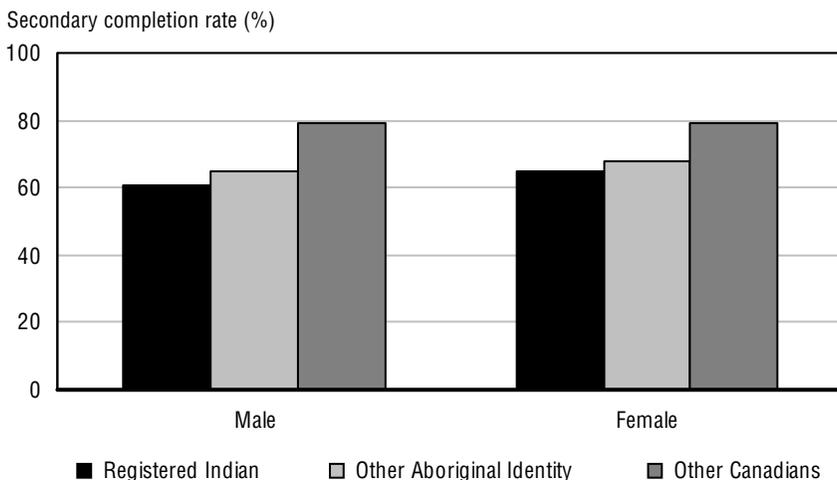
Indians and others with Aboriginal identity) and other Canadians, regardless of gender. The gap is greater among men than among women.

Figure 10 compares the post-secondary continuation rates of the population groups, again by gender and age. As with the secondary completion rates, Registered Indians and others with Aboriginal identity are less likely to continue with post-secondary studies than other Canadians, and this is especially true if they are male.

Figure 11 provides a similar comparison for non-university completion rates. Non-university completion rates among all the identity groups are *higher* for men than for women.

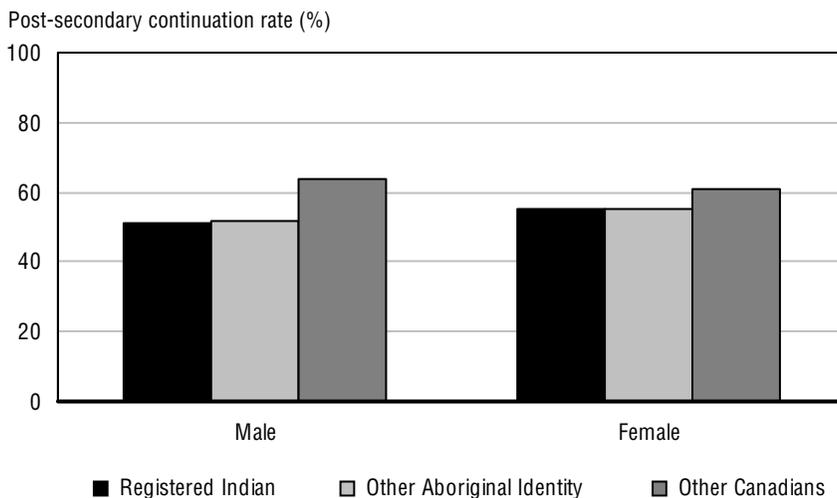
Figure 12 provides a graph of university completion rates for the three identity groups by gender. The difference in university completion rates between the identity groups is large for both genders. Registered Indian men have a lower university completion rate than Registered Indian women, and the same is true among others with Aboriginal identity, but not among other Canadians. The result is that other Canadian men are more than twice as likely as Registered Indian men to complete university, while other Canadian women are about 1.6 times as likely as Registered Indian women to complete university.

**Figure 9: Secondary completion rate by gender and identity group, Canada, 1996**



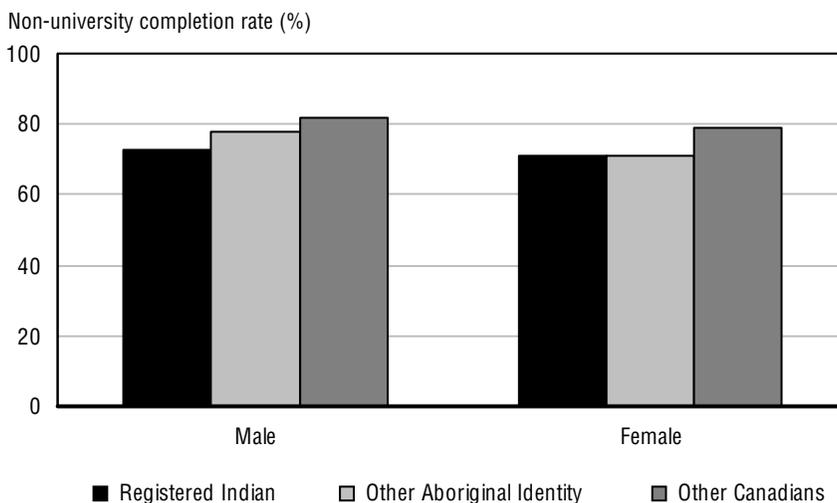
**Source:** Department of Indian Affairs and Northern Development, custom tabulations, 1996 Census of Canada.

**Figure 10: Post-secondary continuation rate by gender and identity group, Canada, 1996**



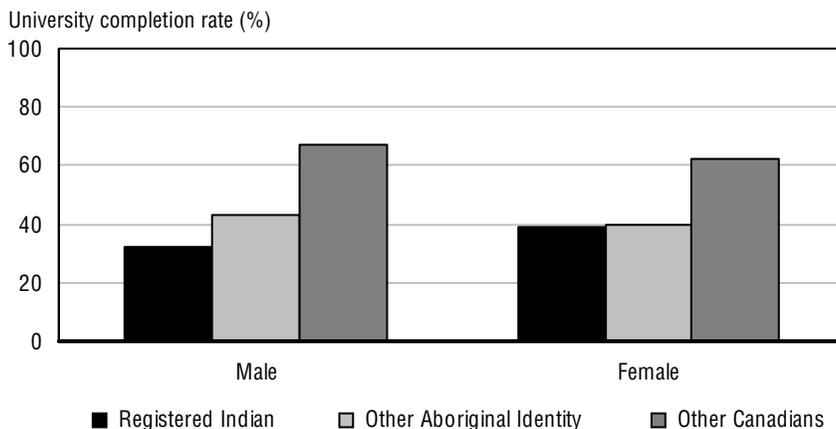
**Source:** Department of Indian Affairs and Northern Development, custom tabulations, 1996 Census of Canada.

**Figure 11: Non-university completion rate by gender and identity group, Canada, 1996**



**Source:** Department of Indian Affairs and Northern Development, custom tabulations, 1996 Census of Canada.

**Figure 12: University completion rate by gender and identity group, Canada, 1996**



**Source:** Department of Indian Affairs and Northern Development, custom tabulations, 1996 Census of Canada.

## Educational Indicators by Age Groups

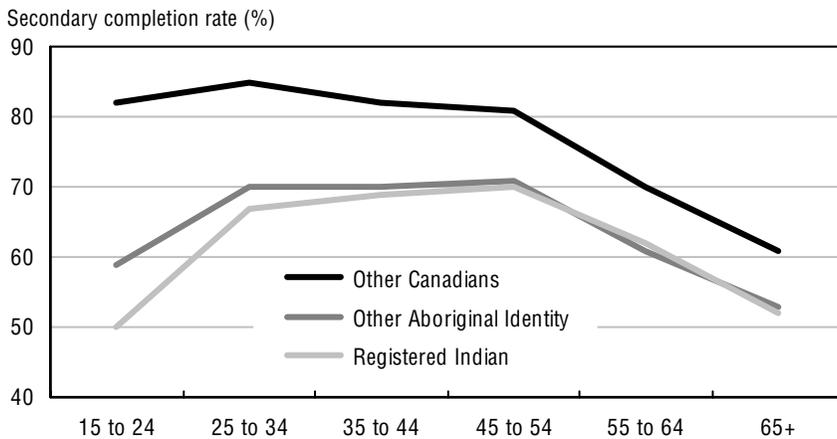
Figures 13 to 16 provide a detailed picture of how the various indicators are related to age groups. In these figures, six age groups have been used and the indicators are shown for each of the three population groups. Figure 13 shows secondary completion rates. The close parallel between Registered Indians and others with Aboriginal identity is striking. Among Registered Indians and others with Aboriginal identity, high school completion rates are quite low among the youngest age group, but increase sharply over the age of 25, staying at about 70% for the ages of 25 to 44 for both groups. After the age of 55 the secondary completion rates of both Aboriginal identity groups decrease.

In comparison, the secondary completion rates among other Canadians is much higher than either of the Aboriginal groups. They also follow a similar pattern, except that completion rates are relatively high among the 15 to 24 age group. This means that the gap between the two Aboriginal groups and other Canadians is greatest for the 15 to 24 age group, where more than thirty percentage points separate other Canadians and Registered Indians. The gap diminishes among older age groups, amounting to about ten percentage points by the age of 45. The relative improvement of completion rates among Registered Indians and others with Aboriginal identity in the mid-age groups suggests that they are somewhat more likely than others to complete secondary school or the equivalent at an older age; or that they are more likely than others to enrol in post-secondary programs at an older age without a secondary school certificate.

Figure 14 compares the post-secondary continuation rates of the three population groups for the six age groups. Again, Registered Indians and others with Aboriginal identity have much lower rates among the youngest age groups, but have rates that are similar to those of other Canadians after the age of 45. It is striking that while the continuation rates among the two Aboriginal groups continue to increase through the 45 to 54 age group, among other Canadians the continuation rate peaks in the 25 to 34 age group and decreases after that point. This pattern suggests, again, that Registered Indians and others with Aboriginal identity are more likely to continue their post-secondary studies at an older age, perhaps taking advantage of special programs and mature admissions policies.

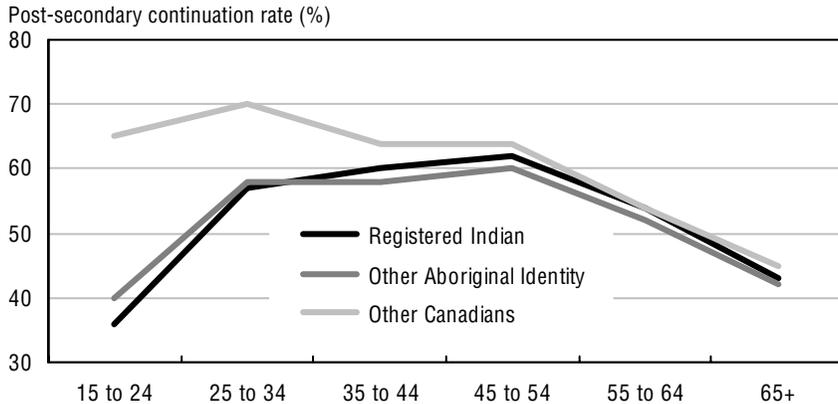
The pattern in Figure 14 may reflect both the trend towards increased high school graduation among the Aboriginal population (which might tend to lower continuation rates among the youngest age group), and the greater likelihood of Registered Indians and other Aboriginals returning to school at an older age.

**Figure 13: Secondary completion rate by identity group and detailed age group, Canada, 1996**



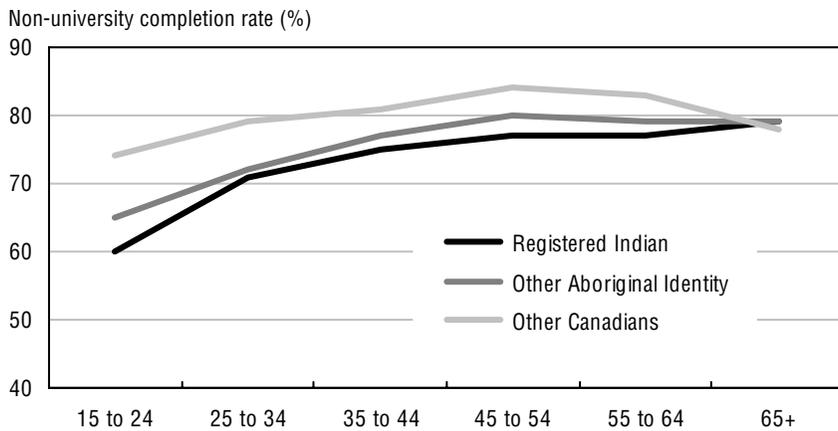
**Source:** Department of Indian Affairs and Northern Development, custom tabulations, 1996 Census of Canada.

**Figure 14: Post-secondary continuation rate by identity group and detailed age group, Canada, 1996**



**Source:** Department of Indian Affairs and Northern Development, custom tabulations, 1996 Census of Canada.

**Figure 15: Non-university completion rate by identity group and detailed age group, Canada, 1996**



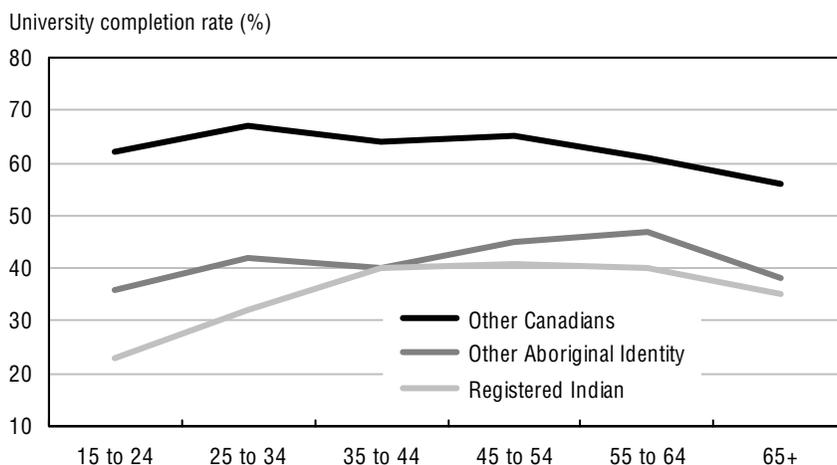
**Source:** Department of Indian Affairs and Northern Development, custom tabulations, 1996 Census of Canada.

Figure 15 compares non-university completion rates among the groups. For this indicator, all three population groups follow a very similar pattern with completion rates increasing steadily until the age of 55, after which the rates level out or fall slightly. There is, however, a gap between the non-university completion rates of the two Aboriginal groups and those of other Canadians, and this gap is greatest for the 15 to 24 age group between

Registered Indians and other Canadians. The completion rate among Registered Indians aged from 15 to 24 is almost fifteen percentage points lower than among other Canadians of the same age. By the age of 55, the gap between Registered Indians and other Canadians has fallen to less than seven percentage points. The pattern suggests that all population groups continue to pursue their training over their lifetimes, but that this is more true among Registered Indians than among other Canadians.

Figure 16 compares university completion rates among the three groups. There is a very wide gap in university completion rates between Registered Indians and other Canadians, while others with Aboriginal identity generally have higher completion rates than Registered Indians. The gap is greatest between Registered Indians and other Canadians ages 15 to 24 with a difference of about forty percentage points. By the age of 35, this gap has fallen to about twenty-five percentage points. Again, the two Aboriginal groups have increased success among older age groups, and this is particularly true for others with Aboriginal identity whose completion rates are highest among the 45 to 54 age group. Among other Canadians, the university completion rate peaks at about 68% among the 25 to 34 age group, gradually falling off from there. Among Registered Indians, the completion rate increases to about 40% by the age of 35 to 44, and stays at about this level through the 45 to 54 age group.

**Figure 16: University completion rate by identity group and detailed age group, Canada, 1996**



**Source:** Department of Indian Affairs and Northern Development, custom tabulations, 1996 Census of Canada.

## Labour Force Participation

Figure 17 shows the relationship between labour force participation rates and educational attainment for the three population groups. Among all population groups there is an increase in participation rates as educational attainment increases. This is especially true as educational attainment increases from less than Grade 9 to high school completion. Among all groups, those with high school certificates have labour force participation rates which are forty percentage points higher than those with less than Grade 9.

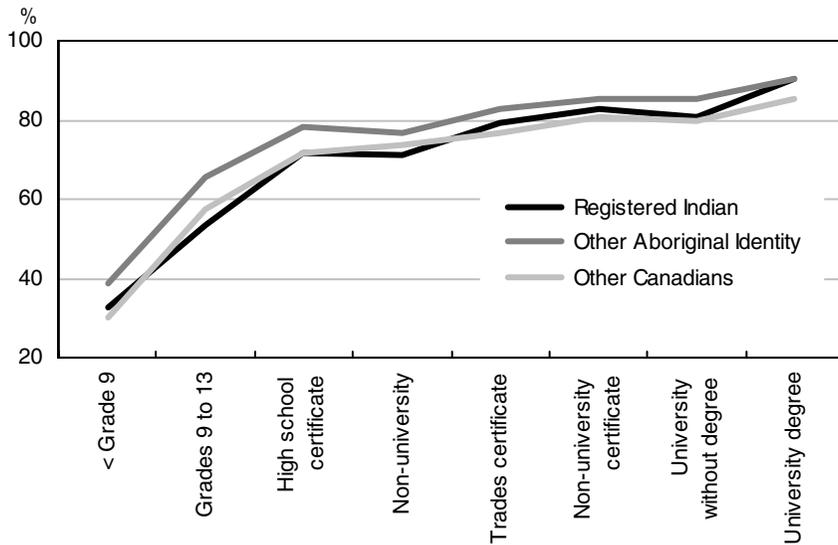
In contrast, the gaps between the groups are smaller. For instance, among Registered Indians with less than Grade 9 education the labour force participation rate is about 32% and is actually higher than among other Canadians with the same educational attainment. The other Aboriginal population has the highest labour force participation rates of any group for all levels of educational attainment.

To some extent, however, Figure 17 is misleading because it does not account for the effect of age on labour force participation. Labour force participation tends to be highest in the middle years (25 to 44) and lower among both younger and older age groups. This relationship is also somewhat different among the different population groups.

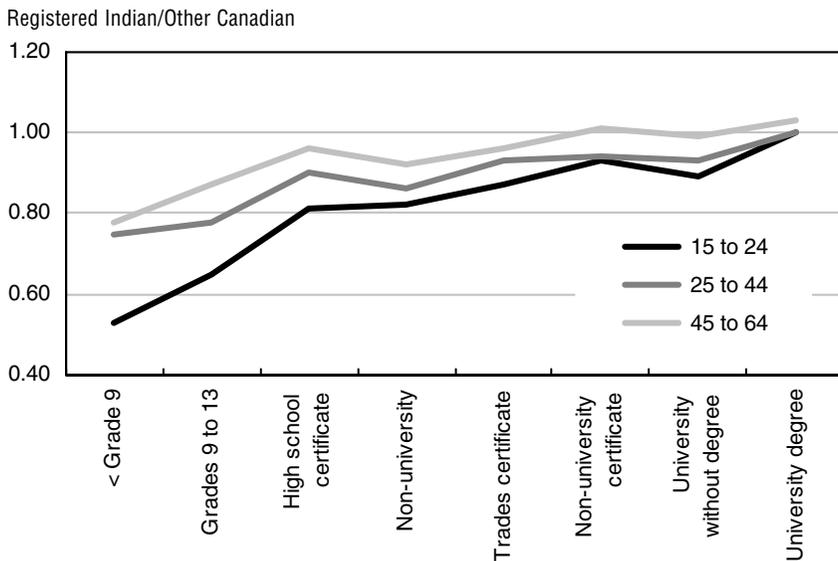
Figure 18 looks at the relationship between age, education and labour force participation by showing the ratio of Registered Indian participation rates to other Canadian participation rates for each educational level and for three age groups. A ratio of 1.00 indicates that the participation rates of Registered Indians and other Canadians are the same. A ratio of .50 indicates that the participation rate of Registered Indians is half the rate of other Canadians.

For all age groups, higher educational attainment tends to bring the ratio closer to 1.00. That is, Registered Indian rates approach those of other Canadians as educational attainment increases. This pattern is most pronounced among the youngest age group, where those with less than a high school certificate have participation rates that are between one-half and two-thirds those of other Canadians with the same level of education, while those with a university degree have the same participation rates as other Canadians. Across all age groups of Registered Indians, participation rates of those with the highest levels of education are very similar to those of other Canadians. Among Registered Indians in the 45 to 64 age group with post-secondary certification, labour force participation is higher than among other Canadians.

**Figure 17: Labour force participation rate, population 15 or older not attending school full-time by highest level of schooling and identity group, Canada, 1996**



**Figure 18: Ratio of Registered Indian/Other Canadian labour force participation rates by highest level of schooling and age group, Canada, 1996**



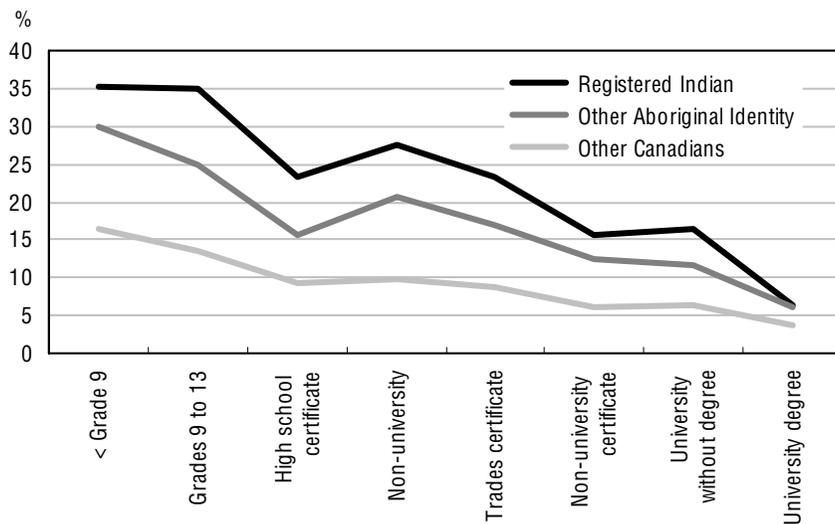
**Source:** Department of Indian Affairs and Northern Development, custom tabulations, 1996 Census of Canada.

## Unemployment Rates

Figure 19 illustrates the relationship between unemployment and educational attainment. As the figure shows, higher levels of education are associated with lower unemployment rates. As educational levels increase, the absolute and relative gaps in unemployment rates between population groups tends to become smaller. For example, Registered Indians with less than Grade 9 education have an unemployment rate of about 36% compared to unemployment rates of 30% among others with Aboriginal identity and about 17% among other Canadians. For those with a secondary school certificate, the range in unemployment rates is from 9% to 23% and for those with a university degree the range is from about 4% to 6%.

It may also be noted that unemployment rates among Registered Indians and others with Aboriginal identity are higher for those who have some non-university, post-secondary education than they are for those with a high school certificate. It should be kept in mind that the category of non-university education without a certificate may include individuals who have not completed high school and who therefore do not have any type of certification. This is an indication of the importance of educational certification in the labour market.

**Figure 19: Unemployment rates among population 15+ with post-secondary education and not attending school full time, by age and identity group, Canada, 1996**



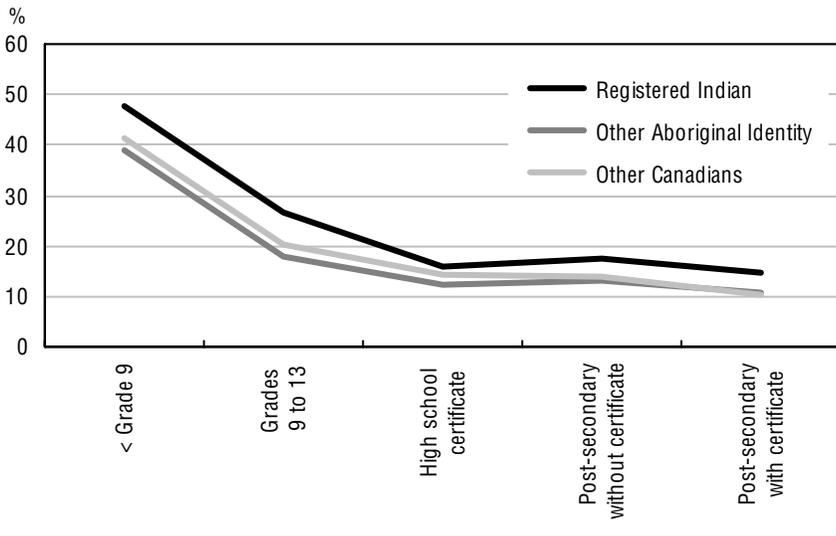
**Source:** Department of Indian Affairs and Northern Development, custom tabulations, 1996 Census of Canada.

## Transfer Payment Income

The degree of dependence on government transfer payments is related to educational attainment, as well as to gender, as shown in the following two figures. As illustrated in Figure 20, dependency on government transfers generally decreases among men as educational attainment increases. It can be seen that there are three levels of transfer income based on educational attainment. Those with the highest proportion of transfer income are those with less than Grade 9 education. Those with secondary education, but without a secondary school certificate, have much lower levels of transfer income than those with less than Grade 9, but higher levels of transfer income than those with a secondary certificate or post-secondary education. The level of transfer income among those with a high school certificate or with various levels of post-secondary education are much the same—further education past high school does not seem to have a great effect on government transfer dependency. It can also be seen that transfer income tends to be slightly higher among Registered Indian men than among other Canadians or others with Aboriginal identity.

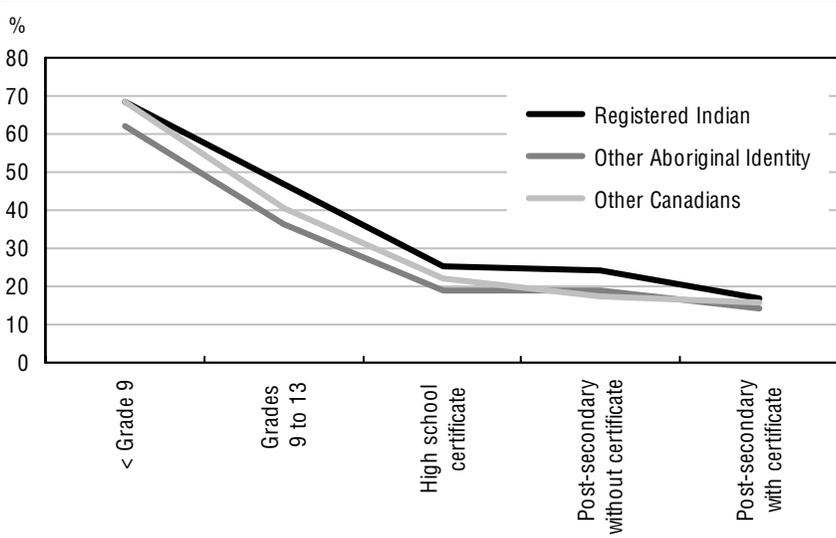
As shown in Figure 21, there is a similar pattern among women except that transfer income makes up a larger proportion of total income for all groups and educational levels. For example, among women with less than a Grade 9 education, between 60% and 70% of their income, on average, comes from government transfer payments, compared to 40% to 50% among men. Among women with a high school certificate, about 20% to 25% of their income is from transfer payments, compared to about 10% to 15% among men. Still, the same pattern prevails: transfer income declines—as a proportion of income—as educational attainment increases up to the level of high school certification, after which transfer income remains at about the same level.

**Figure 20: Government transfers as a percentage of total income among men not attending school full time by identity group and highest level of schooling, Canada, 1996**



**Source:** Department of Indian Affairs and Northern Development, custom tabulations, 1996 Census of Canada.

**Figure 21: Government transfers as a percentage of total income among women not attending school full time by identity group and highest level of schooling, Canada, 1996**



**Source:** Department of Indian Affairs and Northern Development, custom tabulations, 1996 Census of Canada.

## Conclusion

The foregoing report has described a variety of aspects of educational attainment among Registered Indians, others with Aboriginal identity and other Canadians. The relationships among different attributes, such as age, gender, educational attainment and labour market outcomes, are many and complex. More sophisticated analysis of the various interrelationships would be required to determine the extent to which causal relationships exist between the various factors. A few general observations may be made, however, at a descriptive level. First, it is clear that the extent of participation and completion of post-secondary education has been increasing dramatically among Registered Indians over the past ten years. At the same time, a gap in educational levels and success rates continues to exist between Registered Indians and others. Others with Aboriginal identity (not Registered Indians) tend to have educational characteristics that fall between those of Registered Indians and other Canadians.

The educational careers of Registered Indians have a different pattern than those of other Canadians. That is, Registered Indians take longer to reach a given level of attainment, but seem to be more willing to continue their education, or return to complete their education at an older age, compared to others. The result is that—for many of the dimensions of post-secondary education examined in this study—there is a particularly large gap between young Registered Indians (those 15 to 24) and others of the same age, but the gap narrows among older age groups.

Increased educational attainment consistently has the effect of reducing the gaps in unemployment and labour force participation between Registered Indians and others. At the same time, there is a need to look more closely at the assumptions underlying the concept of highest level of schooling. In particular, specific levels of certification have larger effects on labour market outcomes than uncertified education, even at higher educational levels.

It may also be seen from this study that age, educational attainment and gender do not completely account for the differences in labour market and income characteristics between Aboriginal groups and other Canadians. There may be a variety of other factors that are of importance, including geographic, social and cultural factors. These could include differences in regional labour markets, cultural and social contexts in which people live and are educated, and issues of cultural adjustment, accommodation and discrimination. The Census of Canada cannot fully document these factors, nor does it document the more detailed differences or similarities among population groups in such areas as specific educational skills and work histories. Nevertheless, this study has confirmed that post-secondary educational attainment, particularly when it includes some type of

certification, has a major influence on employment, labour market activity and income among various Aboriginal groups.

In summary, there has been clear educational progress among Registered Indians over the past decade, particularly in terms of high school completion and post-secondary participation. Nonetheless, there are many signs that Aboriginal people in Canada, and especially Registered Indians, continue to experience less success than others. The pattern of delayed or incomplete success at the post-secondary level suggests that there may be weaknesses in Aboriginal students' basic education and/or difficulties in the students' social and economic environment that tend to limit their success in post-secondary programs. In other words, there may be limits to the amount that can be achieved through programs that encourage post-secondary participation, but which do not affect students' broader social and educational environment. The challenge of the coming years is to consolidate and strengthen the gains that have been made in post-secondary education, perhaps by focusing on the early preparation of Aboriginal students and on the social and economic context within which education takes place.

## Endnotes

1. Between 1991 and 1996, about 31,000 individuals were registered as Indians as a result of these amendments. This number represents about 5% of the population as of 1996, or about 31% of the net population growth that occurred between 1991 and 1996. These figures are based on Indian Register data maintained by DIAND.
2. See Norris 1996; Siggner 1998; and Guimond et al. 2001.
3. Throughout this chapter, "post-secondary" includes all accredited programs beyond high school, such as programs at private or public colleges, institutes, trade schools and universities.
4. In the Census variable for Highest Level of Schooling, an individual must have completed at least one year of post-secondary education to be categorized as having some post-secondary education—see the 1996 Census Dictionary.
5. For information on the Metis, Inuit and "other" components of the population, see the complete report available on the Indian Affairs website.

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# Appendix

## Definitions of Educational Indicators

In addition to highest level of schooling, three indicators of educational success have been used in this study—corresponding to the possible stages in a person’s educational progress. These indicators are: secondary school completion rate, continuation to post-secondary rate and post-secondary completion rate. Conceptually, the high school completion rate is the number of individuals completing high school divided by the number who enrolled in high school; the continuation to post-secondary rate is the number of people who enrolled in post-secondary programs divided by the total number who completed high school; and the post-secondary completion rate is the number who completed a post-secondary degree, certificate or diploma divided by the total number who enrolled in post-secondary programs. The post-secondary rate is further subdivided into the non-university completion rate and the university completion rate in order to look at the success of students in these two streams of post-secondary education.

In this study we have taken the approach of excluding full-time students who have not yet reached the level required for “success” for a given indicator. For example, when considering secondary school completion rates, students who are still attending secondary school are taken out of the equation because it is not yet known whether they will complete high school. On the other hand, those who are currently attending post-secondary programs are considered to have completed high school based on the logic of the highest level of schooling. Therefore, they are part of the “successful” group even though they are full-time students. This type of logic leads to the following definitions:

### ***Secondary School Completion Rate***

Population with secondary school certificate or any post-secondary education, attending or not attending school

(Population with secondary school certificate or any post-secondary education, attending or not attending school) +  
(Population with Grades 9 to 13 without a secondary certificate, not attending school full-time)

### ***Post-Secondary Continuation Rate***

Population with any post-secondary, attending or not attending school  
(Population with any post-secondary, attending or not attending school) +  
(Population with a secondary school certificate, not attending school full-time)

### ***Post-Secondary Completion Rate***

Population with a post-secondary degree, certificate or diploma, attending or not attending school  
(Population with a post-secondary degree, certificate or diploma, attending or not attending school) +  
(Population with some post-secondary education without a degree, certificate or diploma, not attending school full-time)

Each indicator represents an estimate of the survival rate of a cohort as they move through the educational system; so if we multiply the percent of students who complete secondary school by the percent of students who continue to post-secondary studies by the percent of post-secondary students who complete post-secondary programs, we should get the overall proportion of the population who have attained post-secondary completion. In fact, the indicators do give approximately this result.

However, there still remains a question about the accuracy of these rates, given the highest level of schooling hierarchy. We do not know the precise number of individuals who have completed high school certificates, nor the precise number who have enrolled in non-university post-secondary programs as opposed to university programs. The category of “post-secondary” includes those who have attended both non-university and university programs and may have more than one degree or certificate. These indicators should, therefore, be considered as estimates. In some of the figures and tables in this study we have identified separate university and non-university completion rates. In these instances, the university level of achievement is more accurate than the non-university level, since some university students have also attended—and perhaps completed—non-university programs, but are not included in the non-university statistics.