



Aboriginal Peoples and Postsecondary Education in Canada

by

Michael Mendelson

July 2006

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Introduction

The success of Aboriginal people in our postsecondary education (PSE) system is, or should be, of vital interest to all Canadians. Our future social well being and economic prosperity, particularly in Western and Northern Canada, rests at least partly on better results for Aboriginal Canadians in the postsecondary education system. Not only will improved educational outcomes result in better social conditions for Aboriginal peoples, but they also will furnish a source of much-needed skilled workers to fuel future economic prosperity [Brunnen 2004]. This is a clear instance in which social and economic goals coincide. It is vital to understand how well we are now doing in achieving these goals and what we need to do better.

This report attempts to partly to fulfil this need by presenting an assessment of what the empirical data tells us about how Aboriginal peoples are doing in the postsecondary system, and what the data suggests about strategies to improve these results. This report is not meant to be exhaustive, as there have been several excellent and more in-depth studies [e.g., Hull 2000 and 2005]. Nor is this report prescriptive: It does not make recommendations about policies that should be adopted to improve educational outcomes for Aboriginal peoples. This report is diagnostic: It uses the available data to provide an accurate picture of the state of affairs as it stands now and to suggest what should be our focus for the future.

The source of data for all tables and figures in this report is the Census and the associated Aboriginal People's Survey. This is almost the only information available on non-Status Aboriginal people living off reserve and, also, often the only usable source of data for Status Indians who live off reserve. The data is well described in Hull [2005]. The specific data limitations relevant to this report are discussed in Appendix A.

There also are many specialized surveys of educational issues, such as the Canadian Undergraduate Student Survey and the Canadian College Student Survey. Appendix B of this report provides a review of all relevant Statistics Canada surveys of educational issues, noting the few that record information on Aboriginal people consistent with the Aboriginal identity population defined in the Census.¹ Of course, we can only obtain information about Aboriginal conditions from data that identifies Aboriginal persons, so the absence of this information means that most surveys used to provide data on educational issues are not useful with respect to Aboriginal Canadians. This, in itself, is an important observation.

Some studies have also made use of administrative data from Indian and Northern Affairs Canada, but this information is generally limited to Status Indians living on reserves. Administrative data is largely unavailable for Aboriginal people living off reserve, as records of Aboriginal identity are not usually kept. This practice may or may not be right and proper for society, but it does limit quantitative data to that which can be obtained from surveys; surveys have many constraints, including cost and reliability. There have also been several good qualitative studies – for example, describing best practices in improving postsecondary access and outcomes for Aboriginal people [Malatest & Associates Ltd. 2002, 2004] and describing the range of specialized PSE programs in Canada for Aboriginal students [Richardson and Blanchet-Cohen 2000]. Qualitative studies are as important as quantitative studies: good research requires both. However, the constraints of this report do not allow for qualitative research, so other than references to qualitative studies already undertaken, this paper is exclusively quantitative.

This report is organized in four sections. First, it reviews the basic demographics of the Aboriginal identity population, including population data and core data on socioeconomic status. This information provides a context for the discussion of postsecondary education data. The second section provides a picture of PSE levels for Aboriginal Canadians compared to those of the general population. The third section discusses the capacity that would be required in the postsecondary system for Aboriginal peoples to achieve parity with the overall population – and what would be required in respect of educational attainment by Aboriginal peoples in order to achieve parity. These two perspectives can be considered the supply side (PSE capacity) and the demand side (Aboriginal students wanting and able to get into and complete PSE). The study concludes with a number of recommendations arising from the findings in the preceding sections.

A Demographic Snapshot of Aboriginal Peoples in Canada

This section provides an overview of the demographic characteristics and socioeconomic status of Aboriginal people in Canada, especially those aspects relevant to educational attainment.

Basic demography

Table 1 shows the population data for Aboriginal identity peoples for Canada, the provinces and territories, as reported in the 2001 Census.² There were almost a million people of Aboriginal identity in Canada at the time of the Census. In all regions except Nunavut, North American Indians – a group which is composed of status and non-status Indians, living both on and off reserve – are the majority Aboriginal identity group. However, in Alberta, Saskatchewan and Manitoba, Métis comprise more than one-third third of the Aboriginal population, a larger component than in other provinces.

Figure 1 shows the Aboriginal identity population as a percentage of the total population in each province and territory. Ontario has the largest absolute number of Aboriginal persons, but the Aboriginal population makes up a larger share of the total population in Manitoba and Saskatchewan than in any other province. In the Northwest Territories and Nunavut, Aboriginal people constitute the majority of the population.

The ‘real politic’ of this population distribution is that the Aboriginal community in Manitoba and Saskatchewan, and to a lesser extent in Alberta and BC, is an important political presence, with a lot of political clout. Similarly, the ‘real economics’ is that Manitoba and Saskatchewan, and to a lesser extent Alberta and BC, simply cannot afford to allow the Aboriginal community to fail economically or socially. Aboriginals form big parts of the Western provinces’ population and it is unrealistic to think that they can thrive – especially Manitoba and Saskatchewan – if a significant proportion of their population is undereducated and unemployed. Of course, this is doubly or triply the case for the territories.

Table 1
Aboriginal identity population and identity groups, 2001 Census

	Aboriginal population	North American Indian		Métis		Inuit	
Canada	976,305	608,850	62%	292,305	30%	45,070	5%
Nfld & Lab.	18,775	7,040	37%	5,480	29%	4,560	24%
PEI	1,345	1,035	77%	220	16%	20	1%
Nova Scotia	17,010	12,920	76%	3,135	18%	350	2%
New Brunswick	16,990	11,495	68%	4,290	25%	155	1%
Quebec	79,400	51,125	64%	15,855	20%	9,530	12%
Ontario	188,315	131,560	70%	48,340	26%	1,375	1%
Manitoba	150,045	90,340	60%	56,800	38%	340	0%
Saskatchewan	130,185	83,745	64%	43,695	34%	235	0%
Alberta	156,225	84,995	54%	66,060	42%	1,090	1%
BC	170,025	118,295	70%	44,265	26%	800	0%
Yukon	6,540	5,600	86%	535	8%	140	2%
NWT	18,730	10,615	57%	3,580	19%	3,910	21%
Nunavut	22,720	95	0%	55	0%	22,560	99%

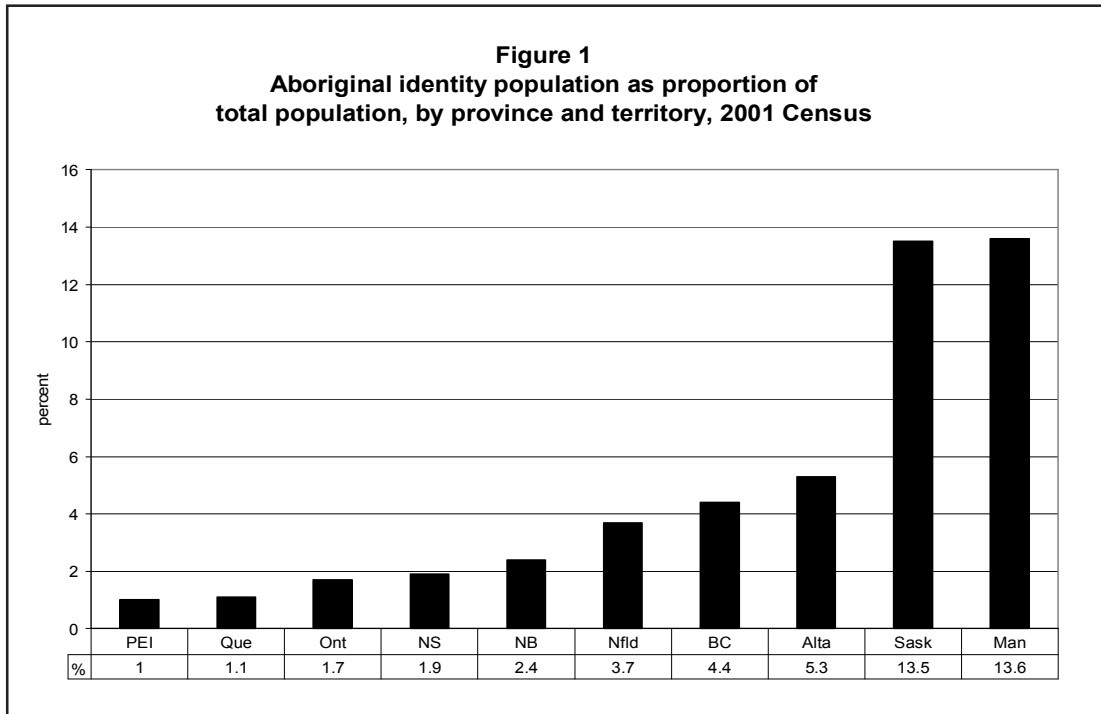
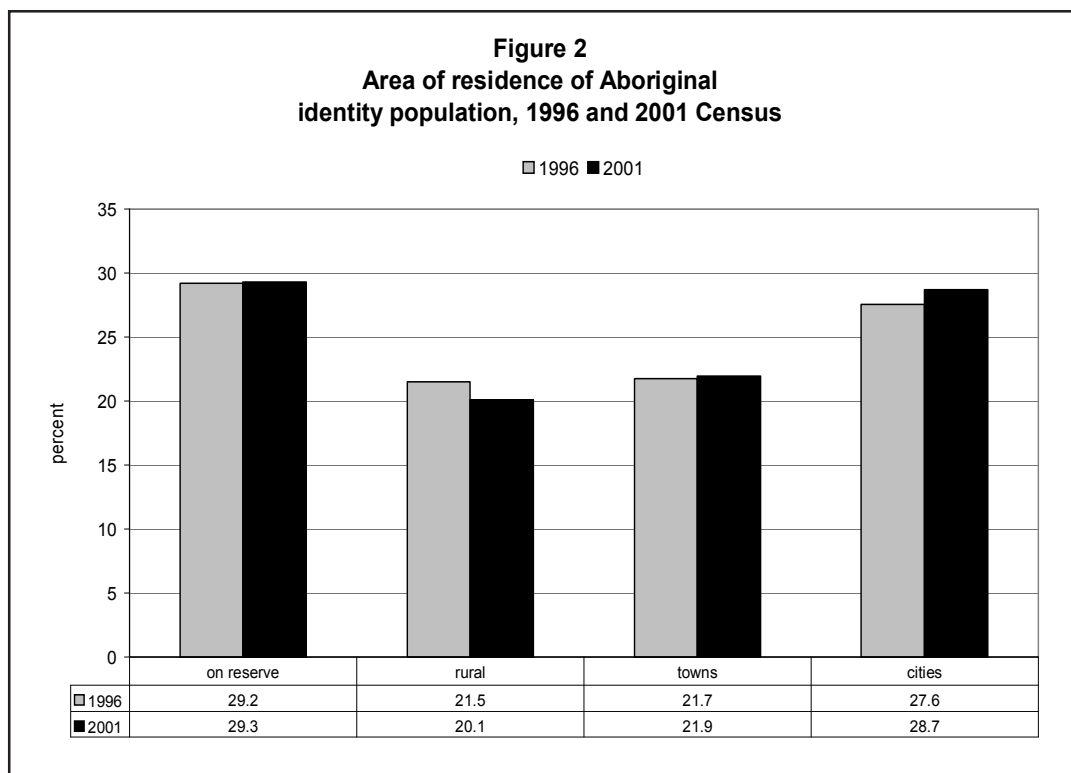
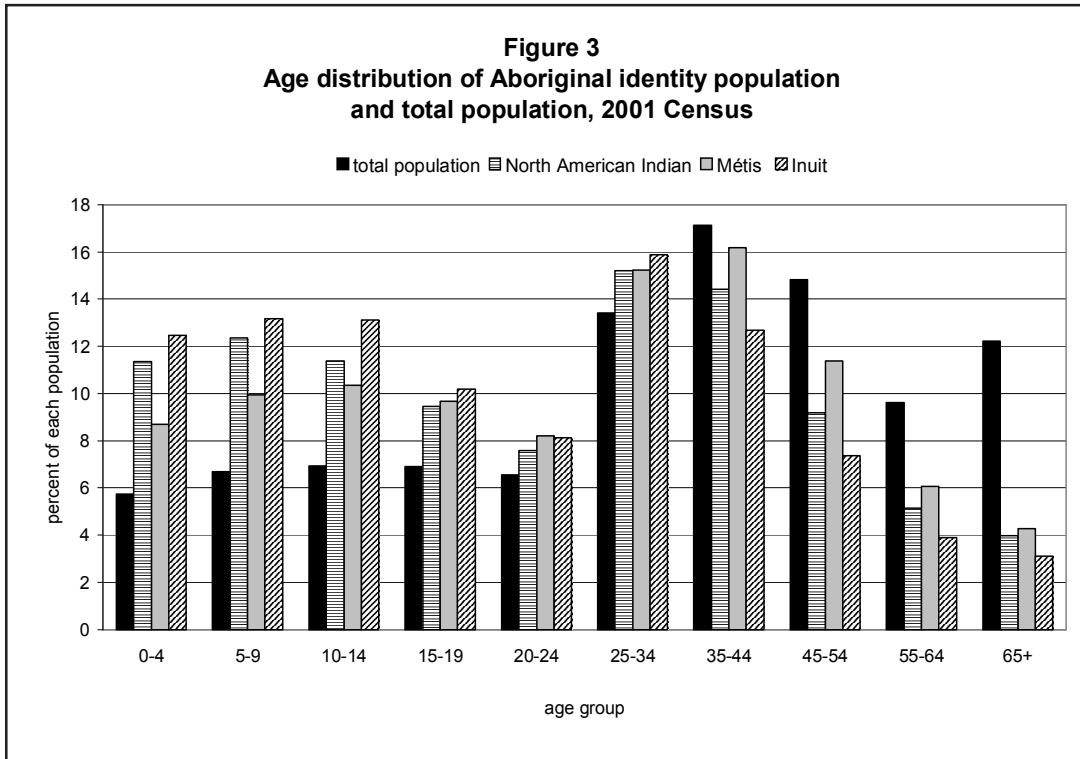


Figure 2 shows the distribution of the Aboriginal identity population by place of residence – whether on or off reserve and, if off reserve, whether in a city or town (small urban area) or a rural area. This data from the 1996 and 2001 Censuses dispel the common myth that there is growing Aboriginal migration off reserves and into the cities: The numbers simply do not substantiate this observation. Rather, while Aboriginal identity populations are growing everywhere, the population on reserve remained about the same proportion of the total identity population in 2001 as in 1996.

In short, the growth in Aboriginal populations in the cities is not occurring at the expense of the reserves. From a social and educational perspective, this means that we cannot focus our attention on either the cities as representing ‘the future’ or the ‘the reserves’ as representing the First Nations heritage. Neither metaphor is accurate. Success in improving educational outcomes for Aboriginal peoples must be *both* on and off reserve. However, as we shall see in the subsequent sections of this report, the challenge to improving outcomes in postsecondary education is greater on reserves than in the cities.

Figure 3 shows the age distribution of the Aboriginal identity population and that of the population as a whole. As is well known, the Aboriginal population is much younger than the overall population. Among the identity groups, the Inuit have the youngest population, followed by North American Indians and then Métis. Almost half of the Inuit are under 20 years of age, and 25 percent are under 10 years of age.





This age profile means that improving educational outcomes is critical right now, and cannot wait for many years. The educational failures sown today will be the social and economic costs reaped tomorrow – and in this case, tomorrow is not a distant future. This age profile also means that Aboriginal workers will form a much larger part of the labour force in the next decades, as the non-Aboriginal population ages increasingly into retirement years and the Aboriginal workforce enters into its mid-twenties and early thirties. Given the demographics of the West and the North, this all the more true of those regions of Canada.

Socioeconomic indicators

Turning briefly to socioeconomic status, Figure 4 shows the average income from all sources of the Aboriginal population and the total population, by Aboriginal identity groups and area of residence. Average Aboriginal income is 64 percent of average total income. All Aboriginal identity groups have substantially lower incomes than the general population, but North American Indian incomes have the lowest incomes, at 58 percent of total income. On-reserve incomes are lowest of all, at 49 percent of total income.

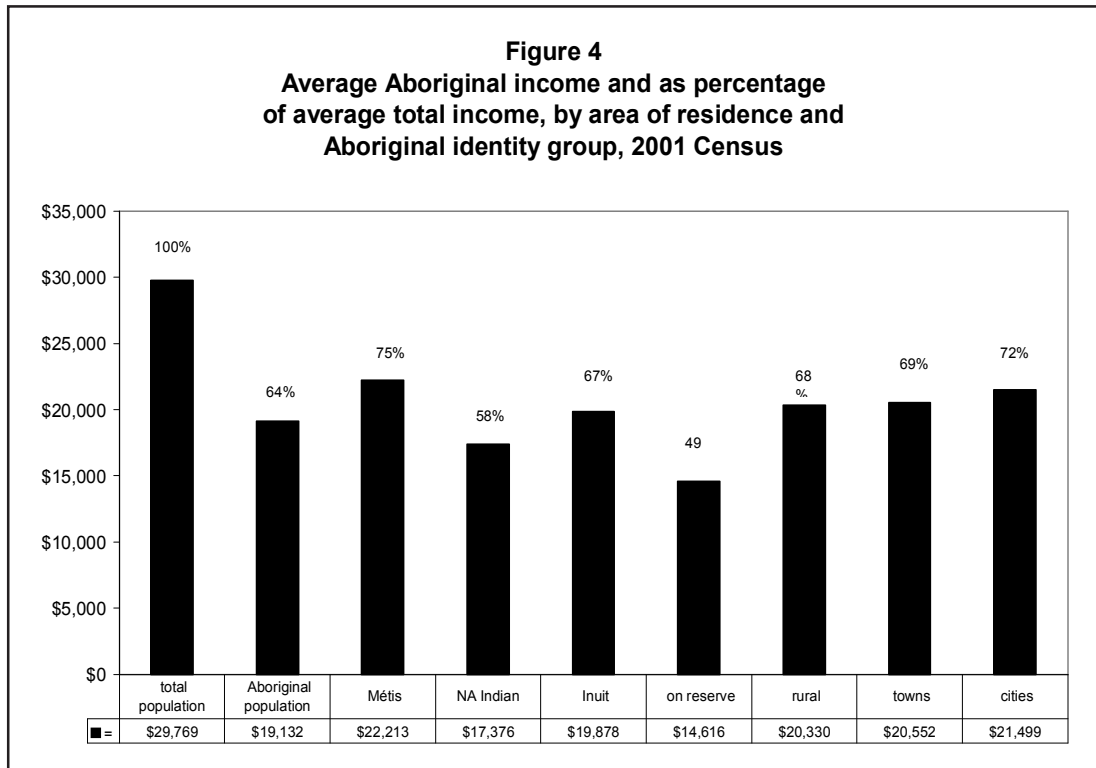


Table 2 gives the same data according to gender. Aboriginal men do better than Aboriginal women. However, income disparity between men and women is less among Aboriginals than among the general population. Furthermore, on-reserve wages of men and women are quite close. While positive from the perspective of gender discrimination, this result is most likely due to the depression of male incomes rather than the strength of female incomes – a pattern which can be found in many groups who have suffered from relatively low wages compared to the general society, such as among blacks in the US.

Figure 5 shows average Aboriginal incomes in all the urban areas with an Aboriginal population of more than 5,000, and compares these to average incomes for the whole population in those cities. Recalling that average Aboriginal incomes are about two-thirds of average incomes for the country as a whole, Figure 5 shows that in most cities Aboriginal incomes are a little better relative to the national proportion, and in some cities, such as Montreal and Toronto, Aboriginal incomes are 75 to 80 percent of the incomes of the whole population. While 75 to 80 percent is not parity, it is a higher proportion of average income than that of visible minority groups in Toronto, which is 72 percent of average incomes.

By contrast, Winnipeg’s average visible minority income is 77 percent of the total population’s average income, while Aboriginal income in Winnipeg is only about 66 percent of the total population’s average income. In short, while any inequality based on race or ethnicity is unacceptable, the Aboriginal economic situation in cities like Toronto and others in the East is part of a wider socioeconomic context

Figure 5
Average Aboriginal income as percentage of average total income, cities with more than 5,000 Aboriginals, 2001 Census

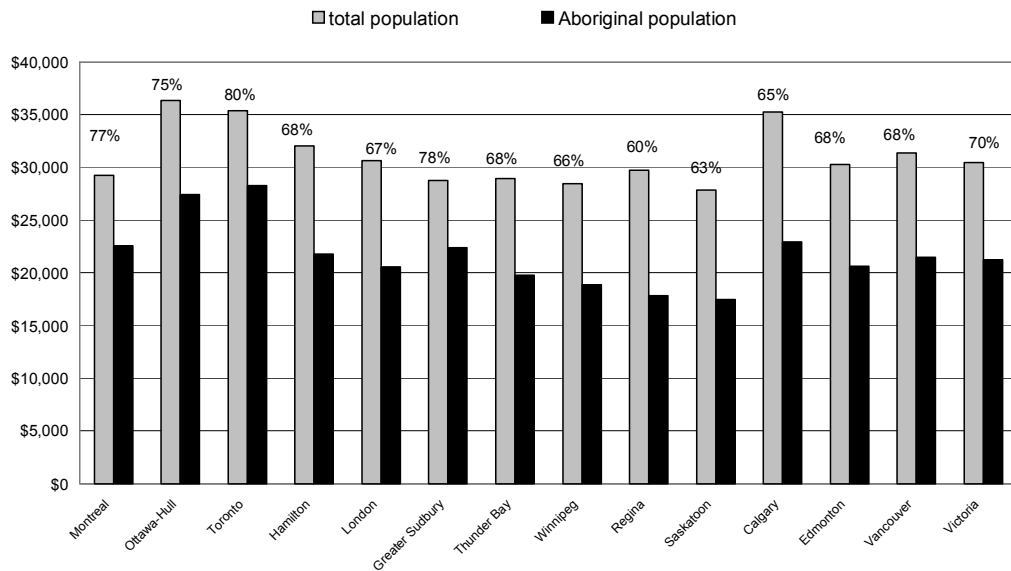
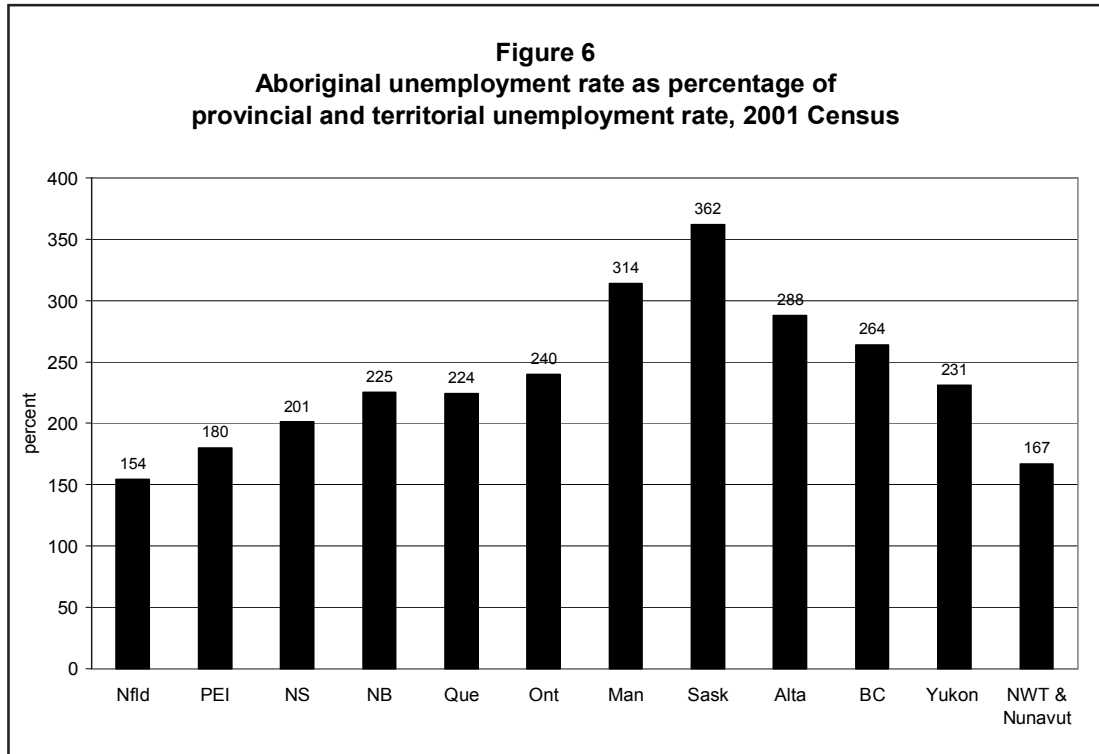


Table 2
Average income from all sources, by area of residence³ and gender, Aboriginal identity population and total population, 2001 Census

	Total	Male	Female	Female as % of male
Total population	\$29,769	\$36,865	\$22,885	62
Aboriginal population	19,132	21,958	16,519	75
Métis	22,213	26,518	17,932	68
North American Indian	17,376	19,395	15,564	80
Inuit	19,878	21,092	18,682	89
On reserve	14,616	15,099	14,120	94
Rural off reserve	20,330	24,170	16,403	68
Town	20,552	25,149	16,618	66
City	21,499	25,097	18,520	74



and is not socially isolated: The Aboriginal community is not singled out as unique in the socioeconomic fabric of the Eastern cities. This does not seem to be the case in Winnipeg or many cities of the West.⁴

As a final snapshot of the socioeconomic situation of Aboriginal people in Canada today, Figure 6 shows the relative levels of unemployment of Aboriginal people compared to the whole population in each province and territory. In Manitoba and Saskatchewan, unemployment among Aboriginal people is more than three times the level of unemployment among the general population. Relative rates are a little better in the East, although they are still high at about double the rate of unemployment among the general population.

Demographic implications

The links among better education, better jobs and better income have been substantially documented. Hull [2005: 150] concludes “Throughout the study there is ample evidence that educational attainment leads to greater opportunities in the areas of employment and income.” In his study of returns to education among Aboriginal people in Saskatchewan, Howe [2002: 1] shows that Saskatchewan’s Aboriginal people achieve a high rate of financial return on their educational investment. His paper calculates the average lifetime earnings of Aboriginal males and females contingent on whether or not they

earn a high school diploma, attend technical school or go to university. “The results...[show] that an Aboriginal male who drops out of school gives up over \$0.5 million. An Aboriginal female can earn over \$1 million by obtaining a high school diploma and then attending university, but will earn less than \$90,000 in her lifetime if she drops out of high school.” Vaillancourt [2005] finds that, in Manitoba, employed Aboriginal PSE graduates had the same incomes as non-Aboriginal graduates with equivalent education, although Aboriginal college graduates (but not Aboriginal university graduates) were somewhat less likely to be employed. The analysis of Walter et al. [2004: 295-6] concludes “...among college and trades graduates, Aboriginals generally earn about the same as their non-Aboriginal counterparts who are visible minorities and non-minorities. However, among university graduates...Aboriginals earn significantly more than university graduates of the other two groups.”

So better education outcomes, including postsecondary graduation, does increase income, which implies that improving PSE success among Aboriginal peoples will result in improved socioeconomic status and, in so doing, contribute to the social and economic well being of Canada. This is a big ‘win’ for the individuals involved, who can live richer and more fulfilling lives and also contribute more to the growth and nurturing of their own cultures. It also is a big ‘win’ for all of society, which will be better off with more prosperous citizens and no doubt also will enjoy the continuing benefits of cultural and economic innovation arising from the Aboriginal community. As we have seen earlier, this outcome is especially important in the West and the North.

However there is a ‘Catch-22.’ While higher education is the way out of low socioeconomic status, low socioeconomic status makes it less likely that higher education will be obtained. Just as research has shown that socioeconomic status improves with education, research also shows that it is much less likely for students from low socioeconomic families to obtain higher levels of education. The Council of Ministers of Education, Canada notes that students from the highest socioeconomic quartile are more than twice as likely to go to university as their counterparts in the lowest socioeconomic quartile [Council of Ministers of Education, Canada and Statistics Canada, 2000].⁵ And it is in the West and the North, just where better educational outcomes are most needed, that Aboriginal socioeconomic status is worst. With respect to incomes alone, Corak et al. [2003] show that family income *per se* is not a factor with respect to whether students go to college, but it is a strong predictor of whether they go to university.

In the next sections of this report we attempt to identify the main barriers that need to be overcome to break the vicious cycle of low socioeconomic status promoting low educational achievement, which in turn results in low socioeconomic status.

Aboriginal Peoples in Postsecondary Education

This section provides a summary ‘snapshot’ of how Aboriginal peoples are doing compared to the total population in the education system, particularly in the postsecondary sector.

Highest level of schooling

Subject to the various limitations discussed in Appendix A, Census data gives us a reasonably reliable empirical picture of the educational attainment of Aboriginal peoples. Figure 7 shows the highest levels of schooling obtained by the total population and the Aboriginal identity population 15 years of age and over in 1996 and in 2001. Figure 8 shows the change from 1996 to 2001 in the percentage of the total and the Aboriginal population 15 years of age and over in attaining each of the five categories of highest level of schooling shown.

The category ‘less than high school’ is unambiguously negative. In 1996, the Aboriginal population fared much worse than the total population, with at least 54 percent failing to complete high school compared to 35 percent in the population as a whole (‘at least’ because some of the people in the category ‘some PSE – no certificate’ may also have failed to complete secondary school). By the 2001 Census, this outcome had improved (i.e., fewer people had attained less than high school as their highest educational level) for both the Aboriginal population and the population as a whole – falling to a little under half of the Aboriginal population and to 31 percent in the total population. The decline of almost 6 percentage points in the Aboriginal population was more than the 4 percentage point decline in the population as a whole. However, the level of 48 percent non-completion of high school for Aboriginal students remains extraordinarily high.

Among the total population of Canada 15 years of age and over, the proportion with only a high school certificate remained almost unchanged, but the percentage among the Aboriginal population increased by a little more than one percentage point (1.3) between 1996 and 2001. This brings the Aboriginal population closer to parity on this indicator. Again, there may be some people in the ‘some PSE – no certificate’ category who have only a high school certificate, so this category may be understated.

Non-university postsecondary education in Figures 7 and 8 includes both trade and college certification, as discussed in Appendix A. There is a positive story to tell here. The Aboriginal population is approaching parity in the colleges, and this is reflected in the data shown in Figure 7. In 1996, 25 percent of the total population and 21 percent of the Aboriginal population 15 years of age and over completed non-university PSE. By 2001, this had improved to 28 percent among the total population and to 25 percent among the Aboriginal population, getting very close to parity.

The data on the university sector is more discouraging: The Aboriginal population’s rate of obtaining university degrees was very low in 1996 and fell in 2001. The rate among the total population also fell, so the gap stayed more or less the same. However, at this rate of change, the Aboriginal population will *never* catch up and achieve parity.

Figures 7 and 8 show data for all ages 15 years and over. Therefore, the picture of change may be clouded by the number of older people in the population for whom we would not expect the highest level of schooling to change in the five years between the censuses. The picture would also be affected by the relative proportion of older populations among Canadians as a whole as opposed to among Aboriginal

Figure 7
Highest level of schooling for Aboriginal and total population aged 15+, 1996 and 2001 Census

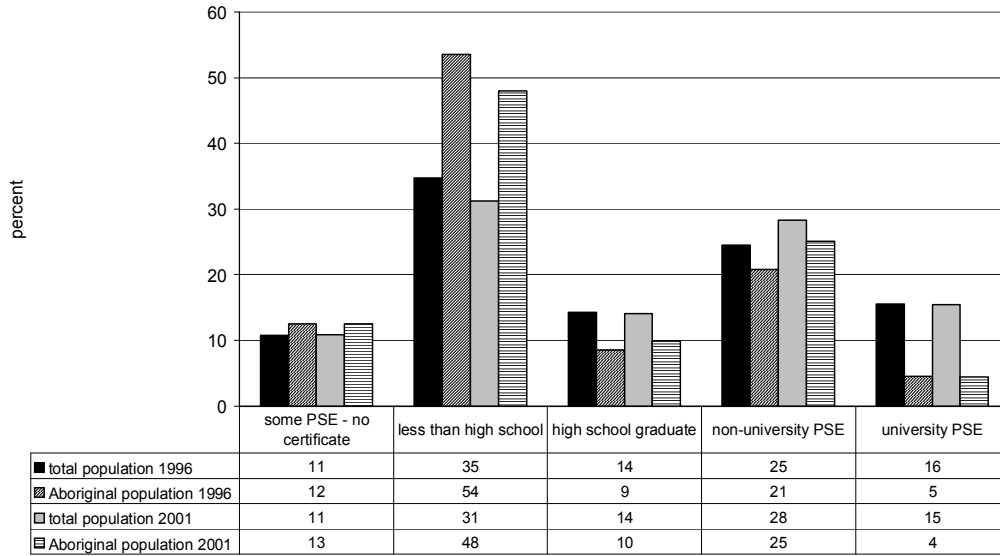
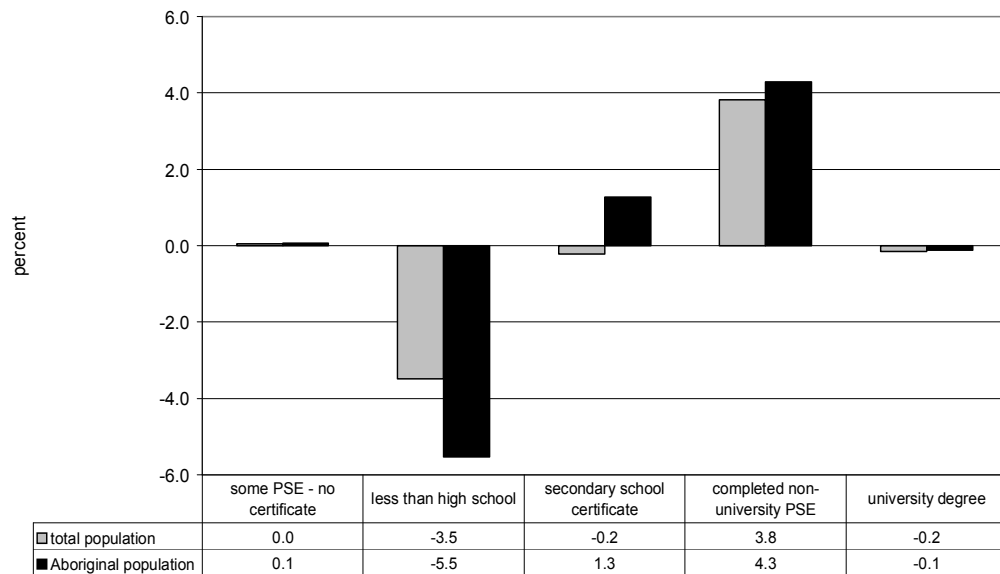


Figure 8
Change in highest level of schooling for Aboriginal and total population aged 15+, 1996 to 2001 Census



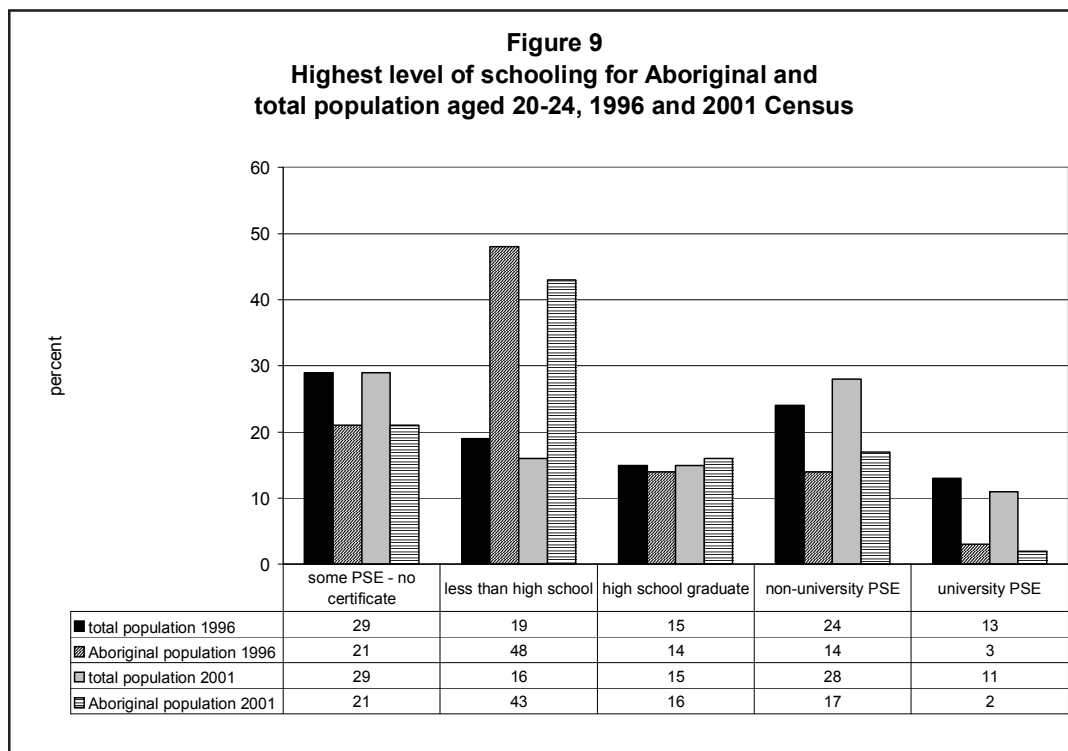
Canadians. For example, we would not ordinarily expect much change in the highest level of schooling of people over 55 years of age, but these make up a larger proportion of the non-Aboriginal than the Aboriginal population. Indeed, because the Aboriginal population is so much younger than the general population, we would expect more change in the 'highest level of schooling' aggregate data just as a result of demographics.

One way to ensure that we are not simply looking at an artefact of the different population age structures, as opposed to underlying change in educational success, is to assess whether there has been an improvement over the five years from 1996 to 2001 just for a younger age group, say those aged 20 through 24. Ordinarily, we would expect almost all of this age group to have completed secondary school and many to have a postsecondary credential, although the latter will be somewhat lower than for the whole population, given the time it takes to complete a PSE course of studies, especially a university degree.

Figure 9 shows highest level of schooling as reported on the 1996 and 2001 Censuses for Canada's total population and for the Aboriginal population, aged 20 through 24. Looking at 'less than high school,' the figures are somewhat better for the Aboriginal population aged 20 through 24 than for the whole Aboriginal population over 15 years of age, but the absolute level of failure to complete high school in the new millennium remains shocking. *An astonishing 43 percent of Aboriginal people aged 20 through 24 reported in 2001 having less than high school education.* This is the age group that would have been in high school in the 1990s, not in some distant past of discredited old policies and old programs. Moreover, the comparative figure for Canada as a whole is 16 percent. This figure indicates a huge gap between the young Aboriginal population and that of the population as a whole. The one small proviso is that the gap might be slightly exaggerated due to the ambiguity of the 'some PSE – no certificate' category, as discussed in Appendix A. And, regardless of the gap, the absolute level – 43 percent – is a huge proportion of those aged 20 through 24 not to have even finished high school, all of which would have had their schooling in the 1980s and 1990s.

Also disappointing are the results for non-university postsecondary certification. Among the 20 to 24 group, 17 percent of the Aboriginal population had non-university PSE certificates in 2001, compared to 14 percent in 1996. This is an improvement of three percentage points. However, the 20 through 24 age group in the population as a whole increased its attainment of non-university PSE certificates to 28 percent – an improvement of four percentage points. For the young age group, the gap in completion of non-university PSE increased, rather than decreased, between 1996 and 2001. We also see among the Aboriginal population aged 20 through 24 that the proportion with a non-university PSE certificate is much lower than the 25 percent for the whole Aboriginal population 15+ years of age, in contrast with the population as a whole. This means that Aboriginal people tend to get their non-university PSE certification later in life – or it could mean that Aboriginal attainment in colleges is slipping backward. We will not know for certain until the next Census.

Figure 9 also shows the proportion of the Aboriginal and general population aged 20 to 24 group that completed university and obtained a degree. The rate within both the Aboriginal and the general population has fallen, in the case of the Aboriginal population to the very low level of 2 percent. However,



in both cases this likely reflects a trend towards taking longer to obtain university degrees than previous generations.

Figure 10 shows the same ‘highest level of schooling’ results, but this time by gender for ages 20-24. Females tend to do better in educational attainment both among the total population and the Aboriginal population. One exception is the non-university postsecondary education sector; here male and female Aboriginal persons do equally well, whereas females do better than males in the non-university PSE sector among the total population. While females show a smaller percentage than males for ‘secondary school certificates’, this stems from the fact that they have a higher proportion completing PSE as well as a higher proportion among the Aboriginal population in the ambiguous ‘some PSE – no certificate’ schooling level.

Table 3 shows the specific quantities of the gap in genders in the Aboriginal and total population. As can be seen, the gender gap is greater or equal in the total population than in the Aboriginal population, with the exception of the ‘some PSE’ category – where males are a higher proportion than females among the Aboriginal population. Put simply, the genders are more equal in the Aboriginal population than in the total population, though this is due to the fact that males in the Aboriginal population do not do as well as males in the total population.

Figure 10
Highest level of schooling for Aboriginal and total population aged 20-24, by gender, 2001 Census

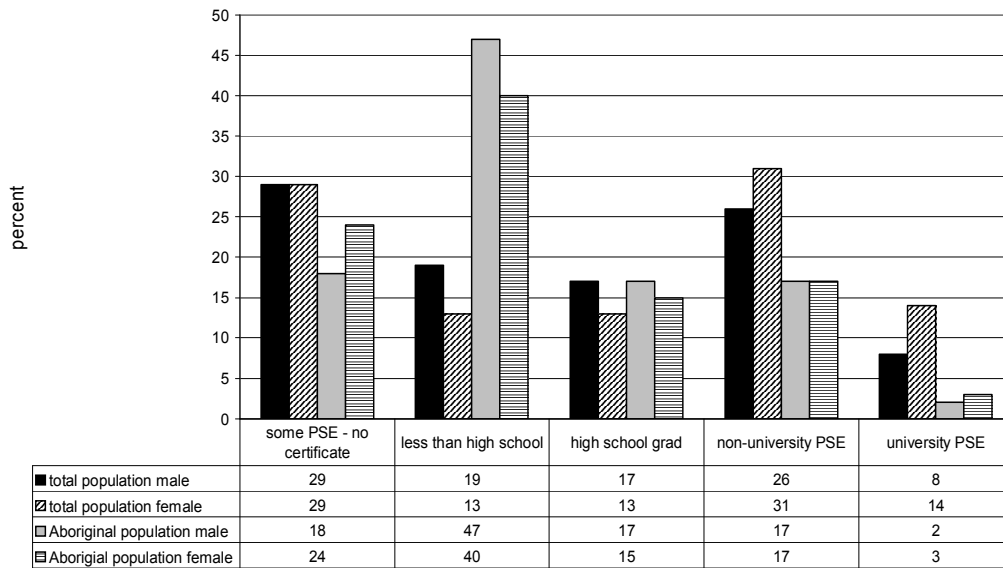


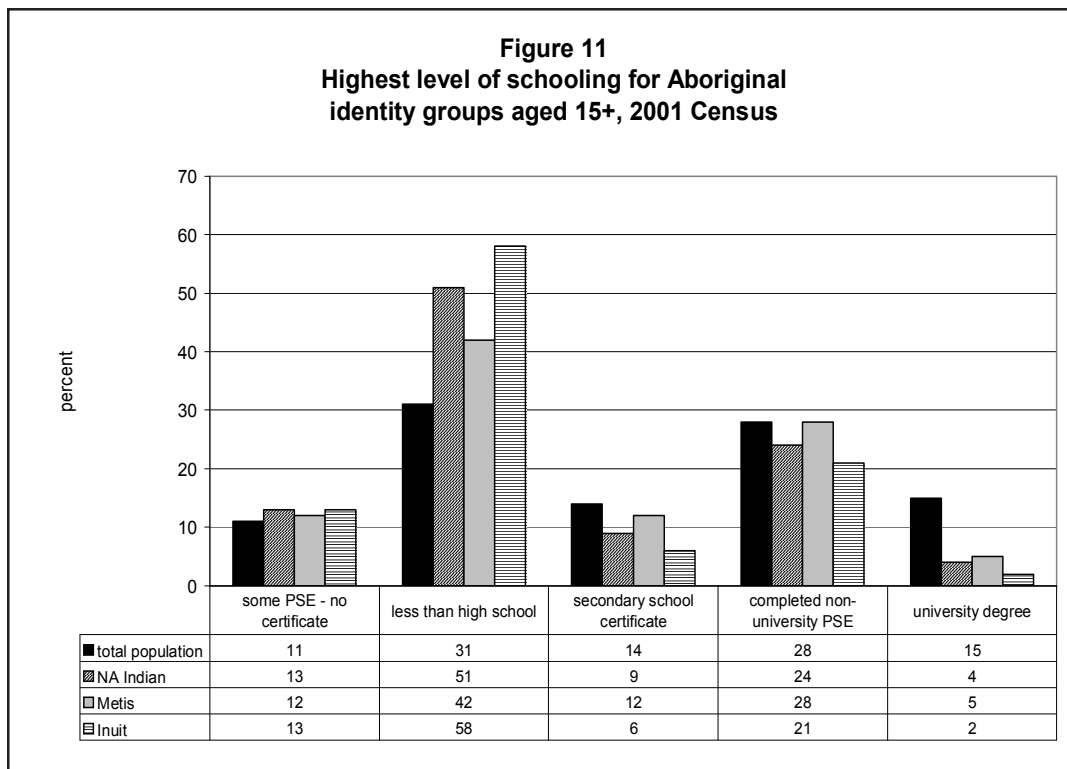
Table 3
Gap in levels of schooling between genders (males minus females)
in the total and Aboriginal population aged 15+, 2001 Census

	Total population gender gap (%)	Aboriginal gender gap (%)
Some PSE – no certificate	0	-6
Less than high school	6	6
Secondary school certificate	5	2
Completed non-university PSE	-4	-1
University degree	-5	-1

Figure 11 shows the highest level of schooling for each Aboriginal identity group compared to that for the whole population. In general, the Inuit have the lowest levels of schooling, followed by North American Indians. Métis have the highest levels of schooling among the identity groups, achieving parity with respect to non-university PSE, but well behind in university PSE. More than half of North American Indians have less than high school, and almost 60 percent of Inuit have less than high school.

The geography of Aboriginal education attainment

Turning to the geographical picture of Aboriginal peoples’ education and postsecondary education experience, Figure 12 shows highest level of schooling for the Aboriginal identity population by area of residence – on reserve, rural, town, and city – compared to the highest level of schooling for the whole population. There is a clear pattern, with Aboriginal educational achievement highest in the cities, second highest in towns, third in the rural areas and least of all on reserve. On reserve, at least 59 percent of the Aboriginal population is not completing high school, but even this extremely high figure may be an understatement because some of the 11 percent recorded as having ‘some PSE – no certificate’ may also not have completed high school. In the cities, 40 percent of Aboriginal students have less than high school, which is still far too high, but within 10 percentage points of the 31 percent of the total population that has not completed high school.



The picture is not all negative. Off reserve, the Aboriginal population has achieved parity with respect to certification in non-university PSE. In the universities, the Aboriginal population living in cities is achieving about one-half of the rate of university degrees of the population in total, at 7 percent. This is far beyond the levels of 2 to 4 percent on reserves and in rural areas and towns outside of the cities.

Figure 12 includes the older age group in the whole Aboriginal population aged 15 and over. To see whether the disappointing figures in Figure 12 are a hangover due to the effect of out-dated and now long-past education policies, Figure 13 shows the same geographic analysis, except for the Aboriginal and total population aged 20 through 24.

Figure 14 compares the ‘less than high school’ category from Figures 12 and 13, to show the extent of change from the whole population over 15, to the younger population, aged 20 through 24. There is an even larger gap in the ‘less than high school’ category between the Aboriginal and total population when we look only at this younger age group. Most worrying, there is virtually no change in the proportion on reserve that has less than high school. Off reserve, there is at least a meaningfully smaller share with less than high school among the Aboriginal population aged 20 through 24, compared to everyone aged 15+, but this is not the case on reserve. For the whole population, only 16 percent of the population aged 20 through 24 has less than high school, compared to 31 percent of the total population aged 15+. This means that in the late 1980s and 1990s almost everyone in the general population was finishing high school, but not

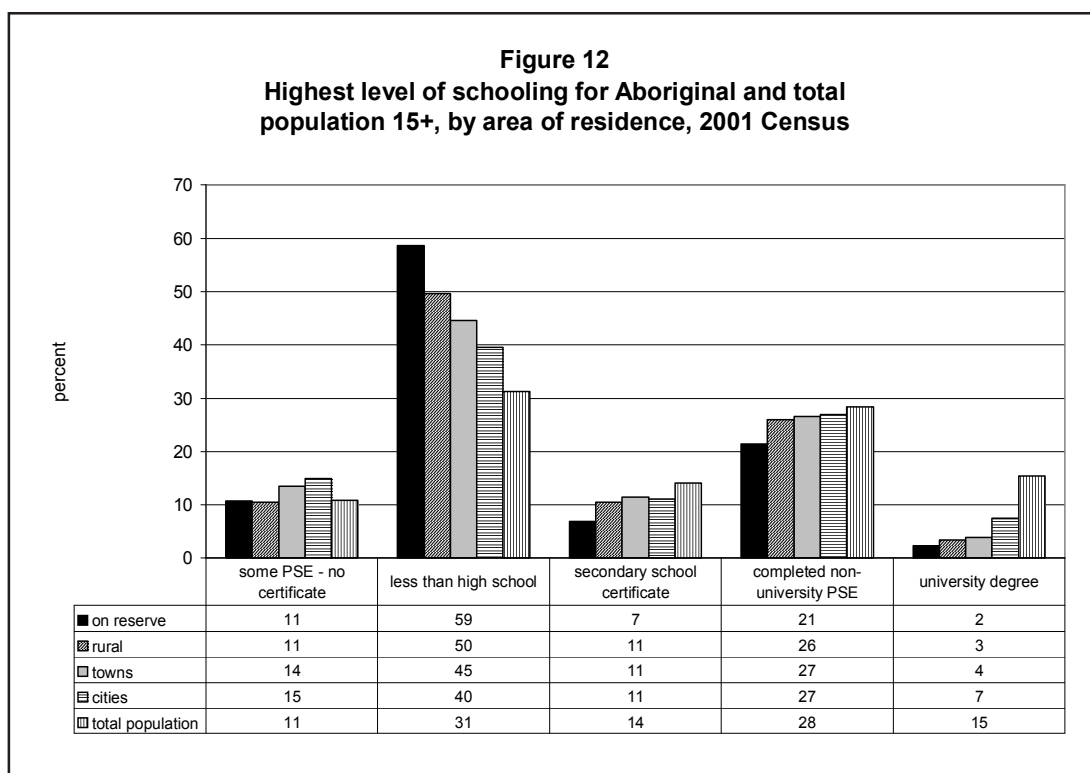


Figure 13
Highest level of schooling for Aboriginal and total population aged 20-24, by area of residence, 2001 Census

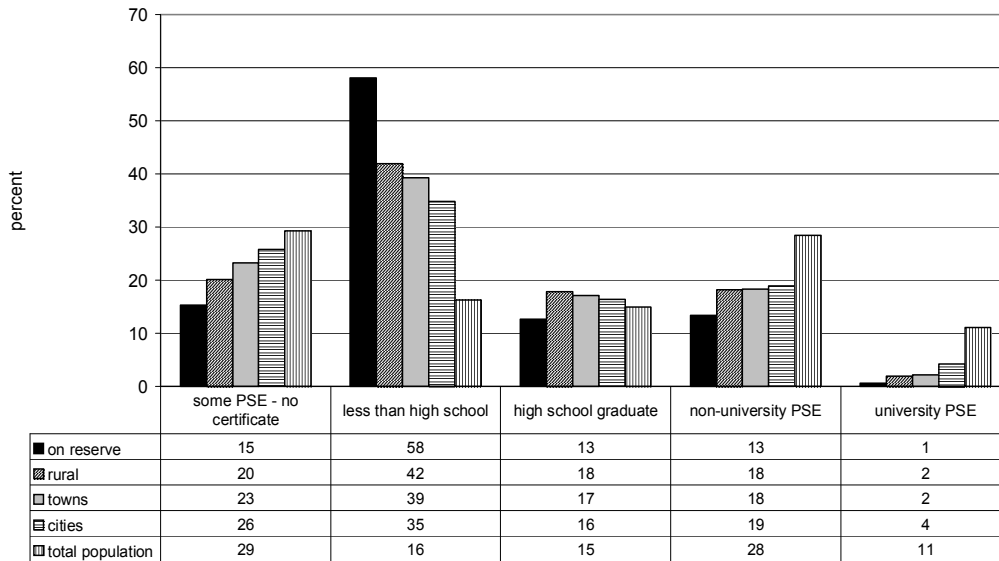
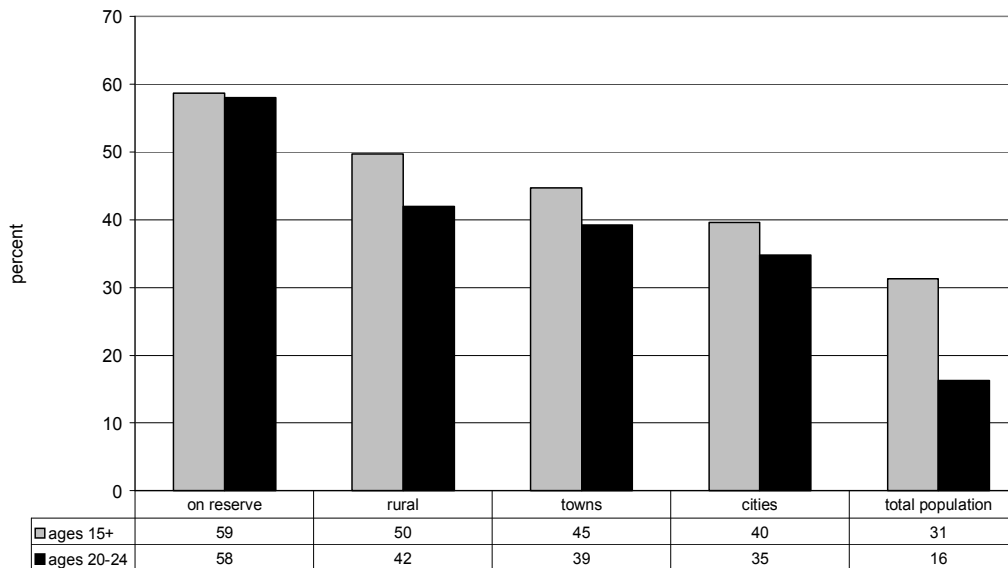


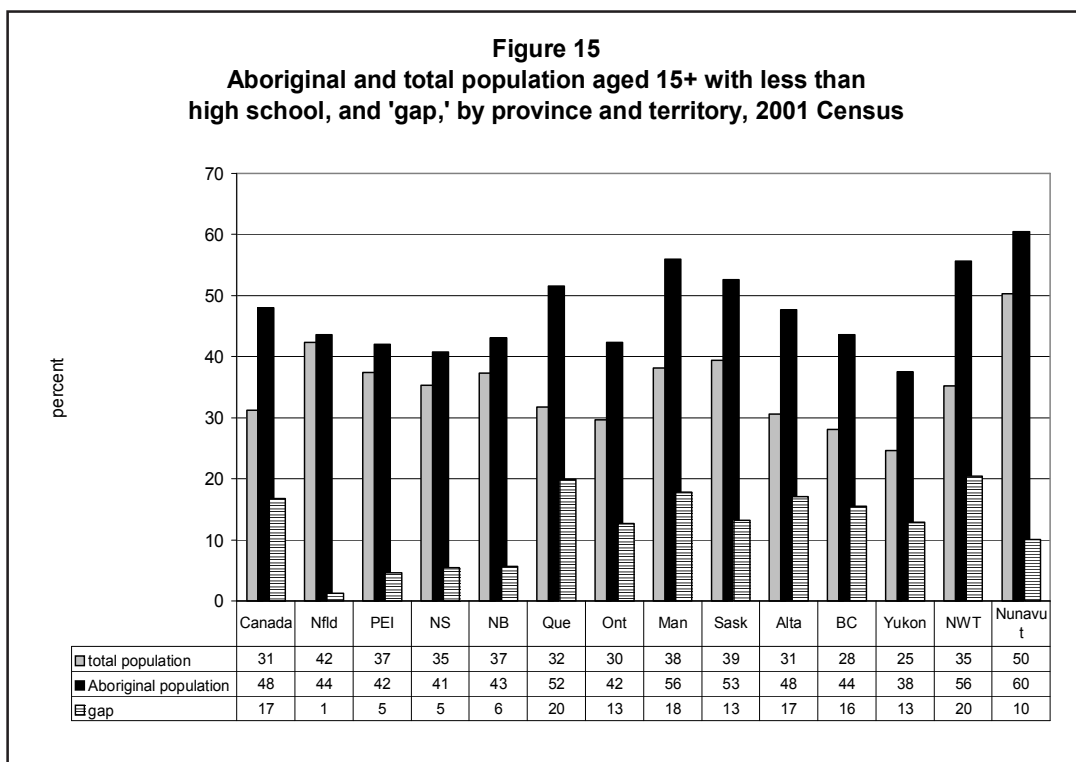
Figure 14
Aboriginal population aged 15+ and 20-24 with less than high school, by area of residence, 2001 Census



the Aboriginal population: Aboriginal people were falling further behind, particularly on reserves, but also in the cities. This outcome reflects educational standards and practices that are less than a decade old and likely are more or less the same practices as exist today.

This bleak picture may be somewhat mitigated by the ambiguous ‘some PSE’ category, since this is smaller on reserve for the 20 through 24 age category than for the total population of that age, and also somewhat smaller for Aboriginal people regardless of residence. Since some of the people in that category may not have finished high school, it may mean that the comparison between the total population and the Aboriginal population is not quite as negative. Nonetheless, the minimum estimate of the number who fail to complete high school remains unaffected by this consideration: We cannot avoid the finding that at least 58 percent of Aboriginal people on reserve aged 20 through 24 have not completed high school. In the following section, we will see why this is likely the single most critical factor in determining PSE attainment levels.

We also can look at geographic distribution by province and territory. Figure 15 shows the proportion of the Aboriginal and total population that has not completed secondary school by province and territory, and the gap between the two populations. As noted previously, the actual rate of non-completion of high school is likely greater than the figure estimated here since a part of the reported ‘some PSE’ population will also have not completed secondary school. However, the percentage of the Aboriginal and



total population with ‘some PSE’ as their highest level of schooling is not that different from one another, so Figure 15 does give us a reasonably reliable picture of the provincial distribution of educational attainment at the secondary level.

The difference between non-completion rates of Aboriginal students and the general population may, on first impression, appear not too large. However, even a small gap between the two populations is significant since this represents the proportion of the *total* population over 15 years of age. For example, in Quebec, 52 percent of the Aboriginal population and 32 percent of the total population failed to complete high school, so an additional 20 percent of the Aboriginal population would have had to graduate from high school to close the gap. A gap of 20 percent is quite large: One out of five of the Aboriginal population over 15 years of age in Quebec would have to complete high school to catch up to the total population.

How do the provinces and territories compare with one another? East of Quebec, the Aboriginal population is close to the secondary school completion rates of the general population, but the gap increases dramatically in Quebec and the remainder of the country. On the other hand, the Atlantic provinces do not do so well when we look at their performance in absolute rather than comparative terms. With ‘only’ 42 percent of Aboriginal students failing to complete high school in Ontario, that province does better than almost any other province or territory. But the large gap in Ontario is due to the lower percentage among the general population who fail to complete high school.

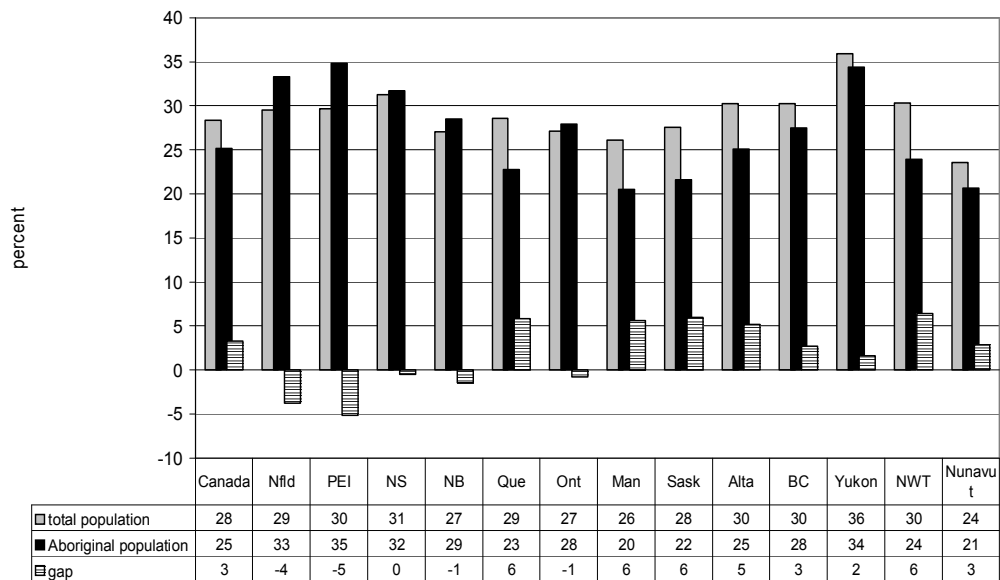
What is more significant: the gap or the absolute level? This is an important question, not only to assess the current state of affairs, but also in judging progress in the future. For example, if we find in the 2006 Census that the absolute percentage of Aboriginal students who fail to complete high school falls, but the percentage of students who fail to complete high school among the general population falls even more rapidly – so the absolute level for Aboriginal students improves but at the same time the gap grows – would this represent progress or regress?

The ambiguous answer has to be that both the gap and the absolute level are important. From the perspective of social cohesion, an increase in the gap tells us that we are moving backward to a more unequal and less inclusive society. Yet if a larger proportion of Aboriginal students do manage to complete high school, each one of these students represents an important personal victory and, from the perspective of economic opportunity, more Aboriginal individuals will have a better chance at a sound economic future and be able to contribute more to society as a whole. An unambiguous assessment is possible only if both the gap and the absolute level are improving or worsening simultaneously.

None of the provinces or territories is superior in terms of either gap or absolute level. Manitoba, Saskatchewan and the Northwest Territories have both the highest absolute levels of failure to complete high school among Aboriginal students, and the largest gaps.

Figure 16 shows the provincial and territorial results in non-university postsecondary completion, combining certification in a trade and community college certification. Of course, while the lower the absolute level the better in the case of non-completion of high school in the previous figure, the *higher* the

Figure 16
Aboriginal and total population aged 15+ completing non-university PSE, and 'gap,' by province and territory, 2001 Census



absolute level the better in the case of non-university PSE completion on this figure. However, as in the previous figure, the smaller the gap the better.

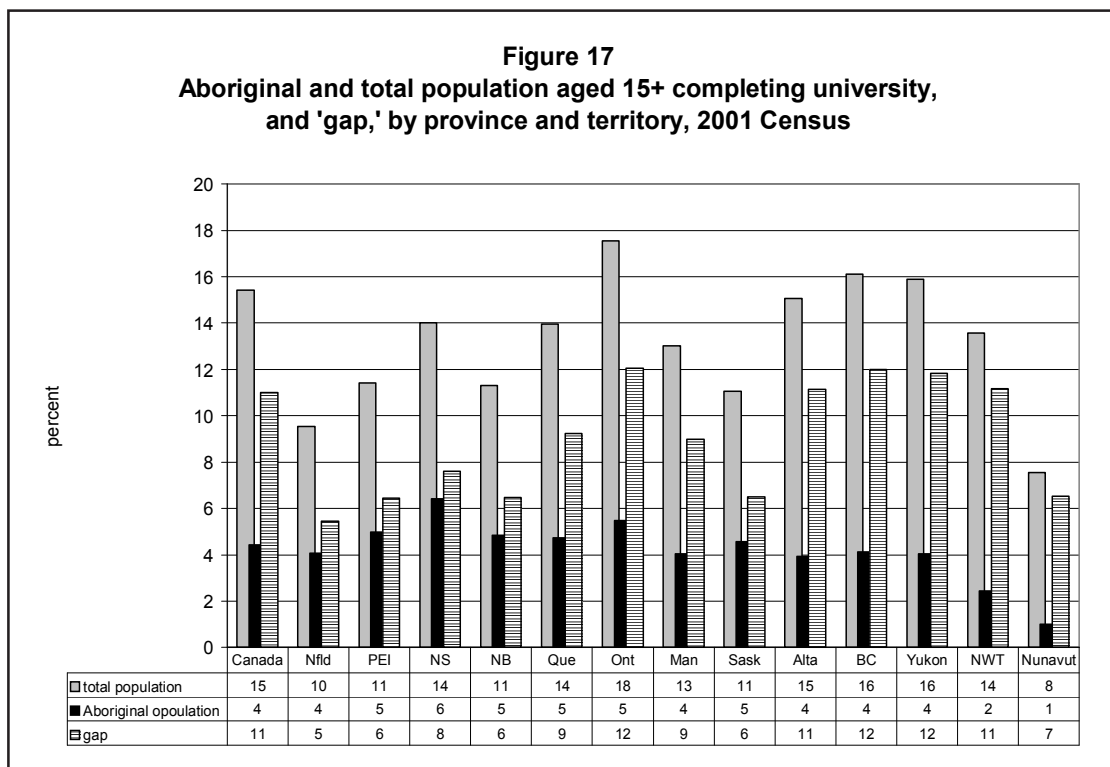
The Atlantic provinces have the best result in non-university postsecondary completion, both with respect to the gap and in absolute levels. In all these provinces, not only is there no positive gap between the Aboriginal and the total population, but the Aboriginal population also is *more* likely to hold a non-university PSE certificate than the total population. In fact, in the Atlantic provinces the rate of completion of non-university PSE is higher than the average for the total population of Canada.

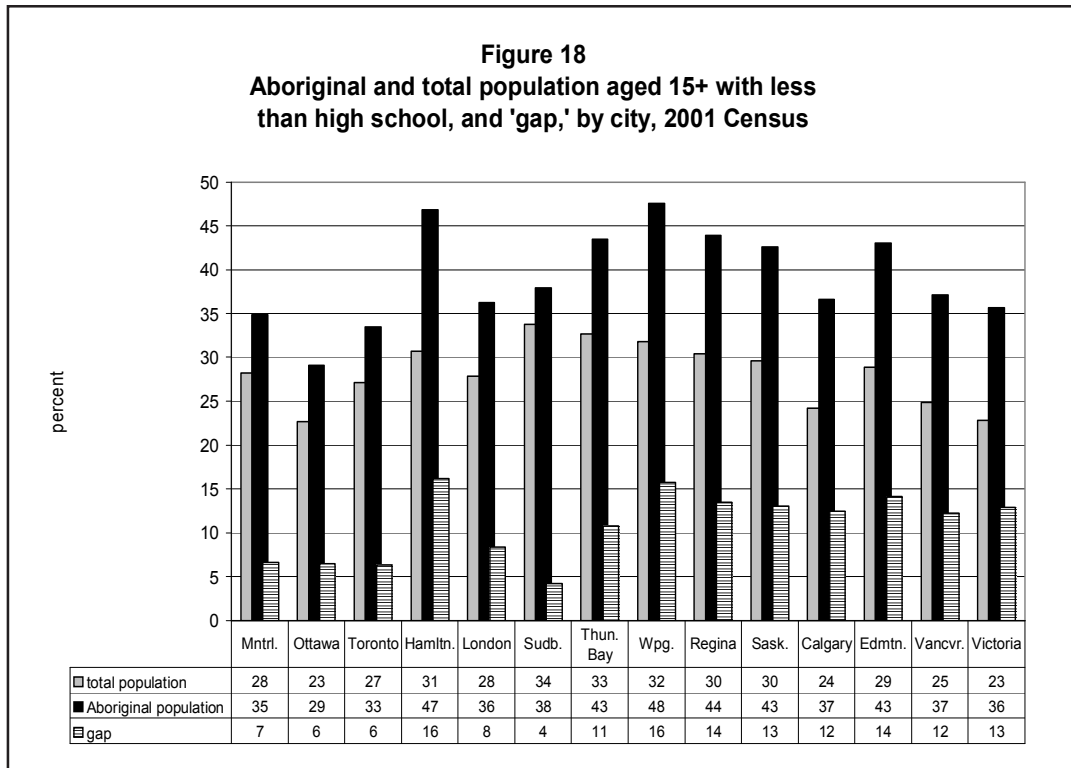
A gap remains in the other provinces, except Ontario, but it is much smaller than the gap in high school completion. In most cases, an additional 6 percent or less of the Aboriginal population would have to complete a non-university PSE certificate in order to achieve parity. Not that 6 percent is trivial: In Manitoba and Saskatchewan, 6 percent of the Aboriginal population represents a significant proportion of the potentially available workforce. Both these provinces have large Aboriginal populations, low unemployment rates, increasing demand for skilled trades, and difficulty attracting in-migration. If these Prairie provinces could achieve parity in non-university PSE, it would go a long way to resolving increasing challenges for skilled labour. Furthermore, among the provinces, Manitoba and Saskatchewan are again lowest in absolute levels of Aboriginal students completing non-university PSE and highest in the gap between the Aboriginal and the total population.

Figure 17 displays the same analysis for university postsecondary education. Here the gaps are very large in every province and territory. Closing the gap would require a tripling or quadrupling of the number of Aboriginal graduates from universities in most provinces, and even more in some. In the next section, we discuss some of the specific numbers of graduates that would be required to close the gap.

One small positive note in Figure 17 may be with respect to Saskatchewan. Although it is perhaps to some extent only a reflection of that province's relatively low university PSE graduation rate among the general population, at 6 percent, the gap between Aboriginal university graduates and those from the total provincial population is among the lowest in Canada. Saskatchewan is usually among the worst in most indicators. Perhaps Saskatchewan's relatively better performance on this one indicator is due to the more ready availability of Aboriginal-targeted university level education through the First Nations University of Canada (previously known as the Saskatchewan Indian Federated College) and the Gabriel Dumont Institute [Richardson and Blanchet-Cohen 2000].

The next three graphs show various levels of educational attainment in cities with an Aboriginal population of more than 5,000. Figure 18 shows the percentage of the Aboriginal and total population that have not completed high school. In all cities, a smaller proportion of the Aboriginal population has not attained at least high school than in the province as a whole. This is consistent with other data showing a gradation of educational attainment from the reserves, to rural areas, to small towns and then to cities.





However, while more of the Aboriginal population is completing high school in the cities, so is more of the general population. Consequently, the gap between those who do not complete high school among the Aboriginal population compared to the total population is just about the same in the cities as in the province in which the city is situated, with the exceptions of Montreal, Ottawa (including Hull), Sudbury and Toronto.

Figure 19 presents completion rates for non-university postsecondary education in the cities. There are only five cities where the Aboriginal population has not either reached or exceeded parity or is within 2 percentage points of parity on this indicator of educational attainment – Thunder Bay, Winnipeg, Regina, Saskatoon and Edmonton. Once again, these are almost all Western cities. In both Regina and Saskatoon, the gap remains over 6 percent of the Aboriginal population. In absolute terms (rather than the gap), Winnipeg, Regina and Saskatoon are the cities with the lowest proportion of their Aboriginal population to have completed non-university PSE.

Finally, Figure 20 shows the completion of university PSE in the cities. Here the pattern is not so clear-cut. In absolute terms, one of the Western cities – Saskatoon – does relatively well compared to the other cities, and one of the Eastern cities – Hamilton – ranks among the worst, despite the presence of a major university, McMaster. Again, some of the relatively better outcomes for the Saskatchewan cities may be at least partly attributable to the Aboriginal PSE institutions in that province.

Figure 19
Aboriginal and total population aged 15+ completing non-university PSE, and 'gap,' by city, 2001 Census

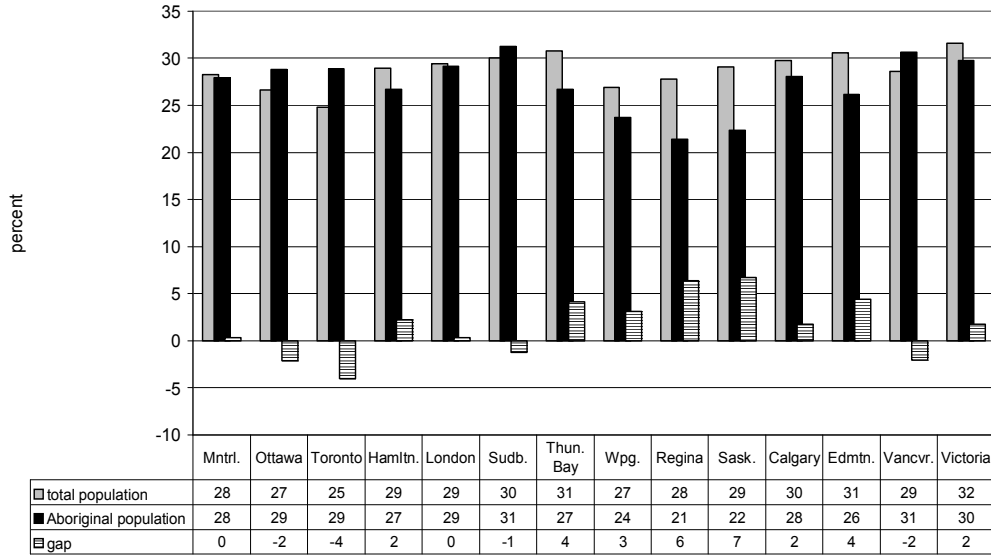
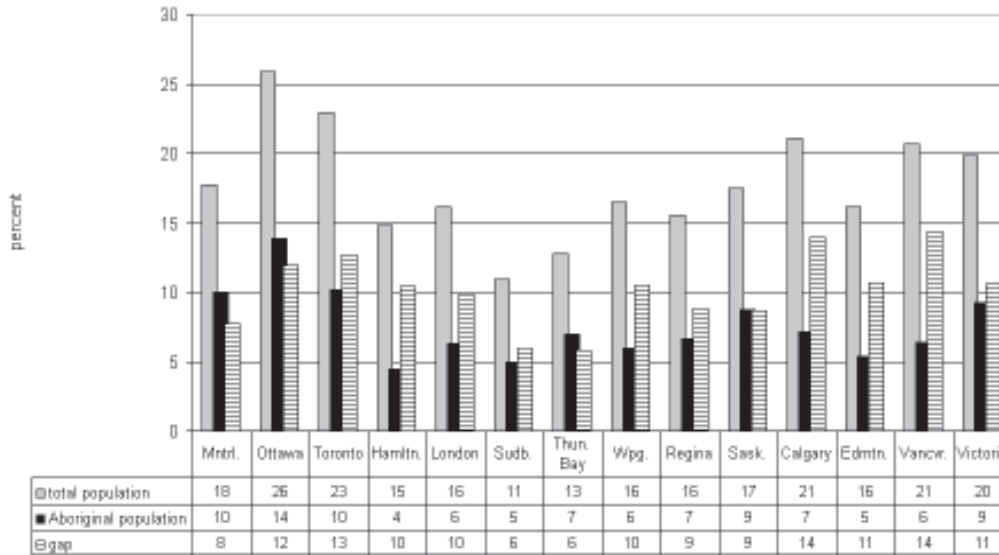


Figure 20
Aboriginal and total population aged 15+ completing university, and 'gap,' by city, 2001 Census



Summary of the current state of Aboriginal attainment in postsecondary education

Most studies have concluded that Aboriginal peoples are more successful in postsecondary education today than in the past [e.g., Rae 2005; Council of Ministers of Education, Canada, and Statistics Canada 2003]. Forty years ago, there were almost no Aboriginal persons in universities and those few who were enrolled became more or less invisible as they immersed themselves in the general culture as a form of defence. Today there are Aboriginal judges, doctors, teachers, scientists, artists and engineers. And, as we have seen, colleges are doing well. Aboriginal students are by and large closing in on parity in the trades and colleges sector, although the Prairies (and Quebec) still lag behind.

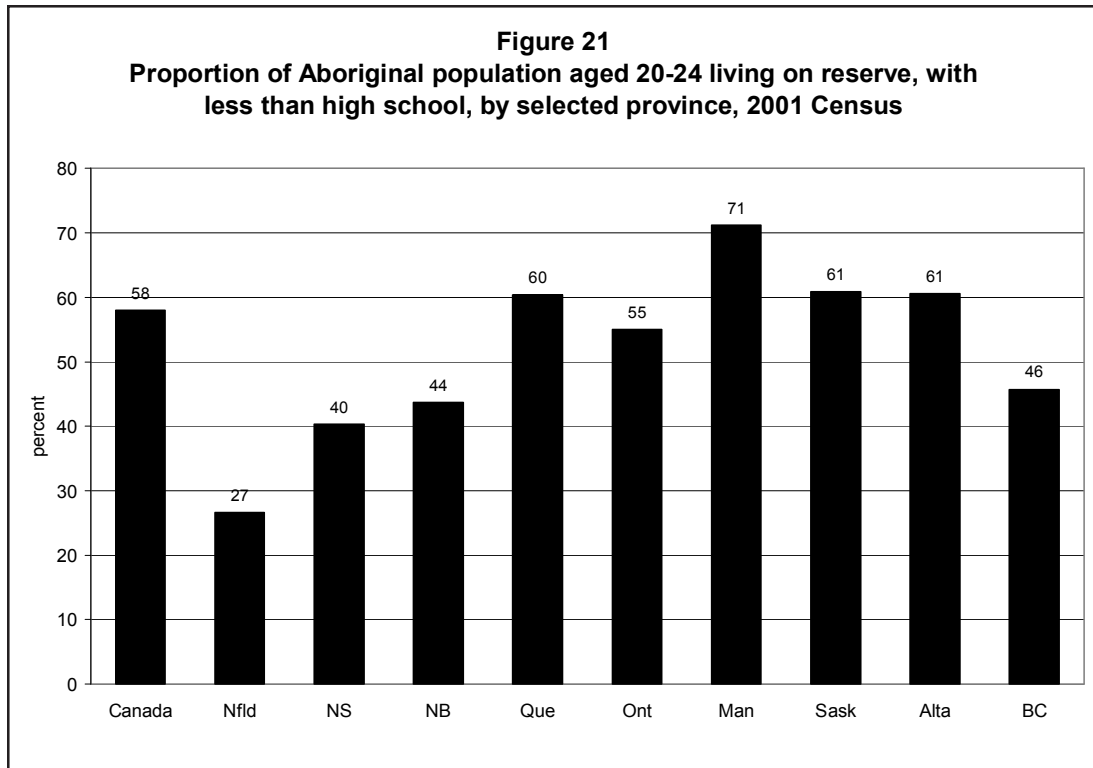
Doubtless there has been improvement, but there is no reason to be sanguine. Rather, there is good reason for every Canadian to be deeply concerned

First, there are huge numbers of Aboriginal students who are simply not completing high school. Yet the economy is evolving, and almost any job, even a minimum wage job, already demands or soon will require a higher level of numeracy and literacy than today. Whereas once it may have been possible to get and keep a reasonable job with less than high school education, failing to get through high school makes a lifetime of poverty increasingly probable.

Second, the evidence that high school completion is improving is not straightforward. As we have seen in Figure 14, there appears to have been little if any improvement in the last five-year period in high school completion on reserve. Indeed, the situation may even be getting worse on reserve. Off reserve, the evidence suggests that high school completion is improving, especially in the cities – but at a rate that may be slower than the improvement in high school completion among the general population. If this is the case, rather than gradually catching up on this education attainment indicator, Aboriginal students are falling further behind. And this is not just about high school; it also directly affects PSE attainment, as we shall see in the next section.

Third, the Prairies and the North continue to lag behind the rest of the country. There is no sign that they are getting closer to the success rates elsewhere in Canada. This is absolutely critical for their economic success and for social well being for all of Canada. If we end up entrenching a racially defined underclass, the consequences will be felt throughout the country, changing who we are and the kind of society we live in. This is nothing but a slowly accumulating massive disaster for the Prairies – and some might say that this disaster is already occurring.

If we combine the two geographic areas with low levels of high school graduation, reserves and the Prairies, we get truly stunning results. As we can see in Figure 21, in Manitoba more than 70 percent of the on reserve population aged 20 through 24 had not completed high school in 2001 – and Saskatchewan and Alberta reserves were not far behind, at 61 percent. Unfortunately, Quebec is not doing much better. What do we suppose these young men and women will do with their lives, as they grow older? What kind of social cohesion will be possible when the large majority of some segments of society will be excluded from normal economic participation? The only difference between this and the kind of disasters that grab headlines and emergency funds is that it will take longer for the destruction to become obvious.



Solutions, however, are not self-evident. This report is more of a diagnosis and does not suggest what specific policies we need to address this crisis in Aboriginal education. However, the results of our analysis do allow us to look more closely at what strategies would be needed. This is the subject of the next section of this report.

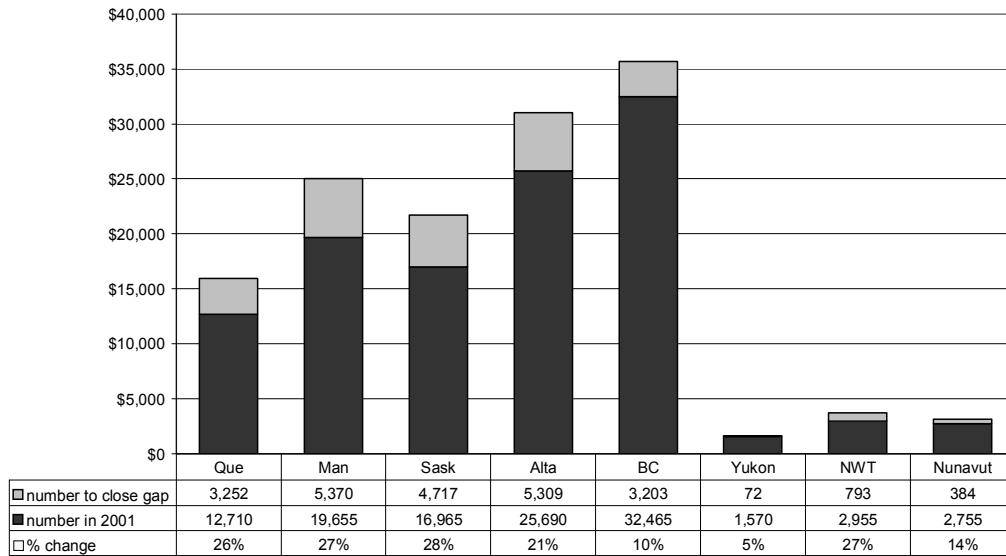
Increasing Aboriginal Peoples' Participation and Success in Postsecondary Education

Postsecondary capacity

If all barriers were removed and sufficient Aboriginal people were qualified and able to take up positions in postsecondary institutions at a level equivalent to that of the general population, what resources would be required? We can give some approximate answers to this question by calculating how many additional Aboriginal students would have had to complete PSE diplomas or degrees to reach parity.

Figure 22 shows the number of existing Aboriginal non-university PSE graduates in 2001 and the additional number that would have had to have graduated on or before 2001 from colleges or acquire trade certificates in order to have had parity with the total population, in each province, in 2001. Provinces where the Aboriginal population had already reached parity are not included. The percentage figures are

Figure 22
Aboriginal non-university PSE graduates,
number of graduates and percentage change needed to
close the gap, by selected province and territory, 2001 Census



the change in the number of graduates that would have been required to reach parity in 2001. The low is 5 percent additional graduates in the Yukon and the high is 28 percent additional graduates in Saskatchewan. The change that would have been required is not extraordinarily large anywhere in Canada.

In total, across Canada, about 23,000 more graduates would have been needed to completely close the gap in non-university PSE completion. About 2,300 more Aboriginal students would have to graduate from non-university PSE every year for a decade if this gap were to be closed in ten years (assuming no change in the numbers graduating in the total population). Of course, this estimate ignores population growth and change in the levels of completion among the general population over the next decade, but it at least provides a rough guide as to the number of students required to achieve parity.

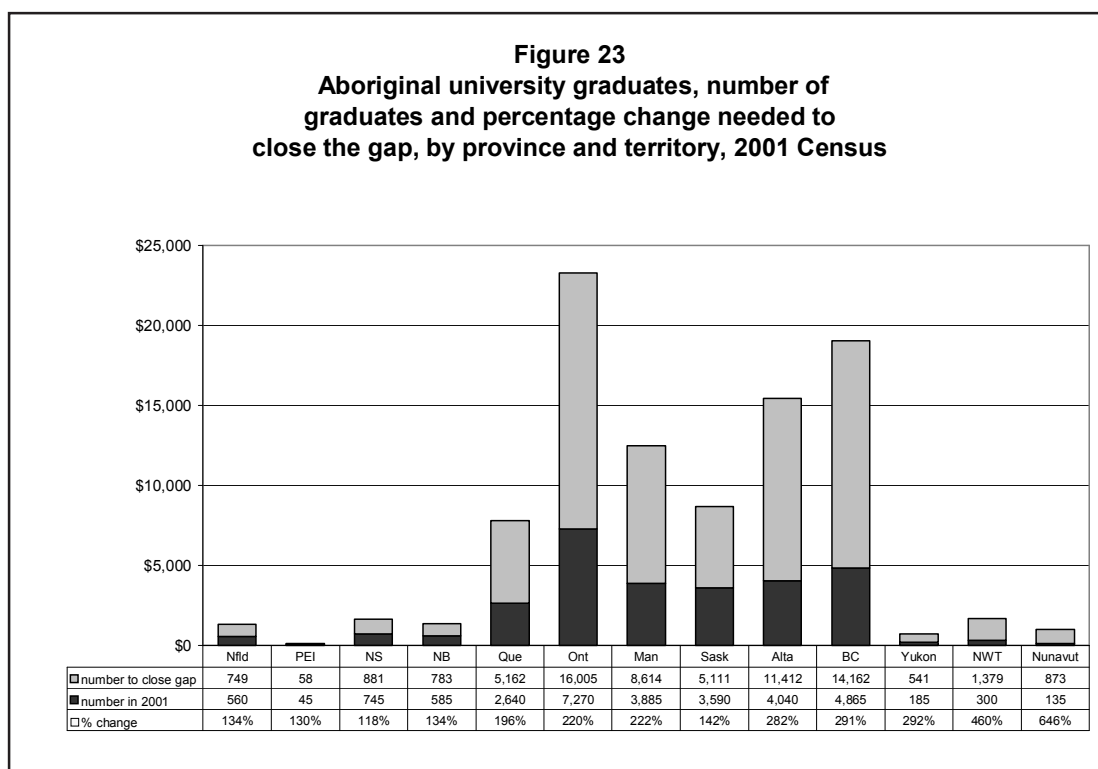
Assuming an average of about three years for a certificate or diploma (making allowance for part time students), and providing a margin for dropouts and non-completion, 2,300 graduates a year would require on a very rough approximation about another 10,000 Aboriginal students in trade certification training and in colleges. Distributed among the provinces in proportion to the size of their current ‘gap’ as displayed on Figure 16, this would require the following additional capacity in the non-university PSE sector: Quebec – 1,408; Manitoba – 2,324; Saskatchewan – 2,042; Alberta – 2,298; BC – 1,387; Yukon – 31; NWT – 343; Nunavut – 166.

There are roughly 400,000 full-time and 85,000 part-time students in colleges in Canada and perhaps another 100,000 working towards trade certificates [Canadian Education Statistics Council 2003],

so the increased capacity needed nationally is relatively small. Even those provinces with the largest gap should be able to absorb this size of increase with only small change to the overall level of current resources to the non-university PSE sector. Of course, there might be alterations required in the nature or type of programs to accommodate increased numbers of Aboriginal students, but trades and colleges are constantly adjusting their programs in any case to accommodate new technology and market demand. It is not obvious that the quality or quantity of change required for this size of increase in the number Aboriginal students would be especially extraordinary. This is not to say that the increased enrollment could be accommodated with no funding and no adjustments, only that the range of financial and other requirements is within the range that has been experienced several times in the last decades.

As noted, these estimates will have to be somewhat different by 2005 and over the next decade. The direction of change is not known, as it will depend both upon recent school attainment as well as demographics. In any case, these estimates are only a rough attempt to establish an order of magnitude for the capacity challenge, but are likely to remain more or less in this neighborhood. In short, closing the gap in non-university PSE graduates is within reach and feasible, *if* there are enough qualified Aboriginal students who decide to apply and are able to be admitted. This is the big ‘if’, as we discuss further in the second half of this section.

Figure 23 is the data for universities that corresponds to Figure 22 for non-university PSE. Figure 23 shows the existing number of Aboriginal graduates from university level PSE in 2001, the number that



would have been required to close the gap in 2001, and the percentage increase in graduates that would have been needed to fill the gap.

In many ways the situation is almost the exact opposite of that for Aboriginal non-university PSE graduates. The total gap across Canada is more than 65,000, compared to only 28,850 Aboriginal university graduates in 2001. There is a gap in every province and territory. If the gap were to be closed in a decade, another 6,500 Aboriginal students would have to obtain degrees every year. Assuming on average four years to get a degree and allowing a margin for dropouts, Aboriginal enrolment in universities would have to increase by about 30,000. Given that there are only about 225,000 Aboriginal people between the ages of 20 and 34, and given that the total number of Aboriginal people with university degrees at the present time is less than 29,000, an enrolment of 30,000 does not seem realistic or perhaps even physically possible in the near future.

This rough calculation implies that closing the gap in university PSE in the medium term (i.e., within a decade) is likely not feasible, because there are so few Aboriginal people with university degrees now in the older population. Even if there were huge successes in K-12 (discussed later), and a disproportionate share of those graduating from high school went into university, and of those most were successful in obtaining a degree, it would still take many decades before the proportion of Aboriginal people with university degrees equalled that of the total population. If we look instead at a 20 year time frame, the additional enrolment required would have eventually to equal roughly 15,000 more Aboriginal students. Taking into account the fact that these are not precise calculations (and do not even take into account shifting demography), they do give us a give us a sense of the size of the gap and the potential time lines involved.

Table 4 sets out a rough estimate of the number of additional Aboriginal students that would be required in each province to achieve parity over a 20 year period. For example, in Manitoba, roughly 2,000 more Aboriginal students would have to be enrolled in universities. This would mean an additional intake of 500 or more Aboriginal students per year until, after about four years, there were 2,000 more Aboriginal students actively enrolled in Manitoba universities.

If we look at the university PSE Aboriginal graduation required from the perspective of the current system's national capacity, with current full- and part-time undergraduate enrolment of about 800,000, an additional 15,000 students would require only about a 2 percent increase in capacity, which is possible to

Table 4
Approximate increase in university enrolment of Aboriginal students
in each province and territory required to close the 'gap' in
20 years in the proportion of the population with university degrees

Nfld.	PEI	NS	NB	Ont.	Man.	Sask.	Alta.	BC	Yukon	NWT	Nun.
171	13	201	179	3,652	1,966	1,166	2,604	3,232	123	315	199

Note: Calculations based on 2001 Census

absorb within present capacity limits, although the challenges are different in each province. Of course, there would be a need for more specialized programs and assistance, and for new types of teachers and the other features of a different stream of students, as well as for additional loans and bursaries, increments to federal financing for First Nations' PSE and other adjustments. As well, there would be increased demand for programs specially targeted to Aboriginal students, such as in the Saskatchewan institutions noted previously. Overall, however, universities and the PSE system have accommodated large changes in the past – for example, the emergence of what is almost a whole new field in information technology. The needed changes would not be outside of the parameters of financial and other announcements that are regularly made with little fanfare in annual budgets.

But if it is not possible to close the gap in university graduates in 10 years for the whole Aboriginal population, is it possible for just the younger generation? For example, what would be required to achieve parity for those 25 through 34 years of age by 2016 – 10 years from now? In the total population, about 25 percent of people 25 through 34 years of age now have university degrees. There will be about 200,000 Aboriginal young adults in this age group in 2016, so parity by 2016 would require that this Aboriginal age group include about 50,000 university graduates by that time – assuming that the proportion of university graduates among the general population does not also increase in the next 10 years. Very roughly, there would have to be about 5,000 Aboriginal students graduating from university for the next 10 years to achieve parity in university graduates by 2016 among young adults.

One unfortunate lack of data is that we do not know how many Aboriginal students are now enrolled in PSE. While the Enhanced Student Information System (see Appendix B) should be able to provide this information in the future, the only data from 2001 is for First Nations and Inuit students funded by the federal government. Based on this data, the Inter-Governmental Consultative Committee on Student Financial Assistance [2003] estimated that “about 54,000 Aboriginal students were in PSE in 1999-2000.” Assuming that the proportion of Aboriginal students in universities and colleges roughly corresponds to the percentage of Aboriginal PSE graduates in each type of PSE setting, and adjusting for the likely longer time required in a university setting in order to graduate, we can guess that there were about 10,000 or more Aboriginal students in universities in 2000. Assuming about 2,000 to 2,500 Aboriginal students currently graduate each year, achieving parity in the Aboriginal young adult population would require approximately doubling Aboriginal students' university enrolment from current levels to double the number of graduates.

All these calculations are extremely rough, ‘back-of-the-envelope’ type of calculations, because there is not enough data to support more exact estimates. Nevertheless it does give us some idea of the challenges involved. Would it be possible to double the number of Aboriginal students enrolled in universities? Certainly not overnight. Among other factors, it will require more graduates from high school, as discussed further in the next section of this paper. However, it might be possible to aim to double enrolment by five or so years from now, so we could at least start down the path to achieving parity. From just a pure capacity perspective, this additional enrolment would not represent an especially extraordinary challenge for the university sector.

Overall, capacity limitations are not, therefore, a major problem in either the non-university or the university PSE sector. It is theoretically possible – assuming that Aboriginal students are qualified to apply

– to achieve parity in the non-university sector in the next decade or so, and in the university sector in the next generation (i.e., 20 years), perhaps somewhat more rapidly if we look only at the younger adult population. The problem is not the capacity of the PSE sector. The problem is the capacity of the K-12 system to get students into the PSE sector, as we discuss below.

Completing high school

As we have seen, the postsecondary sector has the capacity to provide sufficient enrolment for Aboriginal students to achieve parity. But do Aboriginal students have the resources to get into PSE and to succeed once admitted? Appendix C provides a map of policy issues with respect to Aboriginal access and successful completion of postsecondary education. There have been several good surveys of these matters [e.g., Holmes 2005, Malatest & Associates Ltd. 2004, Inter-Governmental Consultative Committee on Student Financial Assistance 2003]. While this literature is helpful and important, there is a simple prior question that is critical for policy development with respect to PSE – a question that makes discussions of specific barriers and capacity in PSE secondary. The question is this: of Aboriginal students who do finish high school, what proportion goes on to PSE and is that figure very different than that of the total population?

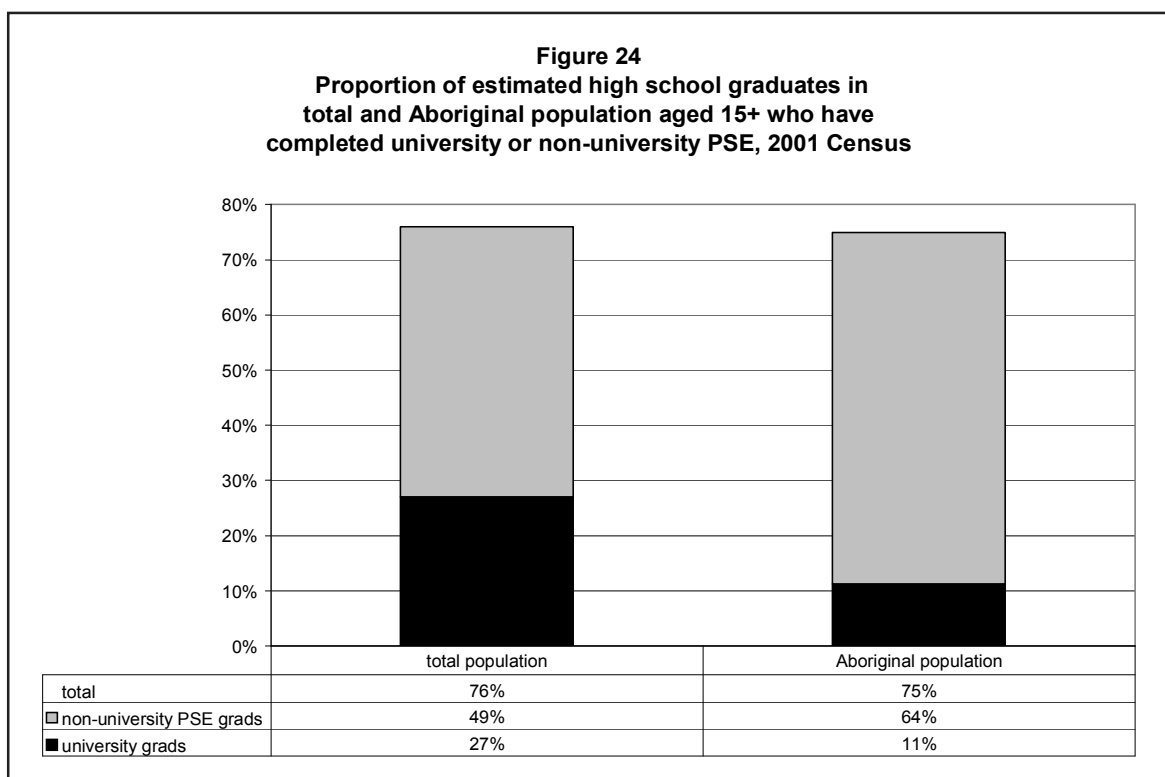
Figure 24 shows that of those Aboriginal students who complete high school and get a graduation certificate, about the *same* proportion go on to complete some form of PSE as do high school graduates of the population in total. In other words, *Aboriginal high school graduates have already achieved parity with respect to completing PSE*. There are substantial and important differences remaining with respect to Aboriginal high school graduates and the general population in the type of PSE selected. Aboriginal high school graduates are much more likely to choose non-university PSE, so that the proportion of high school graduates going into university remains very low among the Aboriginal population. This is a serious issue, but it is not at all obvious that the way to solve it is to attract more students from non-university PSE into universities. That is a zero sum project unless the number of Aboriginal high school graduates can be increased.

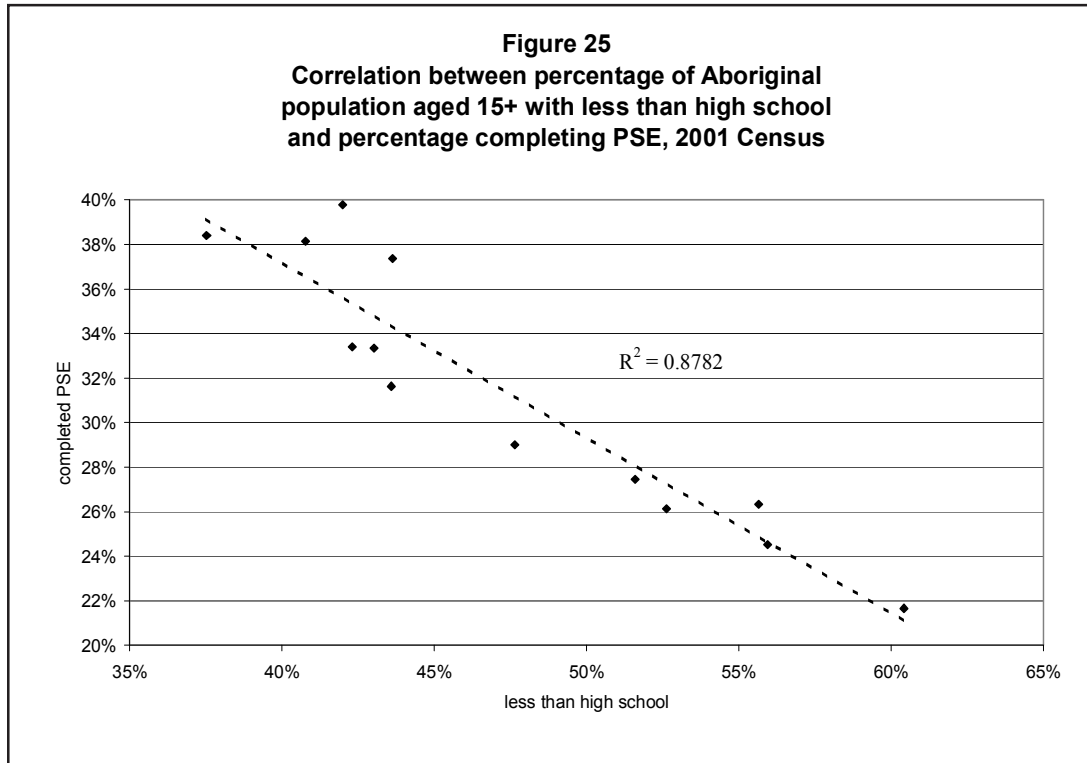
This finding is centrally important to policy and needs to be restated and emphasized: The data appears to show that about the same proportion of Aboriginal high school graduates is going on to graduate in some form of PSE as high school graduates in the total population. If accurate, this means it is unrealistic to expect Aboriginal PSE graduates, as a percentage of the total Aboriginal population, to increase substantially while the proportion of high school graduates remains the same. Without enlarging the pool of Aboriginal high school graduates, the only way to increase the share of Aboriginal PSE graduates is to somehow encourage an even greater number of Aboriginal high school graduates to go on to PSE (and succeed) than is the case in the general population. Certainly we should be aware that each Aboriginal student qualified to enter PSE is a wonderful accomplishment and all efforts should be made to ensure that any barriers are removed to his or her entering and succeeding. But realistically, it is unlikely that Aboriginal high school graduates will go much beyond their non-Aboriginal peers in this regard. In short, if there are to be more Aboriginal PSE graduates, there must be more Aboriginal high school graduates.

Figure 24 is based on an estimate of the number of high school graduates, adding up those who complete some form of PSE (including trade certification although that may not in fact have required completion of high school) and those who report having a high school certificate as their highest level of schooling. Thus it does not include the ambiguous category ‘some PSE – no certificate’ discussed in Appendix A. However this category is small in number and represents about the same proportion of both the total and the Aboriginal population – 11 and 13 percent, respectively – so it is unlikely that a slightly more accurate count of high school graduates would make any significant change in the result shown in Figure 24.

Aboriginal students who graduate from high school are just as likely to go onto and graduate from PSE as are students from the total population. The problem is that Aboriginal students are much less likely to complete high school. Given the importance of this finding, it is important to look at it from a number of perspectives.

Another way to look at the relationship of secondary graduation and PSE completion is to correlate the two variables (failure to complete high school and success in completing PSE) and see how much variation in one explains the other. Figure 25 gives a correlation of provincial and territorial levels of failure to graduate from high school with completion of either university or non-university PSE (including a trade certificate). It shows that failure to complete high school explains 87.8 percent of the variation in PSE





completion rates among provinces and territories. This is an extremely strong correlation and is further evidence that the issue for PSE is K-12.

Figure 26 is yet another way to look at the relationship between high school completion and PSE. It shows the percentage of Aboriginal and general population high school graduates who go on to complete some type of PSE in each province and territory. The results in the previous figure are maintained in every province and territory, where almost the same proportion of high school graduates from both the Aboriginal and the total population complete PSE in all 13 jurisdictions. In the Atlantic provinces and the Yukon, Aboriginal high school graduates have a slightly higher likelihood of completing PSE than do high school graduates from the general population. In the other jurisdictions, Aboriginal high school graduates likelihood of completing PSE is slightly lower than that of the general population, but only by a few percentage points. Overall, finishing high school means about a 75 percent probability of finishing some type of PSE, whether Aboriginal or not.

Figure 27 looks at the same issue from a gender perspective. Aboriginal male high school graduates have a slightly lower likelihood of going on to complete some type of PSE than do males from the general population, although the difference is very small – 74 percent of Aboriginal male high school graduates compared to 77 percent from the general population. It is just the reverse for female Aboriginal high school graduates compared to high school graduates from the general population – 76 percent of female Aboriginal high school graduates compared to 74 percent among the general population. Once

Figure 26
Aboriginal and total population aged 15+,
percentage of high school graduates who complete PSE,
by province and territory, 2001 Census

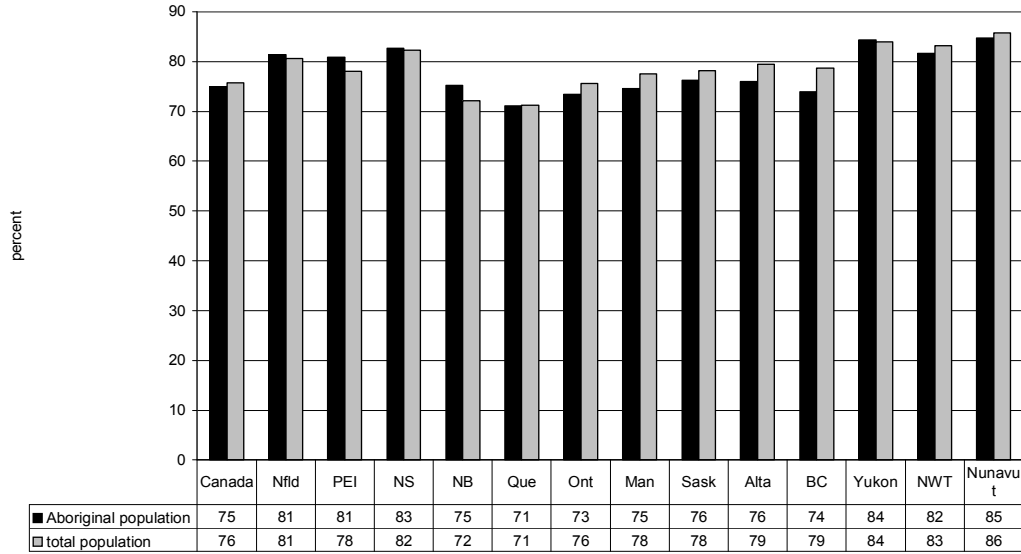
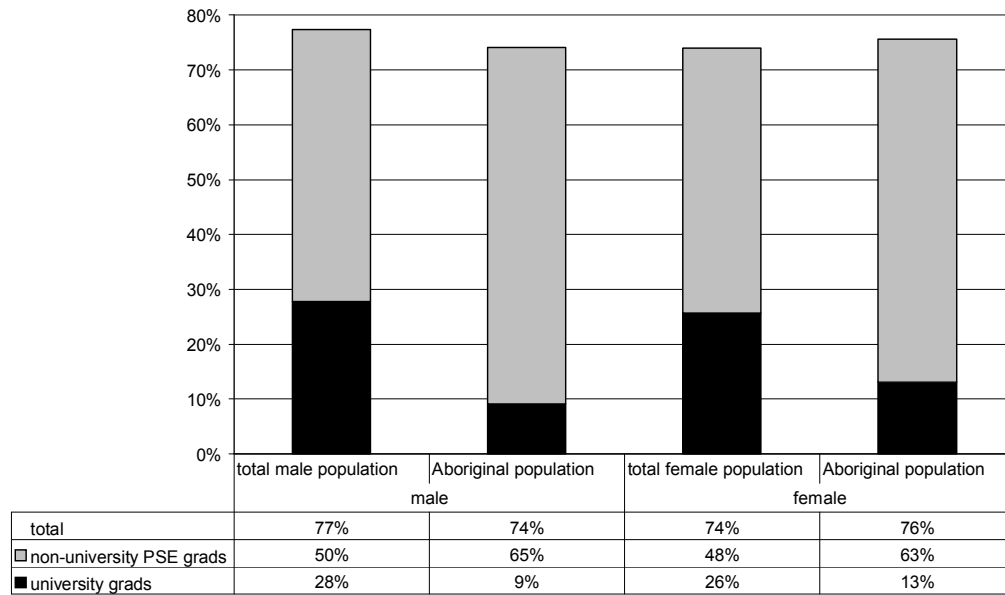


Figure 27
PSE graduates as percentage of estimated high school graduates,
by gender, total and Aboriginal population aged 15+, 2001 Census



again, this observation is consistent with the finding that completing high school is critical for the Aboriginal population.

However, the *type* of PSE completed is quite different for Aboriginal high school graduates than for high school graduates from the general population. Male Aboriginal high school graduates are about one-third as likely to go to university as their male counterparts in the general population – 9 percent go on to complete university versus 28 percent in the general population. Male Aboriginal high school graduates have a much higher likelihood of completing non-university PSE. The situation is similar for female Aboriginal high school graduates, but not as extreme. Female Aboriginal high school graduates are about half as likely to choose university as their counterparts in the general population – 13 percent go on to complete university versus 26 percent in the general population.

The same calculation for Aboriginal identity groups results in the same conclusion: Among the general population 76 percent of high school graduates complete some form of PSE, among North American Indians it is also 76 percent, among Métis it is 74 percent, and among Inuit 79 percent. Again, of course, the type of PSE is quite different for Aboriginal high school graduates of all identity groups, with much more college and trade graduation and much less university.

Implications for increasing Aboriginal PSE attainment

The existing postsecondary education sector has the capacity to absorb the additional Aboriginal enrolment needed to achieve parity, with appropriate budgetary adjustments and so on – though also with some regional challenges. The added number of PSE students needed is not a very large proportion of current enrolment and does not pose an especially onerous capacity challenge. However, given the number of potential entrants and the size of the gap, even under the best possible assumptions, it is unlikely that the gap could be closed in less than about 10 years at best for the non-university PSE sector and likely closer to 20 years for the university sector.

But it is not in the PSE sector itself that the problem is situated. Aboriginal students graduating from high school are succeeding in the PSE sector at the about the same rate as everyone else. However, referring back to the previous section, we saw the huge gap between the Aboriginal population and the total population in completion of high school. It is *this* gap that must be addressed to increase Aboriginal success in the PSE sector. The impediments to increasing the number of Aboriginal PSE graduates are not primarily in the PSE sector, but instead are in K-12.

A lesser issue is the disproportionately large proportion of Aboriginal high school graduates who go to non-university PSE. But the ‘solution’ to this issue is not to attract a greater percentage of high school graduates into university as an alternative to community college. This approach would just move colleges further away from parity.

Similarly, this report has not dealt with the different patterns of trades and disciplines that Aboriginal people choose. The choice of field of study has been discussed extensively in other reports [e.g., Hull 2005]. However, as with trying to correct under-representation in universities by taking Aboriginal students from colleges, shifting an insufficient pool of Aboriginal students from one field to another to achieve a more representative mix of fields would lead to falling further behind in the fields of study that are now seen as over-represented. Robbing Peter to pay Paul is never a solution. The better approach is to work towards trying to increase the overall number of Aboriginal students in the PSE sector: With more students, more will enter into all fields and disciplines. Focussing on redirecting the existing pool of Aboriginal participants in PSE is a diversion from the main issue – namely, increasing Aboriginal enrolment and success in PSE.

Conclusion

Aboriginal peoples are a growing part of Canada's population, especially in the West and the North. While there are many Aboriginal people who are doing quite well, on average the Aboriginal population suffers from higher unemployment, lower levels of education, below average incomes and many other indicators of limited socioeconomic circumstances. These problems will have an increasing negative impact on the well-being of *all* of Canada, particularly in the West and the North. It is critical for all Canadians that this dire situation changes for the better. The way to effect change is through success in education. Numerous studies have shown that Aboriginal people who achieve a postsecondary education do as well on most indicators (though not quite as well in employment levels) as the general population. But everyone loses when Aboriginal students fail to succeed.

Breaking the cycle requires that Aboriginal students get into postsecondary education and graduate, but to do so it is usually necessary to complete high school. The failure to complete high school is the first impediment to increasing PSE attainment. A shocking number of Aboriginal young adults are not completing high school. This is a gathering storm, which will have huge social and economic costs over the next decades. It must be addressed urgently now.

This report has attempted to improve our understanding of the importance, extent and source of the low levels of PSE attainment among Canada's Aboriginal peoples. This is not a report offering prescriptions, but it is obvious from our findings that significant effort must be focused on getting Aboriginal students through high school. And, given that the majority of Aboriginal young adults today have not finished high school, we have to make sure that they get a second chance when and if they are ready to turn their lives around and finally get that high school diploma or equivalent. As Bob Rae put it in his recent report on PSE in Ontario: "When immigrants to Canada, or Aboriginal students whose ancestors have been here for centuries, are locked into low-paid jobs or welfare, this means a loss for the economy, a cost to society and a huge personal setback for them and their families. This is the cycle that must be broken." [Rae 2005: 12].

Beyond the recommendation to focus on K-12 as the gateway to postsecondary education, there are a number of other actions that could contribute to setting the ground for improved educational outcomes among Canada's Aboriginal peoples:

- 1) First Nations, provinces, the federal government and other Aboriginal organizations should work together with educational institutions and other relevant agencies in the educational sector to set a number of quantitative milestones for Aboriginal educational achievement. These milestones should include dates and numbers, and be as specific as possible. For example, targets should be set to increase K-12 graduation rates, with dates for those targets to be met. Targets and dates should also be set for trades, colleges and universities. These targets should, to the extent possible, be geographically specific.

Targets are challenging for everyone, from federal Ministers to Chiefs and Councils, to provincial Premiers, not to mention university presidents and school boards. Setting reasonable targets will require compromise all round: Governments will have to accept that some targets will be difficult to meet and may result in transient bad news. Aboriginal organizations will have to agree to set achievable, if ambitious, goals; parity and other goals (that are only what should be expected from a human rights perspective) may not be achieved immediately or even within a decade.

- 2) If there are to be quantitative goals, there must also be a means of measuring whether they are being achieved. Right now, there is a paucity of data on Aboriginal achievement in education. If goals are established, it will be possible to work ‘backwards’ from these goals to set up the necessary mechanisms to monitor their accomplishment and report on milestones.

Data collection can be both costly and politically challenging. Aside from demanding significant funding, it will raise issues that are hard to resolve and with which Canada has been struggling for some time. For example, the best, most accurate and least expensive data is administrative data; but collecting administrative data on Aboriginal educational achievements requires that Aboriginal students be identified as such in the data. Can or should we ask students to identify themselves for administrative purposes if they wish to do so (as is apparently being done in the Enhanced Student Information System)? Also, administrative databases are most useful when information can be linked from one database to another. How can this be done and while also protecting individual privacy? A forum is needed in which these issues can be raised and resolved, primarily by Aboriginal peoples themselves.

Despite these financial and policy challenges, getting good data and keeping track of our progress is the only way to ensure that educational progress for Canada’s Aboriginal peoples is really being achieved. The cost, while doubtless significant, will be small relative to the costs and the implications for the future of this country of allowing the education system to continue failing Aboriginal people.

- 3) There must also be an agency to do this work, and it must have the trust of all the partners. A First Nations Statistical Institute was approved in March 2005 with all-party support by Parliament and is being set up now, with the goal of becoming operational by the spring of 2006.

This Institute would appear to be an appropriate agency to mandate to develop data sources and monitor and report on results. However, the Act setting up the new Institute confines its operations only to First Nations and to “other aboriginal groups” defined as “an aboriginal group that was

formerly a band under the Indian Act and that is a party to a treaty, land claim agreement or self-government agreement with Canada” [First Nations Fiscal and Statistical Management Act (2005) Section 90]. This definition would appear to preclude the Institute from collecting data about so-called non-Status Indians, Métis and many Aboriginal people living in cities and towns. With this restriction, the Institute could at best be one partner and not the central organization mandated to carry out data collection and dissemination. Perhaps the function would have to be assigned to a partnership between Statistics Canada and the new First Nations Statistical Institute or, at least for the educational sector, the Institute’s mandate might need to be expanded.

- 4) This report is obviously not a vehicle to answer questions about how best to keep students in high school, about how to learn from the success of the colleges and translate these to universities, about what and whether specially-targeted Aboriginal PSE institutions and programs are needed, or about the many other questions concerning educational programs. However, we can see from this and other studies that there are successes, so we should have available a rich source of information and learning to construct a better educational system for Aboriginal people. Unfortunately, this learning – sometimes referred to as ‘best practices’ – does not happen simply by osmosis. Nor does an occasional consultant’s report casually handed out to other agencies do the trick. The translation of best practices has to be an active, on-going, even aggressive, pursuit.

In a good private sector franchise operation, a franchise outlet doing exceptional business will attract a team of investigators from headquarters who will review the outlet’s activities down to the smallest detail until they can pinpoint the reason for its success and set out a methodology, in detail, on how to replicate it. This methodology will then be implemented rigorously throughout the chain. Perhaps we cannot expect the same kind of rigour in the educational sector, but we can learn from the private sector’s success to learn how to set up a mechanism that can identify and disseminate information about what works. In other words, there has to be an agency with a mandate for this purpose. Again, there are costs associated with this activity, but these costs will doubtless pay manifold returns in improving results.

In this paper, we have used the best data available to present a picture of how Aboriginal students are doing in Canada’s PSE system today. While there has been some progress, there has not been as rapid, positive change as might have been hoped. Indeed, there are some worrying signs that even more recent efforts at providing better educational opportunities are not working well. However, this picture is necessarily blurry. The data is at best imperfect. Likely, with deeper digging in the Census data and an opportunity to explore some of the other databases, a finer and more detailed picture could emerge.

Descriptive reports of this kind, based on quantitative data, do not usually find information that is pivotal in policy discussions. Typically, the best we can do is find data that is suggestive but does not give a clear direction. This study, however, is unusual in that the finding regarding the relationship between K-12 completion and postsecondary education strongly indicates that K-12 is the key to PSE. This finding is important enough to deserve further research. It is possible that other researchers would come to different conclusions – although it is difficult to see how. Other studies, perhaps focussed on this specific question, and using other databases, would be highly desirable.

Appendix A: Limitations of the education data

Most data regarding Aboriginal peoples in postsecondary education is available only through the Census, which is the source of primary data for this paper. As noted previously and detailed in Appendix B, there are only a few other sources of quantitative empirical information about Aboriginal people in education, although one of them – the Enhanced Student Information System – does promise to be a rich source of data if it is developed and used for research in the future. However, as of yet there appear to be no studies of Aboriginal education issues using the Enhanced Student Information System. Therefore, we must rely for the time being almost entirely on the Census.

The education variable included in the Census is ‘the highest level of schooling.’ This variable has serious shortcomings. It is a hierarchical variable, meaning that we can think of it like a ladder with an ascending series of rungs. This variable reports only on the highest rung a person has reached, but does not tell us if a person has actually been on the lower rungs or skipped over those rungs. The hierarchy in the variable ‘highest level of schooling’ is as follows: ‘less than high school’ is the lowest rung in the hierarchy; the next rung is ‘completed secondary school with a certificate; the next highest is a ‘trade certificate or diploma’; next is ‘some PSE – no certificate’; then non-university certificate (e.g., community college) and finally a university diploma. Because ‘highest level of schooling’ is a hierarchical variable, only the highest rung on the ladder is reported. So if someone has, for example, a trade certificate and also some PSE without a certificate, then that person is recorded as ‘some PSE – no certificate’ and the researcher does not know about the trade certificate. More importantly, anyone with ‘some PSE – no certificate’ may or may not have graduated from high school.

Unfortunately, this hierarchical reporting does not accord well with our real interests in post-secondary education, and may also cloak some of the most important information. To understand the difficulty here, and appreciate the limitations of the data, it is necessary to take a bit of a technical excursion.

The term ‘postsecondary education’ may have a meaning that pertains either to a person or to a set of skills or knowledge. When postsecondary education is defined around the person rather than skills, it may be said to include any course or training that occurs outside of the secondary school system targeted at people who are beyond the normal age for graduation from secondary school or whom are otherwise expected to have ‘finished with,’ if not actually completed and graduated from, secondary school. In other words, in this meaning, PSE is any education taken by a person who is no longer part of the secondary school system, so it is in this personal sense that it is *post* secondary. In contrast, when post secondary education is defined as a particular set of skills or knowledge, PSE includes education towards acquiring credible knowledge or skills *beyond* a level that would be expected of a graduate of a secondary school. The former definition is essentially about the person – whether they as individuals have left secondary school – while the latter definition has to do with the skills and knowledge taught – whether the skills and knowledge are beyond the level expected to be taught in secondary schools.

To understand educational attainment, we are interested in the skills definition of PSE, not the personal definition, but the variable ‘highest level of schooling’ provides answers about the personal definition of PSE. This means, for example, that a six-month course at a private school to learn basic arithmetic would likely be recorded as a ‘some PSE - no certificate’, although this skill is one that would

ordinarily be acquired at the primary and secondary level. Consequently, we would not know whether the individual had ever graduated from secondary school.

This problem makes the variable ‘some PSE – no certificate’ especially difficult. It is an ambiguous catch-all category that could include casual classes as well as more recognizable PSE courses. Some people whose highest level of schooling is ‘some PSE – no certificate’ may have graduated from high school and some not – so that the real status of this person in the PSE system is difficult to interpret. Some of the people who are recorded as having some PSE may have had a rather casual course, no certification, and have never finished secondary school. Yet they are lumped in with secondary school graduates who do take non-certified courses. As a result, this category is potentially misleading, combining quite different actual levels of educational attainment. Indeed, many people who record this level of PSE do worse in employment than those with no PSE at all [Hull 2005]. It is possible to obtain data from the Census on high school graduation and use this to cross-tabulate with the ‘highest level of schooling’ variable so as to include this as a higher level rung on the ladder only for people who have actually finished high school, but this research goes beyond the scope of this report. Therefore for most purposes we report on but do not discuss or attempt to interpret the variable ‘some PSE – no certificate.’ Luckily the percentage of the Aboriginal and the general population with ‘some PSE – no certificate’ is not very different, and not too large, so for the most we can safely ignore the ambiguity of this variable with very little impact on overall findings.

Trade certificates present a further, although less serious, problem. For the purpose of the Census, these certificates are treated as non-university PSE certificates, although many of the people who obtain a trades certificate may not have actually attended a college or university and some may not have graduated from high school. Hull [2005] did a cross-tabulation on the 2001 Census data and found that about 17 percent of the Status Indian population who had a non-university certificate had in fact never attended a PSE institution. Hull removes these from his data on PSE. In this report we are interested mainly in the acquisition of skills and knowledge beyond that offered in high school (the skills based definition of PSE) and the implications for social and economic policy. A trades certificate can be a way to make a significant contribution to the economy and, not coincidentally, make a good income. This report therefore takes a different course than Hull and includes all trades certificates in our PSE data as non-university PSE certificates.

The data in this report also differ from that reported in *Education Indicators in Canada* (Canadian Education Statistics Council 2003) in several respects, most of which are minor but two of which are more significant.

First, and most importantly, in *Education Indicators* the categories for high school graduation and ‘some PSE – no certificate’ are added together and presented under the heading ‘high school.’ While this difference is important and will make overall sums look different in this report than in *Education Indicators*, both reports are internally consistent in their treatment of these variables in both the Aboriginal and total population. Nevertheless, there is a valid concern that the *Education Indicators* report is overstating high school graduation and thereby failing to investigate what is likely the most important trend for Aboriginal peoples’ education.

Education Indicators also adds the data for those who get a certificate of some kind from a university, but less than a bachelor's degree, together with those who do get a university degree and reports this all as 'university.' This adds about 30 percent onto the university category and so may overstate the true university graduation rate. Again, this is an important question because it is in university completion that Aboriginal peoples are most behind the general population, so we need to be concerned about masking this problem through adding in a category that some might argue is more an instance of universities acting like colleges, than the completion of an actual 'university-level' course of learning. Consistent with our reference for a skills definition of PSE, in this report we have added those obtaining a less than bachelor's certificate from a university to the 'non-university PSE' category.

Appendix B: Statistics Canada surveys relevant to education

Survey	Dates	Aboriginal identity data	Purpose of survey
Aboriginal Peoples Survey 2001	Occasional	Y	The purpose of this survey is to identify the needs of Aboriginal people focusing on issues such as health, language, employment, income, schooling, housing, and mobility. Includes commonly reported reasons for not completing postsecondary schooling. Follow-up on Aboriginal identity population from Census.
Adult Education and Training Survey (AETS) 2003	Occasional (1992)	N -Aboriginal ancestry	The Adult Education and Training Survey (AETS) is Canada's most comprehensive source of data on individual participation in formal adult education and training. It is the only survey to collect detailed information about the skill development efforts of the entire adult Canadian population.
Annual College and Related Institutions Educational Staff Survey	Annual	N	This annual survey collects data on educational and senior institutional staff of community colleges and public trade schools involved with education at the postsecondary and trade levels in Canada.
Census	Every five years	Y	On May 15, 2001, Statistics Canada conducted the Census of Population to develop a statistical portrait of Canada and its population on one specific day. The Census is designed to provide information about the demographic, social and economic characteristics of the Canadian population and about its housing units.
Elementary/Secondary Education Staff Survey (ESESS)	Annual	N	The purpose of the Elementary/Secondary Education Staff Survey is to provide the main characteristics of educators (e.g., age, sex, employment status, staff position) in primary and secondary schools. Primary and secondary schools include public schools, private schools, federal schools and schools for special needs students or people with vision and hearing loss in Canada.
Enhanced Student Information System (ESIS)	Annual Began in 2000	Y – Aboriginal identity definition	The Enhanced Student Information System (ESIS) is a national survey that enables Statistics Canada to provide detailed information on enrolments and graduates of Canadian postsecondary education institutions in order to meet policy and planning needs in the field of postsecondary education. Implementation began in the year 2000. ESIS replaces the University Student Information System (USIS – Survey #3124), the Community College Student Information System (CCSIS – Survey #3122) and the Trade and Vocational Survey (TVOC – Survey #3142) with a single survey.
Full-Time and Part-Time Enrolments and Graduates of Postsecondary Programs of Colleges	Annual	N	This survey collects data on enrolment and number of graduates of postsecondary programs of community colleges and related institutions. The data are used by Human Resources Development Canada and the Secretary of State to analyse the labour force supply, and also by educational associations for studies of the education system and by individual researchers to study the participation of special groups such as foreign students and women.

Statistics Canada surveys relevant to education (cont'd.)

Survey	Dates	Aboriginal identity data	Purpose of survey
International Adult Literacy and Skills Survey (IALSS)	Occasional	Y?	The International Adult Literacy and Skills Survey was a 7-country initiative conducted in 2003. In every country, nationally representative samples of adults aged 16-65 were interviewed and tested at home, using the same psychometric test to measure Prose and Document literacy as well as Numeracy and Problem Solving skills. In Canada, the survey population was expanded to provide information on respondents over the age of 65. The main purpose of the survey was to find out how well adults used printed information to function in society. Another aim was to collect data on the incidence and volume of participation in adult education and training, and to investigate the relationships between initial and adult education, on the one hand, and literacy, numeracy and problem solving proficiency and wider economic and social outcomes, on the other.
National Graduates Survey (NGS)	Occasional	Y	This survey was designed to determine such factors as: the extent to which graduates of postsecondary programs had been successful in obtaining employment since graduation; the relationship between the graduates' programs of study and the employment subsequently obtained; the graduates' job and career satisfaction; the rates of under-employment and unemployment; the type of employment obtained related to career expectations and qualification requirements; and the influence of postsecondary education on occupational achievement. Each graduating class is interviewed twice: two years after graduation (National Graduates Survey) and five years after graduation (Follow-up Survey of Graduates).
Postsecondary Education Participation Survey (PEPS)	One Time 2002	Y – same as NGS	The Postsecondary Education Participation Survey was developed to provide basic indicators on access to postsecondary education, persistence in postsecondary education and postsecondary financing in order to assess the effectiveness and efficiency of Human Resources Development Canada's (HRDC) Harmonized Canada Student Loans Program. To do so, PEPS collected information from 18 to 24 year-olds (17 to 24 in Quebec).
Register of Postsecondary and Adult Education Institutions	Irregular July 2005	N/A	The register is designed to identify the universe of public and not-for-profit postsecondary and adult education institutions in Canada and their programs of study. Institutions have been classified in a more detailed level than previously, so that users can identify, compare and analyze the information in a more comprehensive manner.
Registered Apprenticeship Information System	Annual	N	The purpose of the survey is to gather information on the number of registered apprentices, across Canada, involved in apprenticeship training and obtained certification. This survey compiles data on the number of registrations in apprenticeship programs, as well as apprentices and journeypersons granted provincial and Interprovincial certification.
Secondary School Graduates Survey	Annual	N	The purpose of the Secondary School Graduates Survey is to provide graduation counts by age and sex. Graduation rates are also produced. The two primary objectives of the School Leavers Survey were:

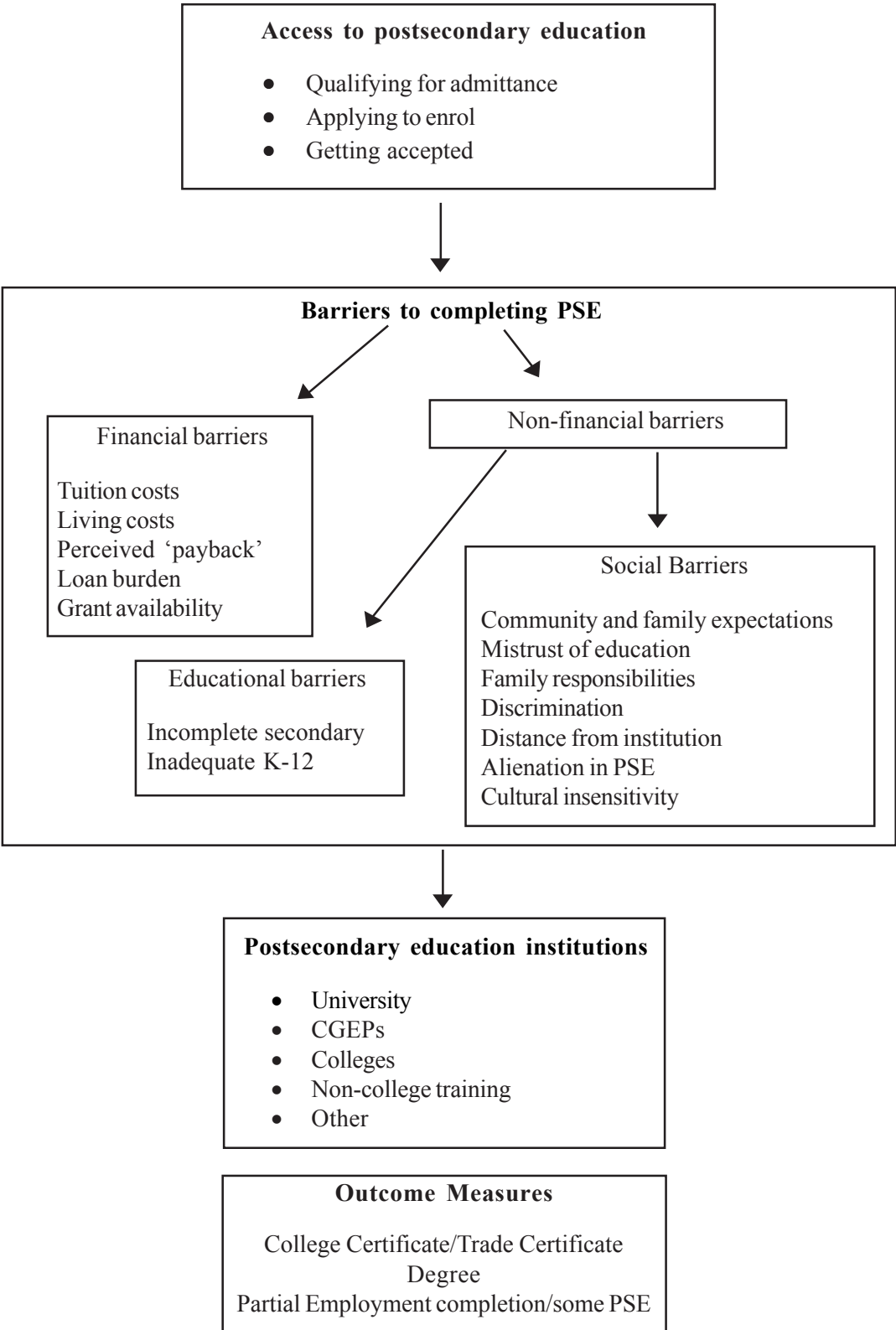
Statistics Canada surveys relevant to education (cont'd.)

Survey	Dates	Aboriginal identity data	Purpose of survey
School Leavers Survey	One time 1993	N	<ol style="list-style-type: none"> 1. to develop comparative profiles of three groups of secondary school attendees <ol style="list-style-type: none"> a) those who successfully completed secondary school (graduates), b) those still attending (continuers), c) those who left school before receiving a diploma or certificate (leavers); and 2. to establish rates of leaving school before graduation, in Canada and the Provinces.
The School Leavers Follow-up Survey (SLFS)	One time 1996	N	The primary objective of the School Leavers Follow-up Survey (SLFS) was to study the school-work transitions of young people beyond high school, particularly: 1. from the end of high school to the first job and 2. after the first job (i.e., various school-work and work-work transitions).
Survey of Earned Doctorates (SED)	Annual	Y	The Survey of Earned Doctorates (SED) is an annual census of doctorate recipients in Canada that was conducted for the first time on a national basis during the 2003-04 academic year. The basic purpose of this survey is to gather data about all doctoral graduates in Canada to inform government, associations, universities and other stakeholders on the characteristics and plans of these very highly qualified graduates as they leave their doctoral programs.
Survey of Labour and Income Dynamics	Annual	No – asks Aboriginal ancestry question and treaty status	The Survey of Labour and Income Dynamics complements traditional survey data on labour market activity and income with an additional dimension: the changes experienced by individuals over time. At the heart of the survey's objectives is the understanding of the economic well being of Canadians – what economic shifts do individuals and families live through, and how does it vary with changes in their paid work, family make-up, receipt of government transfers or other factors? The survey's longitudinal dimension makes it possible to see such concurrent and often related events.
Trade/Vocational Enrolment Survey - Full-Time and Part-Time	Annual	N	The types of programs collected by the survey consist of Pre-Employment or Pre-Apprenticeship programs, Registered Apprenticeship programs, Pre-Vocational Academic Upgrading or Basic Training for Skill Development (B.T.S.D.) programs, Language Training programs, Skill Upgrading programs, Basic Job Readiness Training programs, Orientation programs and Special Training programs.
University and College Academic Staff System (UCASS)	Annual	N?	This survey is conducted to obtain national comparable data concerning the socioeconomic characteristics of university full-time staff.

Statistics Canada surveys relevant to education (cont'd.)

Survey	Dates	Aboriginal identity data	Purpose of survey
University and College Academic Staff System - Part-time Staff (PTUCASS)	Annual	N?	This survey collects annual information on the number and characteristics of the part-time teaching staff at Canadian public degree-granting postsecondary institutions. It was designed to complement the survey of full-time faculty and to reflect the changing reality of higher education.
University Student Information System - Enrolment and Graduations (USIS) Replaced by ESIS	Annual	N	This survey collects annual information from degree-granting universities and colleges in Canada on individual student characteristics and their study programs, including gender, age, citizenship, geographic source of student, field of study, level and type of attendance (full-time/part-time and year of graduation).
Youth in Transition Survey (YITS)	Biennial	Y	The Youth in Transition Survey (YITS) is designed to examine the patterns of, and influences on, major transitions in young people's lives, particularly with respect to education, training and work.

Appendix C: Map of Aboriginal peoples' postsecondary education policy issues



Endnotes

1. Some reserves were not enumerated or incompletely enumerated in the 2001 and 1996 Census. In 2001 it is estimated that about 31,000 reserve-based North American Indians were excluded from the Census on 30 reserves. Most of this population is in Ontario and Quebec. These populations have not been included in any of the Census data in this report.
2. Statistics Canada defines the Aboriginal identity population as “those persons who reported identifying with at least one Aboriginal group, i.e. North American Indian, Métis or Inuit (Eskimo), and/or those who reported being a Treaty Indian or a Registered Indian as defined by the Indian Act of Canada and/or who were members of an Indian Band or First Nation” [Statistics Canada 2001 census dictionary]. For a good discussion of the various definitions of the Aboriginal identity groups and other issues surrounding the enumeration of Aboriginal persons, see Hull 2005.
3. Rural off reserve is a population of less than 10,000; town is more than 10,000 and less than 100,000; city is more than 100,000.
4. Data on incomes of visible minorities from 2001 Census: Selected Income Characteristics (35), Age Groups (6), Sex (3) and Visible Minority Groups (15) for Population, for Canada, Provinces, Territories and Census Metropolitan Areas 1, 2001 Census – 20% Sample Data. www12.statcan.ca
5. Socioeconomic status includes factors other than incomes – with respect to incomes alone, Corak et al. [2003] show that family income *per se* is not a factor with respect to whether students go to college, but it is a strong predictor of whether they go to university.

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