Assessing the Role of Provincial Education Systems and Reserve "Non-Systems" in Interprovincial Variation in Aboriginal Student Performance

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ABSTRACT

Many factors determine education outcomes. Among the hardest to isolate is the impact of alternate school systems. This paper decomposes incomplete K-12 rates for young adults (ages 20-24 at the time of the 2006 census) by province, by location within a province (urban vs. rural, on- vs. off-reserve), and by Aboriginal identity group (non-Aboriginal, Métis, Indian – First Nation). The optimum provincial education systems are defined as those generating the lowest incomplete K-12 rates among subsets of young Aboriginals. The optimum reserve school "system" refers to the reserve schools in the province with the lowest K-12 completion gap between young Indian-First Nation living on-reserve and living in rural or small towns in the same province. On a national basis, deviations from the optimum provincial performance account for a quarter to half of Aboriginal / non-Aboriginal gaps in K-12 completion rates. The province with uniformly superior on-and off-reserve outcomes is BC. The paper discusses institutional differences between BC and other provinces that may partially explain BC's superior results.

In Februrary 2012 a panel, jointly sponsored by the Assembly of First Nations and the federal Ministry of Aboriginal Affairs and Northern Development, conducted a review of reserve education. Among the major barriers to better outcomes, concluded the panel, is that, "The education 'system' for First Nation students on reserve is a far cry from any system that other Canadians would recognize in terms of ... degree of input, accountability, and democratic governance most Canadians take for granted" (AFN/AANDC 2012,9). Reserve schools operate, the panel concluded, in a "non-system". Each reserve runs its own school much as, a century ago, each rural municipality in the Prairies ran its own one- or two-room school. Dedicated teachers may achieve remarkable success in a "non-system", but overall, the outcomes will not be satisfactory. In diplomatic language, the panel advised chiefs and councils on the need to professionalize school management by introducing school "authorities" that assume responsibility for running a number of reserve schools. Such "authorities" would be democratically accountable to the First Nations living within the region, but schools would no longer be primarily accountable to individual band councils.

In March 2012 the federal budget promised new legislation and "sustainable funding" for reserve schools:

In response to the Panel's report, the Government will work with willing partners to introduce a First Nation Education Act and have it in place for September 2014. The purpose of this legislation is to establish the structures and standards to support strong and accountable education systems on reserve. This will set the stage for more positive education outcomes for First Nations children and youth. The Government will also work to explore mechanisms to ensure stable, predictable and sustainable funding for First Nations elementary and secondary education. (Canada 2012,149)

Most educators and administrators involved with Aboriginal education agree that improvement in on-reserve school outcomes requires *both* more money *and* organization of schools into multi-school equivalents of provincial school districts.¹ It is an understatement to observe that events subsequent to tabling of the 2012 budget have not demonstrated an analogous consensus among First Nation leaders. In October 2012, a special AFN assembly on education rejected federal proposals outright. "We're not going to let Canada make everybody think that the solution to low graduation levels is resolved by a legislated solution," said Grand Chief Derek Nepinak of the Assembly of Manitoba Chiefs (CBC 2012). At time of writing (April 2013), AANDC is attempting to secure among chiefs at least some measure of agreement to legislative reform, based on a *Discussion Guide* (AANDC 2013b) published in late 2012.

Largely absent from the conflict over legislating reserve school organization has been any reference to evidence as to whether institutional reform may improve high school

¹ A representative example is Mendelson's (2009) call for creation of reserve school "authorities".

completion. This paper undertakes two tasks. It decomposes incomplete Aboriginal high school results among young adults by province, at the time of the 2006 census, in a manner that provides evidence – admittedly far from definitive evidence – that policies and institutional arrangements pursued by provincial education ministries and provincial on-reserve "non-systems" do matter. The province with the unambiguously best high school completion rates among young adults, disaggregated by identity group (North American Indian – First Nation [henceforth Indian-FN], Métis, and non-Aboriginal) is BC. Second, it discusses institutional features of provincial and reserve school organization that may explain the superior completion rates in BC.

Rules of thumb

Education officials – school principals, school district superintendents, deputy ministers in provincial education ministries – may not cite precise statistics but they are aware of certain "rules of thumb" that characterize student outcomes. One is that, within their province, K-12 academic performance is superior in big city school districts than elsewhere. A second is that, controlling for the location of the school district, students identifying as Indian-FN will have the worst outcomes, and non-Aboriginal the best; results for Métis students will fall roughly in the middle.

The explanation for the first rule of thumb is straightforward. The best teachers often migrate to census metropolitan areas (CMAs – census-defined urban locations with population over 100,000). Beyond any impact this migration may have on the quality of rural and small town schools, it enables schools in big cities to have less teacher turnover. High turnover is one factor, among others, that tends to lower student performance in a school. Also, large urban schools enjoy scale economies in their ability to offer specialized services and instruction that, even with compensating higher per student budgets, rural and small town schools often cannot replicate. Education outcomes depend not only on school quality. Higher family income and parental education levels are in virtually all studies associated with better student outcomes. Average family incomes and parental education levels are both higher in large cities than in other locations. Finally, for rural families whose children expect to remain in the local community, the financial rewards of high school completion – and subsequent post-secondary training – are less evident than in an urban context, the location of most knowledge-based high-income jobs. This dynamic operates *a fortiori* on-reserve where there are likely to be few jobs requiring post-secondary training.

The explanation for Aboriginal / non-Aboriginal disparities is more complex. To begin, relative to non-Aboriginals, those who identify as Aboriginal are more likely to live in small town or rural communities – or in the case of registered Indians to live on-reserve. Hence, they suffer the impact of the first rule of thumb: rural and small town students fare less well in terms of high school completion.

Discrimination against Aboriginals has almost certainly declined in Canada over the last three decades. One indicator is that more people now acknowledge an

Aboriginal identity in the census (Siggner & Costa 2005). Since 1981 the intercensus increases in the size of Aboriginal identity cohorts is well in excess of projections based on fertility and mortality rates. The increase in implicit "ethnic mobility" is most pronounced among those identifying as Métis.

No longer do schools disparage Aboriginal culture, but discrimination persists in more subtle ways. Within provincial school systems, too many teachers and administrators assume that native students are inherently less able than others to master the core competencies of reading, writing and mathematics. We should be careful in putting forward this argument. The problem is more complex than residual present-day discrimination within the school system. A history of past discrimination permeates attitudes among many Aboriginal families toward formal education. And whether or not their parents are sceptical of schools, Aboriginal children may grow up in an environment where few of the adults they know have benefited – in terms of income and employment – from a good education. Hence, why should they, the children, struggle to complete high school?

The rules of thumb are illustrated, for all Canada, in figure 1. The statistics presented are for the cohort of young adults, ages 20-24 at the time of the 2006 census. (For explanation of the identity definitions employed by Statistics Canada see the appendix.) The census data indicate location of residence in 2006, a good but obviously imperfect measure for the location of K-12 instruction. The tabulated census results disaggregate location into four categories: census metropolitan areas (CMAs have a population above 100,000), urban non-CMA, rural, and on-reserve. For the three identity groups the best outcomes are for those living in CMAs. For non-Aboriginal and Indian-FN young adults, their respective urban non-CMA and rural incomplete K-12 statistics are similar; for Métis, the rural is higher than the CMA statistic but below that for urban non-CMA.

What should be of particular concern here is the very high share, over 60 percent, of young adults on-reserve without high school certification. They face severely limited employment opportunities off-reserve, and their employment opportunities on most reserves are also limited.²

Less well known than these rules of thumb are the comparative results disaggregated by province. Figure 2 illustrates incomplete K-12 rates among young adults for Canada and for the six provinces, Quebec to BC, with large Aboriginal populations (in excess of 100,000). Nine of ten Aboriginals reside in one of these six provinces. While the first rule of thumb obtains in all provinces, there exists significant variation among provinces. For non-Aboriginals the best provincial outcome is in BC (9.2 percent incomplete K-12); the worst is in Alberta (15.6

² Admittedly, some are completing high school or gaining high school equivalence after age 24. The Aboriginal incomplete K-12 rates among the cohort ages 25-34 is about a third lower than those illustrated in figure 1.

percent). For Métis, the best is in BC (18.4 percent); the worst is in Manitoba (29.2 percent).³ For Indian-FN, the best is once again in BC (38.5 percent), and the worst once again in Manitoba (62.8 percent). In relative terms, the range is large. Within each identity group the highest provincial incomplete rate is more than 50 percent above the lowest.

Provincial school systems and reserve "non-systems"

Nearly two thirds of the Aboriginal population identify as Indian-FN, one third as Métis; the remainder, under 5 percent, identify as Inuit. Métis children attend provincial schools. Slightly over half the Canadian population identifying as Indian-FN live on-reserve. Based on these ratios, about seven in ten Aboriginals live off-reserve, three in ten on-reserve. The children of "registered Indian" families living on-reserve may attend an on-reserve school. Nation-wide, about 60 percent do. However, about 40 percent – mostly high school students – attend a nearby provincial school, often in a small town (Rajekar and Mathilakath 2009). In summary, about one Aboriginal child in five is at any time attending an on-reserve school; four in five are attending a provincial school.

A final introductory observation is that it makes little sense to consider provincial schools and schools run by band councils as belonging to watertight compartments. Net Aboriginal migration since WWII has been toward the city but a great deal of "back and forth" has been taking place. Aboriginal families are more mobile than non-Aboriginals, which means frequent transfers for many Indian-FN children between a reserve and provincial school.

Decomposing Aboriginal K-12 incomplete rates

The two rules of thumb suggest a decomposition of Aboriginal incomplete K-12 rates in provincial schools into two effects: 1) the extent to which provincial school systems minimize incomplete K-12 among *non-Aboriginal* students, allowing for school location (in either a CMA or rural plus non-CMA urban community), and 2) the extent to which provincial school systems overcome discrimination against Aboriginal students and scepticism of Aboriginal families toward formal education, as measured by the size of the provincial Aboriginal / non-Aboriginal gap in K-12 completion.

A somewhat similar decomposition can be conducted with respect to K-12 incomplete rates among those living on-reserve. Since most reserves are rural, we are interested in 1) the extent to which young Indian-FN adults living off-reserve in a rural or small town context in any province have incomplete K-12, and 2) the gap

³ The differences in K-12 incomplete rates across the Prairies are trivially small. The results are as follows: Alberta (29.22 percent), Saskatchewan (28.59 percent), Manitoba (29.24 percent).

between the on-reserve incomplete rate and that among Indian-FN living in rural or small town communities within a particular province. This decomposition provides a measure of the relative performance, across provinces, of the "non-systems" operating on-reserve.

Ideally, we should generate a national sample of young adults, determine for each member of the sample the location of K-12 schooling and a range of socioeconomic and identity characteristics (such as parental education and income, Aboriginal identity group, and specific FN). Less definitive would be an analysis of a random sample of young adults drawn from the 2006 long form population, again including a range of individual characteristics. Within the sample, we could introduce index variables for each province, and location within a province (urban CMA, rural plus urban non-CMA, or on-reserve). And finally we could regress high school completion on these variables and estimate coefficients. The value and statistical significance of the index variable coefficients would provide a measure of relative efficacy of the various provincial school systems and of the on-reserve "non-systems". That is not what this paper attempts.

Instead, this paper offers an obviously underspecified exercise in explaining incomplete K-12 rates. By ignoring individuals' characteristics, the decompositions illustrated in figures 3 – 5 overstate the impact of provincial school systems (and reserve "non-systems") as explanation for education outcomes. The rationale for this decomposition exercise is to suggest that, almost certainly, differences across provinces in quality of provincial education programming and, second, differences across provinces in quality of on-reserve schools, are an important consideration. Not that these differences explain everything, but nor do socioeconomic characteristics and issues of Aboriginal identity.

Decomposition results

Deviations in K-12 incomplete rates among non-Aboriginals

The lowest incomplete K-12 rate realized among non-Aboriginals in CMAs is 7.5 percent, in BC. (See table 1.) The highest is 13.2 percent, in Alberta. Alberta's deviation from the minimum is 5.7 percentage points (= 13.2 – 7.5). At a national level the deviations from the best provincial outcome is 3.4 points (= 10.9 – 7.5). The implication here is that, even without addressing factors underlying the Aboriginal / non-Aboriginal gaps, Alberta might realize a 5.7 percentage point improvement in high school completion results in its CMAs among both non-Aboriginal and Aboriginal students if it could replicate the performance of BC's school system.

The rural plus small town results follow roughly the same pattern. The lowest K-12 incomplete rate among young non-Aboriginals is 13.5 percent, again in BC. However, this minimum incomplete rate is nearly twice the comparable statistic among CMAs. Nationally, the deviation from best provincial outcomes is 2.8 points (= 16.3 - 13.5).

Métis / non-Aboriginal gap decompositions

From Ontario to BC, the lowest provincial Métis / non-Aboriginal completion gap among young adults in CMAs is 8.2 percentage points, in Ontario.⁴ (See table 2 and figure 3.) The BC gap is only slightly larger. By contrast, in the Prairie provinces the gaps are much larger. The Manitoba gap, for example, is 16.4 points, twice that prevailing in Ontario, 8.2 points.

Among schools in rural and small towns the lowest Métis / non-Aboriginal gap is in BC. The Ontario deviation from BC is trivially small. Again, the Prairie Métis / non-Aboriginal gaps are larger than in either Ontario or BC.

Indian-First Nation / non-Aboriginal gap decompositions

The smallest Indian-FN / non-Aboriginal gap in CMAs is 13.6 points, in Quebec. The analogous minimum gap for Métis living in CMAs is 8.2 points. In provinces to the west there exist very large deviations from Quebec's Indian-FN / non-Aboriginal gap. Ontario and BC experience gaps 8.0 points higher than in Quebec. The gap deviations in Alberta and Saskatchewan are roughly twice those in Ontario and BC; the gap deviation in Manitoba is three times higher.

The rural plus small town results are notable for the much larger minimum Indian-FN / non-Aboriginal gap than the analogous Métis / non-Aboriginal gap (17.7 points compared to 6.2 points).

Indian-First Nation decomposition, on-reserve versus off-reserve

The purpose here is to compare the performance of reserve schools, by province, relative to the performance of provincial school systems in rural and small town communities. The benchmark is 36.2 percent, the minimum incomplete rate among Indian-FN young adults living off-reserve in rural or small town communities. (See figure 5.) This minimum occurs in BC. Deviations from this minimum among comparably defined rural and small town Indian-FN populations in Ontario and Quebec are small. As we have come to expect, the deviations are much larger in the Prairie provinces.

The minimum gap between completion rate among Indian-FN young adults living on-reserve relative to those living off-reserve in rural or small town communities in the same province is 10.7 points. This minimum is realized in BC. The deviations in provincial gaps from that in BC are large in the other five provinces. Clearly, the "non-system" among BC reserve schools is achieving considerably better results than in any of the five other provinces.

⁴ Few declared a Métis identity in the 2006 census among those resident in Quebec. Accordingly, it is excluded for the Métis decompositions.

Summary observations

At the national level, the off-reserve Indian-FN / non-Aboriginal gaps are roughly twice the Métis / non-Aboriginal gaps. And at the national level, disaggregating by location within each identity group the gaps are similar.

Perhaps the most important result to retain from this decomposition exercise is that *deviations* from the minimum provincial-level Aboriginal / non-Aboriginal gaps are large relative to the national gaps (see table 2). In other words, some provinces are achieving significantly better results than others. The fraction accounted for by deviations ranges from roughly a quarter in the case of the rural plus small town Indian-FN / non-Aboriginal gap (6.1 points of a 23.7 point total) to nearly half in the case of the CMA Indian-FN / non-Aboriginal gap (11.1 points of a 24.7 point total).

Finally, reserve schools in BC achieve a markedly lower on- vs. off-reserve Indian-FN gap than is the case in any other province.

Institutional innovations in British Columbia

The magnitude of interprovincial deviations from the optimum provincial performance is tentative evidence that the policy and institutional differences among provinces are among the determinants of Aboriginal education success and failure. In three of five decompositions the BC result is either best or the deviation from best is trivially small. This section discusses three institutional and policy dimensions whereby on- and off-reserve Aboriginal education in this province differs from elsewhere.

The fact that BC has achieved superior Aboriginal student outcomes relative to other provinces, is not a reason for stakeholders in that province to rest on their laurels. The gaps with non-Aboriginal students remain unacceptably large.

Better data

Standardized tests permit comparisons as students progress through the K-12 cycle. Canada participates, for example, in international random sample tests, such as the PISA tests conducted by the Organization for Economic Cooperation and Development. These are useful in comparing education results across provinces and between Canada and other countries. However, to assess and manage a complex school system, such as that of a province, requires data at a far more disaggregated level than PISA or snapshots every five years via the census.⁵

⁵ The 2011 census snapshot is likely to be blurred at best. Among the most important biases probably introduced by elimination of the mandatory long form concerns Aboriginal results. See the appendix for more detail.

For reasons specific to the politicians and senior officials in charge in Victoria in the 1990s, BC innovated aggressively in setting up statistical procedures to generate data covering Aboriginal students in the provincial K-12 system. The BC education ministry asks all students (on a voluntary basis) to indicate an Aboriginal identity if relevant. Furthermore, BC publishes data on Aboriginal students disaggregated in many instances to the school level. Other provinces have since the 1990s improved their Aboriginal student outcome statistics, but BC remains at the forefront.⁶

Most provinces undertake core competency tests in reading, writing and arithmetic at several grades in the K-12 cycle. In BC these tests (so-called Foundations Skills Assessment – FSA) are conducted in grades four and seven, and are disaggregated by identity, allowing analysis of trends among Aboriginal relative to non-Aboriginal students. BC also publishes analyses of student cohorts followed from grade 8, allowing a longitudinal comparison of Aboriginal and non-Aboriginal students in subsequent grades.

Performance measurement should be comprehensive. Measuring Aboriginal student performance on tests of basic skills is crucial, since competence in reading, writing and mathematics are essential for success both in higher education and mainstream society. Given the multiple aims of the educational enterprise, as well as the unique priorities of Aboriginal communities, other indicators also matter. For instance, the ability of provincial schools to provide a culturally affirming educational experience for Aboriginal children is an important aspect of performance to monitor.

There are two main reasons to undertake detailed student outcome monitoring. First, measuring and reporting school and student performance serves an accountability function. Whether Aboriginal or not, parents and citizens are concerned about the quality of the schools their children attend. Given the absence of educational accountability to Aboriginal communities in the past, information about school performance – both on- and off-reserve – is important to convince Aboriginal communities that education programs are working for their students. Second, performance measurement is a tool for improving school quality.

In general, middle-class parents, school trustees and senior educators responsible for school administration favour the collection and dissemination of detailed student outcome data. But doing so is not a politically easy undertaking. In BC – and in many other jurisdictions – the teachers union has waged an aggressive public campaign over the last decade against FSA testing. In the hope that non-participation render results suspect, the BC Teachers Federation recommends that parents refuse to allow participation by their children. Many Aboriginal organizations have supported this campaign for fear that revelation of large performance gaps between Aboriginal and non-Aboriginal students be a rationale for discriminatory actions.

⁶ For example, the BC education ministry annually publishes a detailed report (BC 2012) on Aboriginal student performance in the province.

Admittedly, data can be abused. To rank schools without serious discussion of factors beyond the control of schools is not helpful. But the potential to abuse data is not a reason to ignore data or dismantle statistical gathering institutions. As the old conundrum has it, if you don't know where you are, and you don't know where you want to go, you're unlikely to get there.

Aboriginal education enhancement agreements and discretionary funding to provincial school districts

School districts are an oft forgotten but potentially important level of school governance (Anderson 2006). In the 1990s BC established a precedent, copied since in some other provinces, of awarding supplementary funds annually to school districts based on the number of identified Aboriginal students. Provided they are devoted to Aboriginal education, districts exercise wide discretion over allocation of these funds. There exists reasonably good evidence to the effect that in school districts that, by various criteria, take seriously their obligations to monitor and advance their native students, Aboriginal student scores on provincial core competency tests are superior to the scores of native students in districts that do not (Richards, Hove and Afolabi 2008).

Encouraging enterprising school districts to try new initiatives makes sense. The benefits seem to derive from a variety of avenues:

- The provincial education ministry requires districts to draw up Aboriginal education enhancement agreements with medium term targets.⁷ This obliges district school boards, superintendents and school principals to address Aboriginal student outcomes in their district and compare with other districts.
- The enhancement agreements oblige school districts to engage local Aboriginal community leaders in school policy-making and setting of targets;
- School and district-level educators may interact more closely with local onreserve schools, with the intent of addressing and rectifying shared education issues.

A controversial aspect of school district innovation is designation of magnet schools whose student body is expected to be primarily Aboriginal. Such schools raise the issue of peer effects. Socio-economic characteristics of individual families may affect not only their own children; the characteristics may also impinge – positively or negatively – on other students in the school and hence become determinants of school quality. After adjusting for other factors, the above-cited study found that Aboriginal student performance on core competency tests were on average significantly lower in schools with large Aboriginal cohorts. Conversely, the peer effect may be positive. In the same

⁷ For a description of these agreements see BC (2013). To read a sample agreement see Richards and Scott (2009, appendix one).

study the average FSA performance of non-Aboriginal students in a school had a marked positive impact on scores of Aboriginal students.

The potential impact of student peers is inseparable from designing school curriculum and hiring faculty in a manner to promote Aboriginal culture. To improve school performance among marginalized ethnic/racial groups, many studies stress the value of hiring teachers who belong to the ethnic/racial group in question, and of introducing a school curriculum oriented to the group's cultural experience. These features are usually more in evidence in schools with large numbers from the relevant group. Such schools are better able to achieve efficient scale in such things. However, a tradeoff usually exists. The presence of a large culturally homogeneous low-performing student cohort may well encourage a school culture of low academic expectations: some combination of low teacher expectations of their students' academic potential and low student expectations of their own and their peers' potential (Rivkin, Hanushek, and Kain, 2005).

First Nation Schools Association (FNSA) and First Nations Education Steering Committee (FNESC)

By general consensus among professional educators in Canada, reserve schools in BC have achieved more coordination among themselves, and with the provincial school system, than is the case in any other province. The coordination may be better; it is far from perfect. FNESC and FNSA have limited discretion relative to chiefs/council on individual reserves and limited managerial capacity relative to provincial school boards and provincial education ministries.

Provincially based First Nation organizations, provincial education ministries, and AANDC have negotiated a series of tripartite education agreements across Canada. Reflecting the relatively well established role of FNESC and FNSA, the education agreement in BC is the most ambitious.⁸

FNESC is a provincial society in BC controlled by the chiefs and councils of bands operating under provisions of the Indian Act or self-governing First Nations subject to a modern treaty. Much of its activities concern liaison with the provincial government on policy and programs for Indian-FN students in provincial schools (FNESC 2011). FNESC is a political organization somewhat akin to a school board. FNSA is also a provincial society. It provides secondary services to most on-reserve schools in the province. It also undertakes data collection from member schools (FNSA 2012). It is somewhat akin to the professional staff of a school district. Between them, FNESC and FNSA undertake many functions associated with school districts in provincial systems, and are in effect a "proto school district" for onreserve BC schools.

BC education outcomes for young Aboriginal adults may be the best among

⁸ The texts of current tripartite education agreements, including that in BC, are available online (AANDC 2013a).

provinces; that is a very low benchmark. Among those in BC identifying as Métis, the incomplete K-12 rate was twice that among same-age non-Aboriginals in the province; among those identifying as Indian-FN the rate was four times higher (recall figure 1).

Conclusion

The above discussion of three dimensions whereby BC differs from other provinces and the decomposition exercise are far from definitive proof that the proposals of the joint AFN/AANDC panel and the 2012 federal budget proposal for reserve school authorities will improve outcomes. An obvious conclusion is a call for better evidence.

The more relevant conclusion is that the evidence discussed is highly suggestive that institutional arrangements for schools matter, and hence the 2012 budget was right in making a commitment "to establish the structures and standards to support strong and accountable education systems on reserve." This is the bureaucratic language of budget drafters. It is easy to mock. It is easy for First Nation leaders to indulge in rhetorical critiques of past federal policy and inadequacies in AANDC funding. It is easy for the federal government to turn away and deal with other files. The goal of decent Aboriginal education outcomes is however too important to abandon.

Appendix

Defining Aboriginal Identity Groups

As with all issues of identity in the modern world, the criteria are debatable. The Canadian census defines the Aboriginal population in several ways. The most widely used is based on self-identification. Individuals can self-identify as belonging to one of three Aboriginal groups: (1) North American Indian or First Nation (Mohawk, Ojibwa, Cree, and so on), (2) Métis (descendents of communities formed from the intermarriage of Indians and coureurs de bois engaged in the fur trade), or (3) Arctic Inuit. Self-identification as an Aboriginal in the census does not necessarily mean an individual has Aboriginal ancestry.

Another census definition is based on an individual indicating that he or she is a "registered Indian" under provisions of the *Indian Act*, a Canadian statute dating from the late 19th century. The great majority of those who self-identify as Indian / First Nation are also registered Indians. Only registered Indians have the right to live on designated reserve lands and receive the associated benefits. The census defines the Aboriginal identity population as those who self-identify as Aboriginal or indicate that they are "registered Indians."

Most of the statistics discussed in this paper derive from the 2006 census, by far the most important source of consistent information about Aboriginal social conditions across Canada. Detailed Aboriginal data from the 2011 census will not be available until later in 2013. The 2006 census included a 20 percent random sample required to complete the "long form" questionnaire. Since participation was mandatory among those randomly selected, the reported results on many social conditions among Canadians were as accurate as a census could provide. For the 2011 census the government made the controversial decision to abolish mandatory participation in a "long form" 20 percent sample and substituted voluntary participation in a larger 35 percent sample, the basis for the National Household Survey. While the sample was larger, those who rely on census Aboriginal data have expressed serious concerns about bias. The Aboriginal response rate may well have been considerably lower than in 2006, and those Aboriginals who chose not to respond may well have been poorer and/or more alienated from mainstream Canada than one would conclude from a representative sample.

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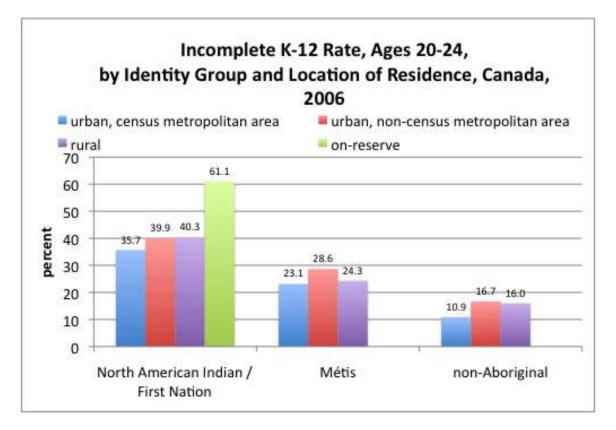
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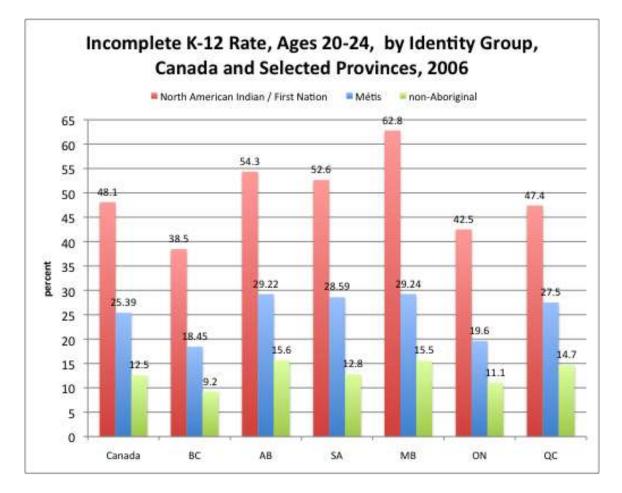
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source: For all figures, the source is author's calculations from tabulations of the 2006 census (Canada 2008).





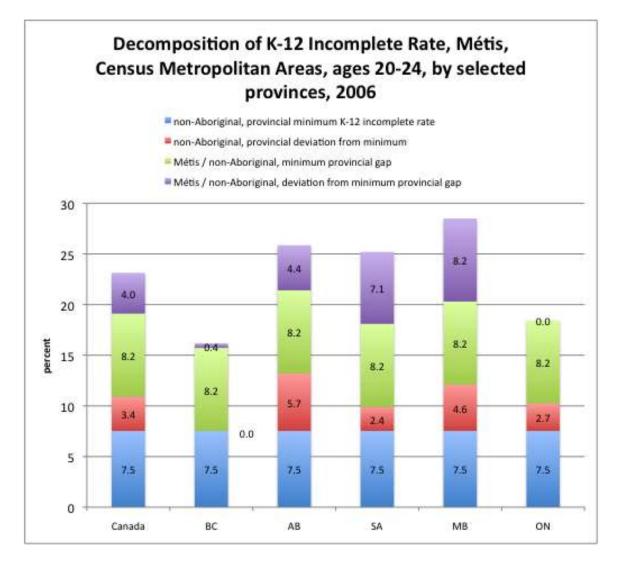


Figure 3b

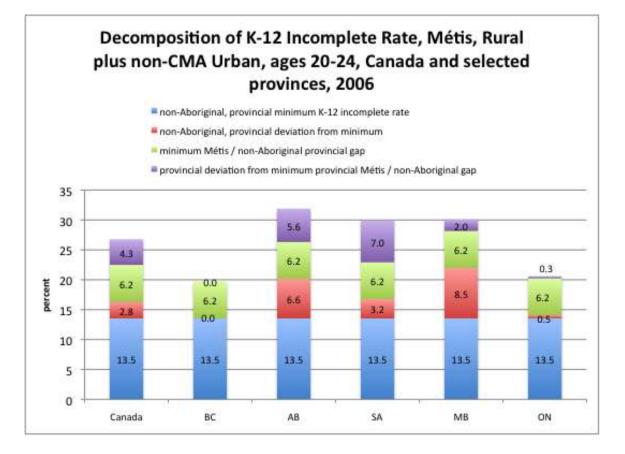


Figure 4a

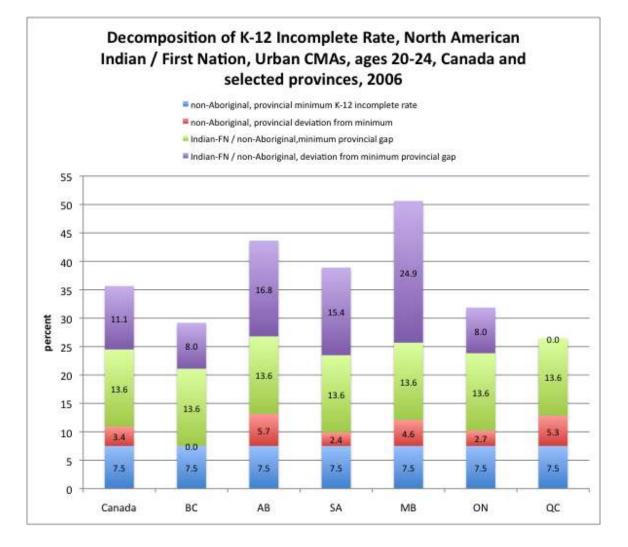


Figure 4b

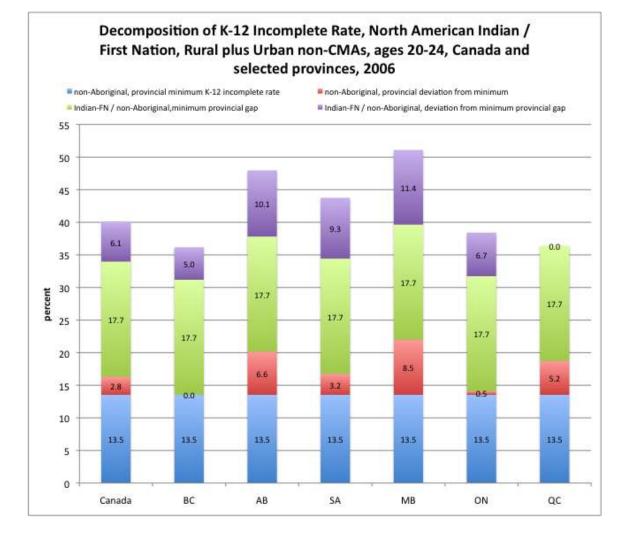


Figure 5

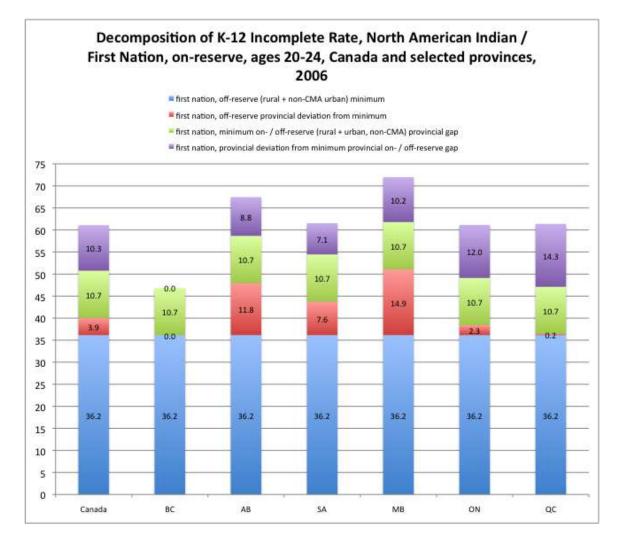


Table 1

K-12 Incomplete Rates, Young Non-Aboriginal Adults	ages 20-24, C	anada and	Selected Prov				
	Canada	BC	AB	SA	МВ	ON	QC
			(percentage p	oints, unless ind			
Census metropolitan areas (CMAs)							
Minimum provincial incomplete rate	7.5	7.5	7.5	7.5	7.5	7.5	7.5
Provincial (national) deviation from minimum	3.4	0.0	5.7	2.4	4.6	2.7	5.3
Total incomplete rate	10.9	7.5	13.2	9.9	12.1	10.3	12.9
Deviation as share of total incomplete rate (percent)	31.1	0.0	43.0	24.0	37.8	26.6	41.4
Rural + non-CMA urban							
Minimum provincial incomplete rate	13.5	13.5	13.5	13.5	13.5	13.5	13.5
Provincial (national) deviation from minimum	2.8	0.0	6.6	3.2	8.5	0.5	5.2
Total incomplete rate	16.3	13.5	20.2	16.8	22.0	14.1	18.8
Deviation as share of total incomplete rate (percent)	17.1	0.0	32.9	19.3	38.5	3.9	27.8

Table 2

	Canada	BC	AB	SA	мв	ON	QC
	canada		(percentage points			0.1	٩v
Census metropolitan areas (CMAs): Métis / Non-Abori	ginal gap		.,	,			
Minimum provincial gap	8.2	8.2	8.2	8.2	8.2	8.2	
Provincial (national) deviation from minimum	4.0	0.4	4.4	7.1	8.2	0.0	
Total gap	12.2	8.6	12.6	15.3	16.4	8.2	
Deviation as share of total gap (percent)	32.8	5.1	35.2	46.4	50.0	0.0	
Rural + non-CMA urban: Métis / Non-Aboriginal gap							
Minimum provincial gap	6.2	6.2	6.2	6.2	6.2	6.2	
Provincial (national) deviation from minimum	4.3	0.0	5.6	7.0	2.0	0.3	
Total gap	10.4	6.2	11.7	13.1	8.1	6.5	
Deviation as share of total gap (percent)	41.0	0.0	47.4	53.0	24.1	5.2	
Census metropolitan areas (CMAs): Indian - First Nation	on / Non-Aborig	ginal gap					
Minimum provincial gap	13.6	13.6	13.6	13.6	13.6	13.6	13.6
Provincial (national) deviation from minimum	11.1	8.0	16.8	15.4	24.9	8.0	0.0
Total gap	24.7	21.6	30.4	29.0	38.5	21.6	13.6
Deviation as share of total gap (percent)	45.0	37.2	55.3	53.1	64.7	37.1	0.0
Rural + non-CMA urban: Indian - First Nation / Non-A	boriginal gap						
Minimum provincial gap	17.7	17.7	17.7	17.7	17.7	17.7	17.7
Provincial (national) deviation from minimum	6.1	5.0	10.1	9.3	11.4	6.7	0.0
Total gap	23.7	22.6	27.8	27.0	29.1	24.3	17.7
Deviation as share of total gap (percent)	25.6	22.0	36.5	34.5	39.3	27.5	0.0
Indian - First Nation: on-reserve / off-reserve (rural +	non-CMA urba	n) gap					
Minimum provincial gap	10.7	10.7	10.7	10.7	10.7	10.7	10.7
Provincial (national) deviation from minimum	10.3	0.0	8.8	7.1	10.2	12.0	14.3
Total gap	21.0	10.7	19.5	17.8	20.9	22.7	25.0
Deviation as share of total gap (percent)	49.0	0.0	45.0	39.8	48.7	52.8	57.1

Note: Few declared a Métis identity in the 2006 census among those resident in Quebec. Accordingly, it is excluded for the Métis decompositions.