

# Improving the Educational Outcomes of Aboriginal People Living Off-Reserve: Evidence from BC ... and elsewhere

Saskatoon, 15 March 2010

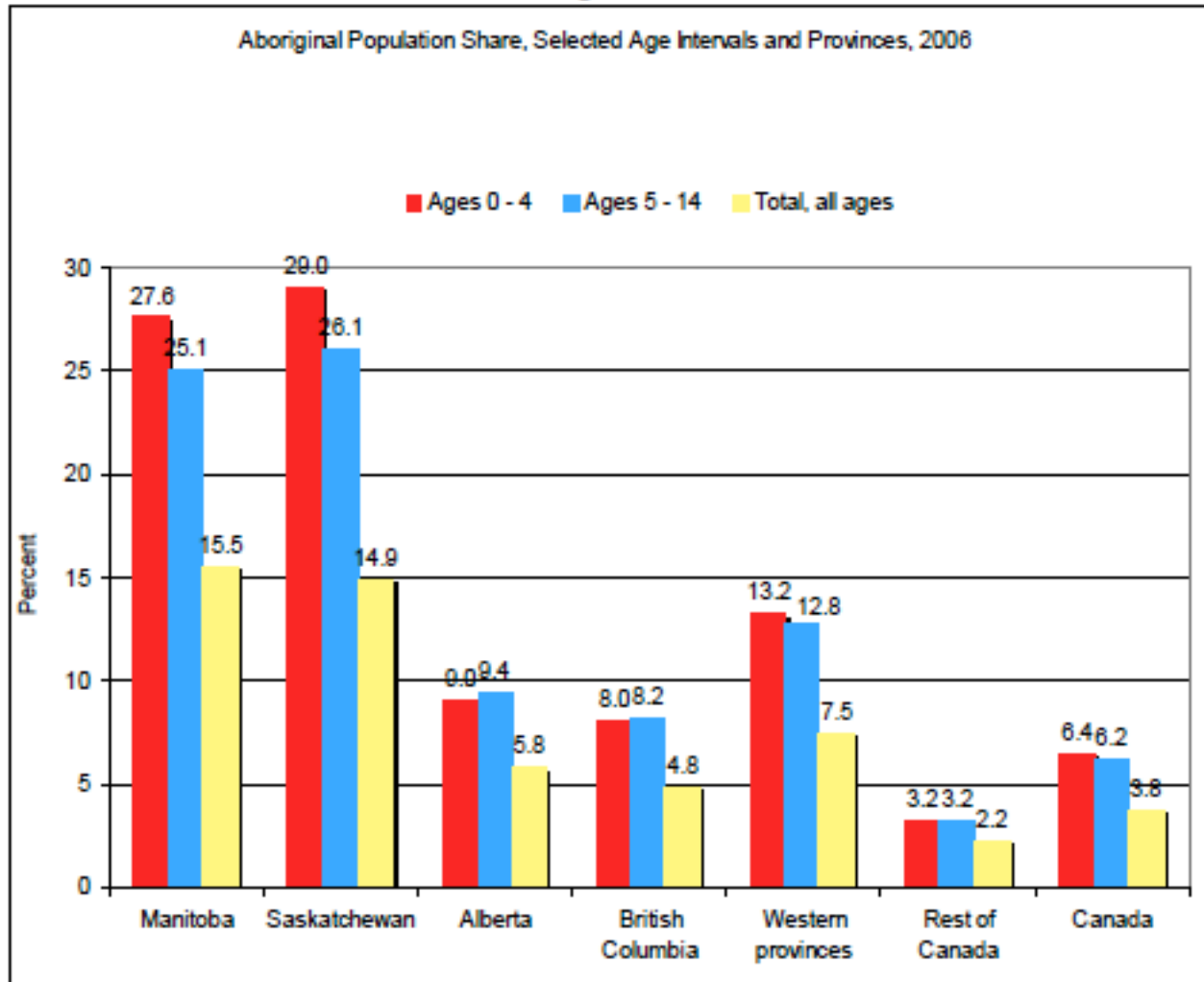
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“The Choice”  
Gerald Folster,  
Manitoba artist



# Strengthening the Foundations

## Aboriginal share of school-age cohorts in western Canada is now 1 in 8



**Note:** Many of the graphs in this deck are from the report *Strengthening the Foundations* (written by Megan Scott and me). It is available online at <http://www.cprn.org/doc.cfm?doc=2088&l=en>

Source: Authors' calculations from Statistics Canada (2008c).

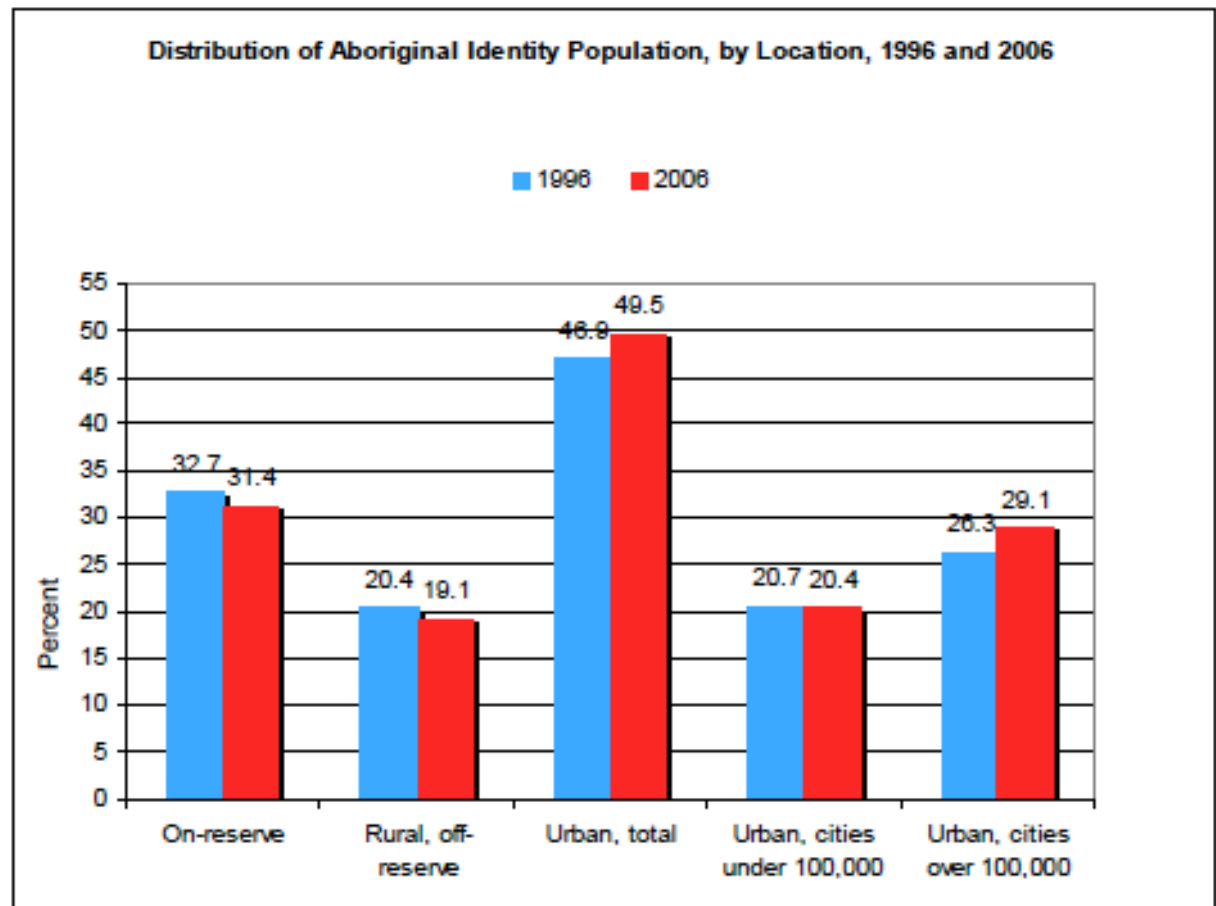
## ***Strengthening the Foundations***

### **Provincial systems and reserve schools interact extensively**

\* About 20% of Aboriginal students attend 500 small on-reserve schools [= 60% x on-reserve share (30%)];

\* 80% attend provincial schools [= off-reserve share (70%) + students living on-reserve but attending provincial schools (40% x 30%)]

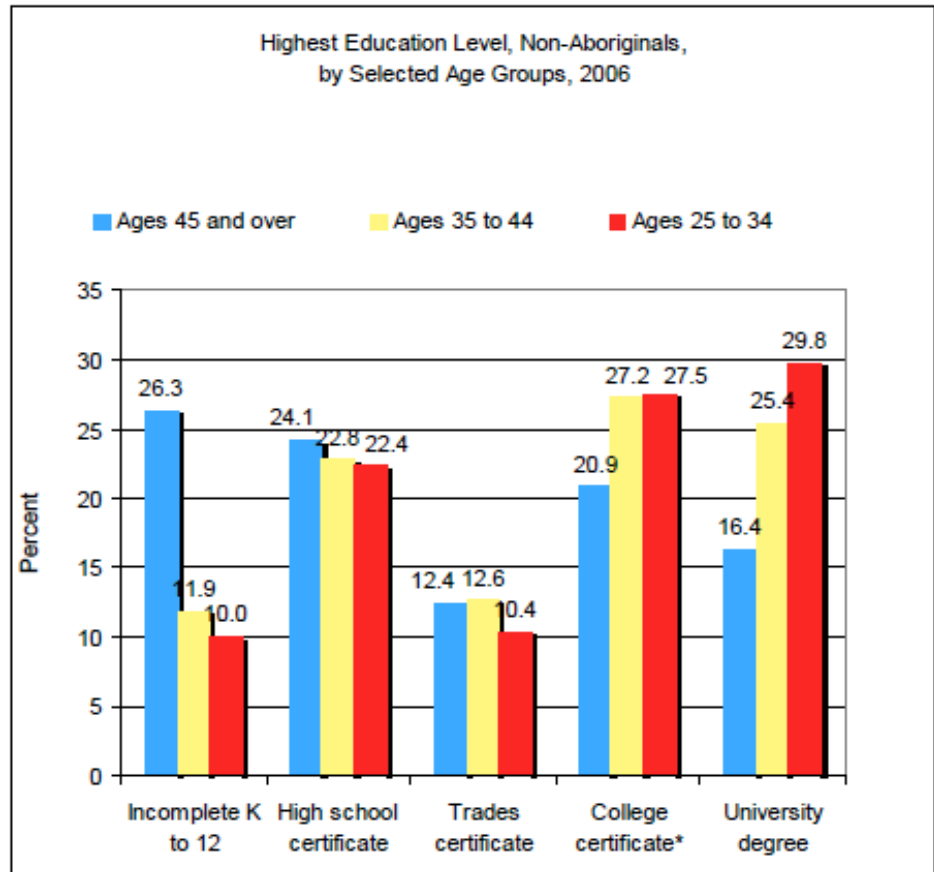
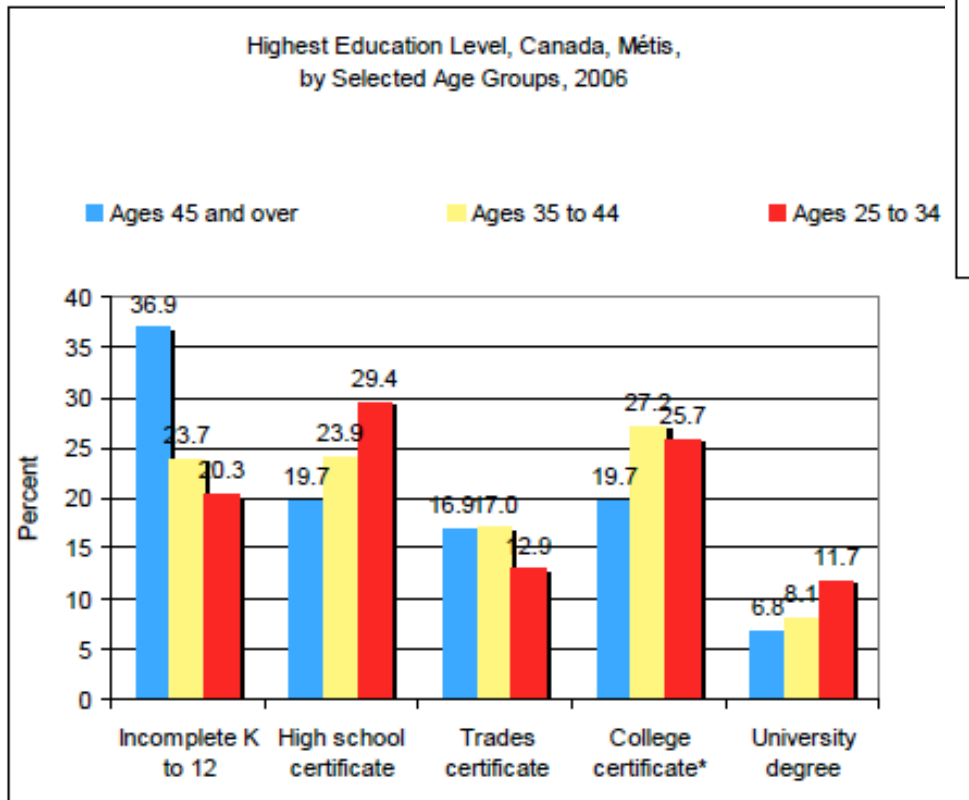
\* Mobility between systems is high



Sources: Authors' calculations from Statistics Canada (2004; 2008c).

## Strengthening the Foundations Progress and stall (1):

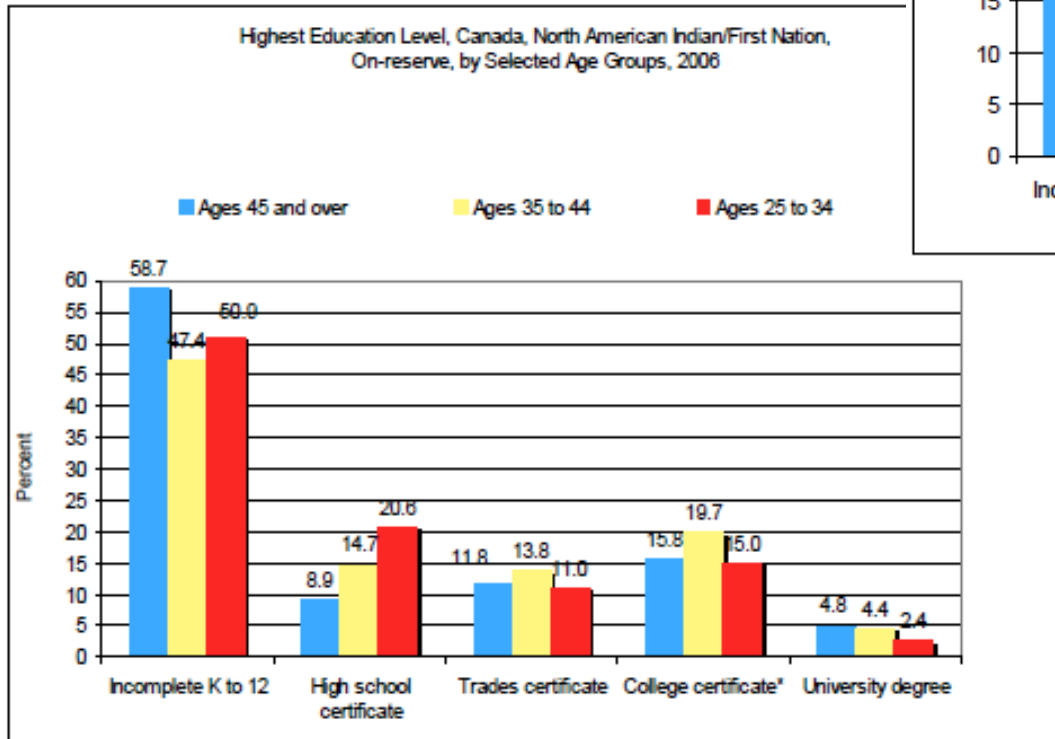
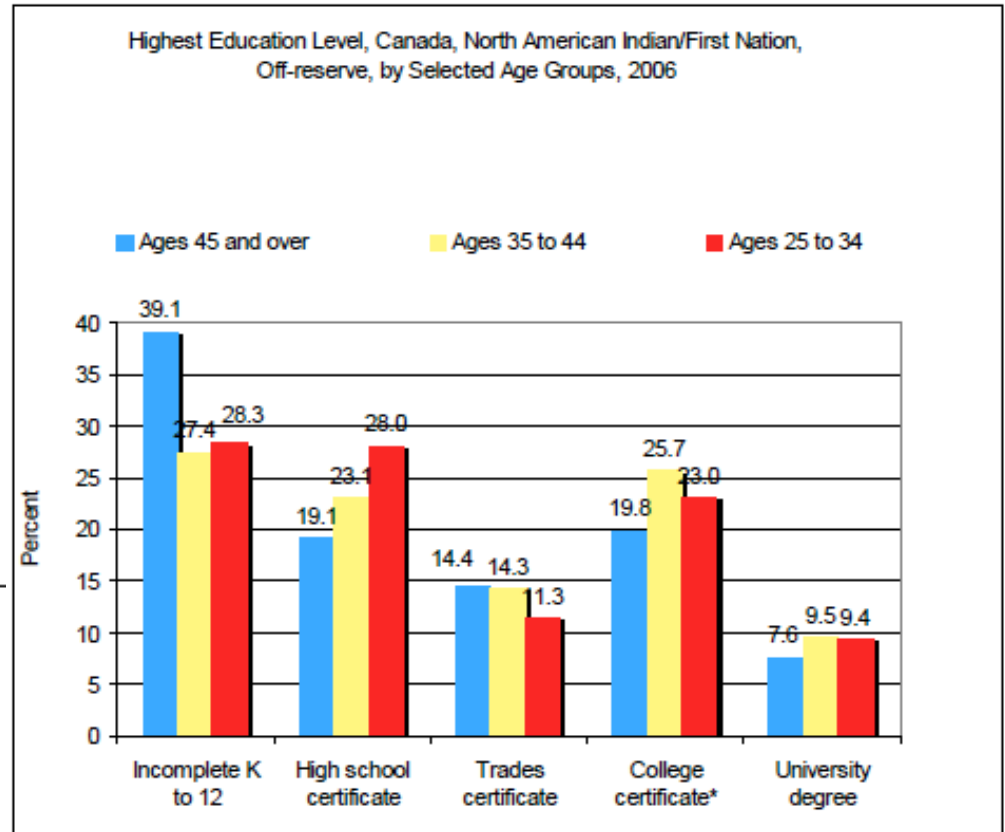
significant intergenerational  
progress among Métis and  
non-Aboriginal, but ...



Source: 2006 Census

# Strengthening the Foundations Progress and stall (2):

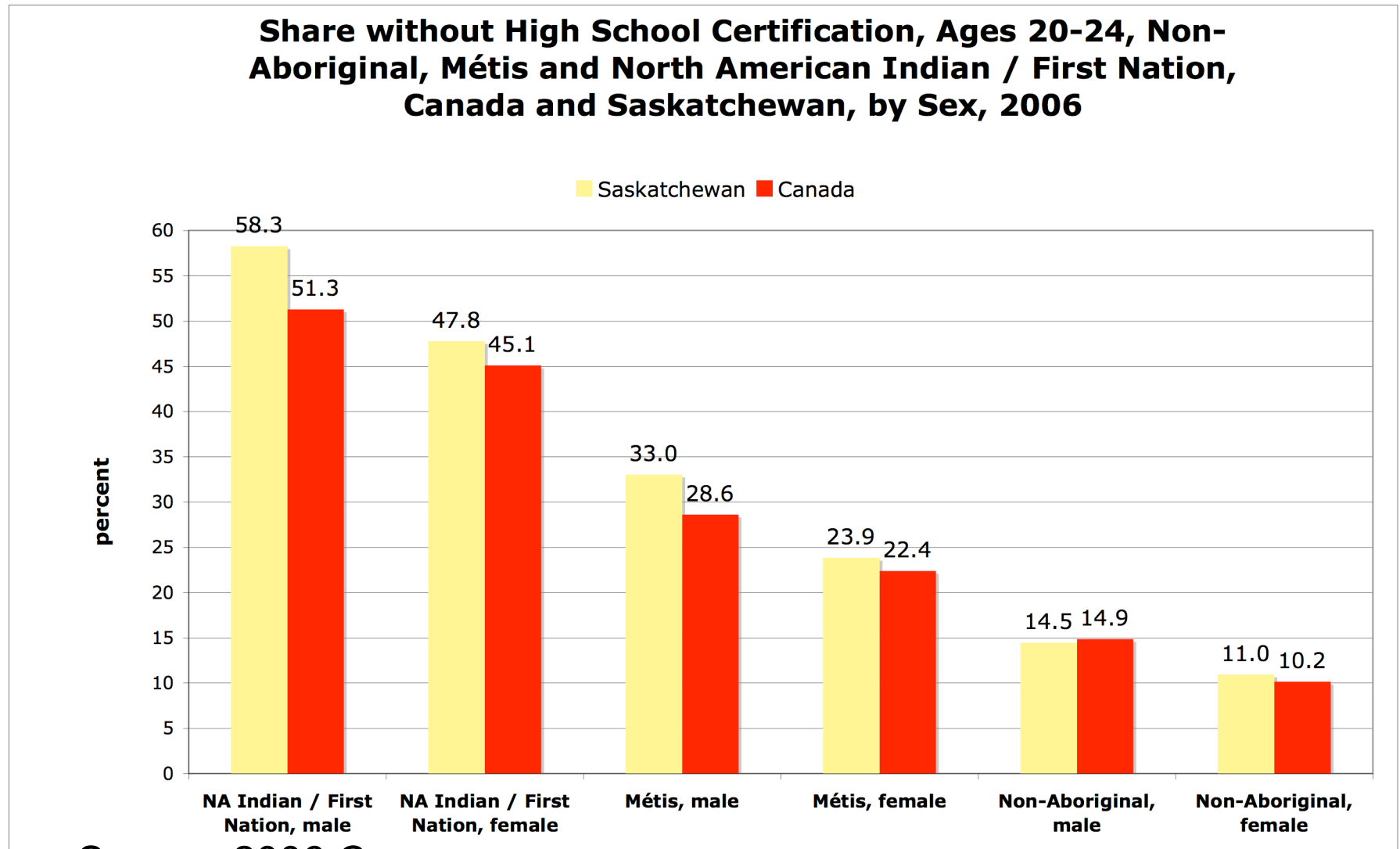
... some progress in Indian/FN high school completion rate between 45 and over and younger cohorts, but stall among 25-34 cohort



\* Includes college/CEGEP certificates plus university certificates below bachelor level

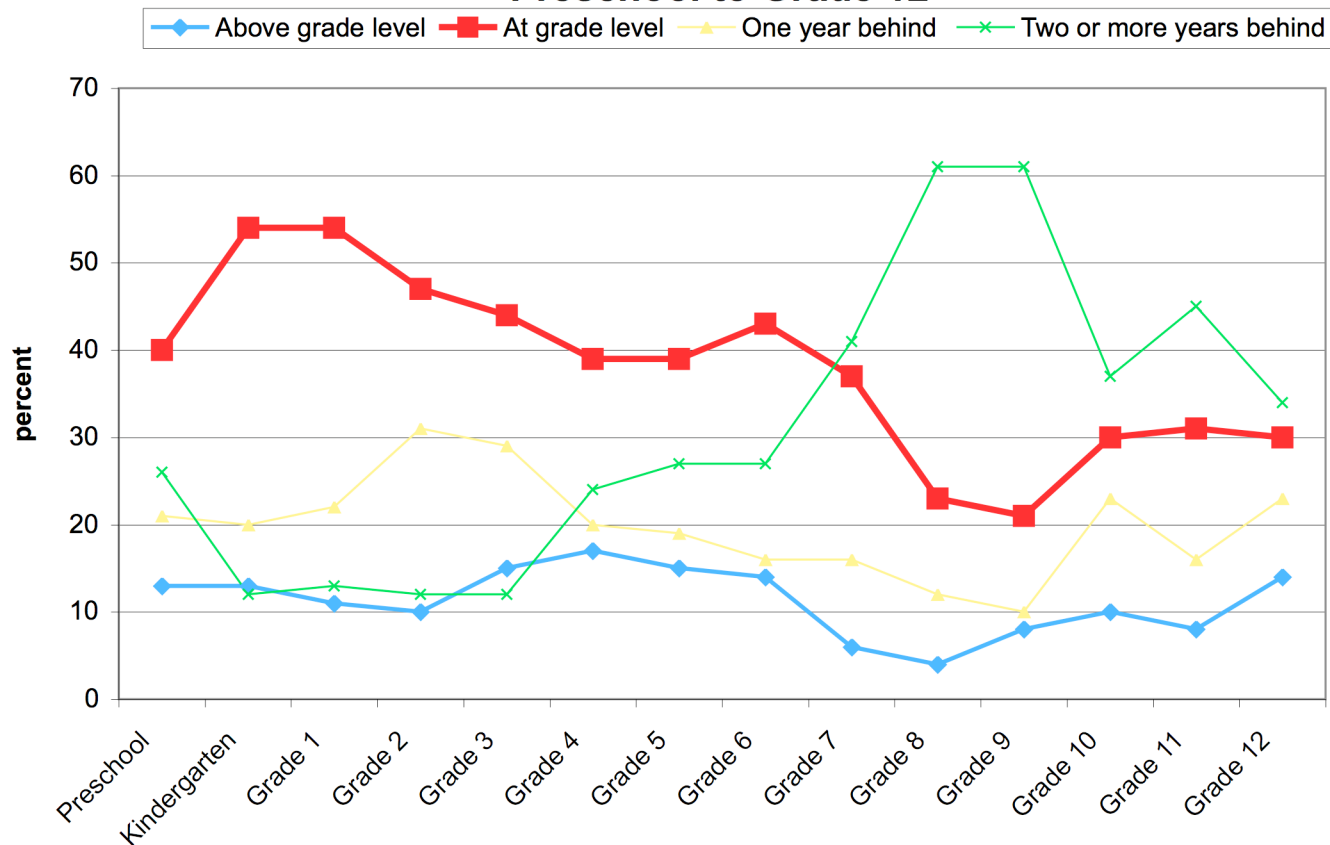
Source: Statistics Canada (2008c).

# Among young Saskatchewan Aboriginals, high school completion is below national averages – lower among Indian/FN than Métis, lower among men than women



Source: 2006 Census

### Distribution of Student Performance in Reading, On-Reserve Schools, British Columbia, Preschool to Grade 12



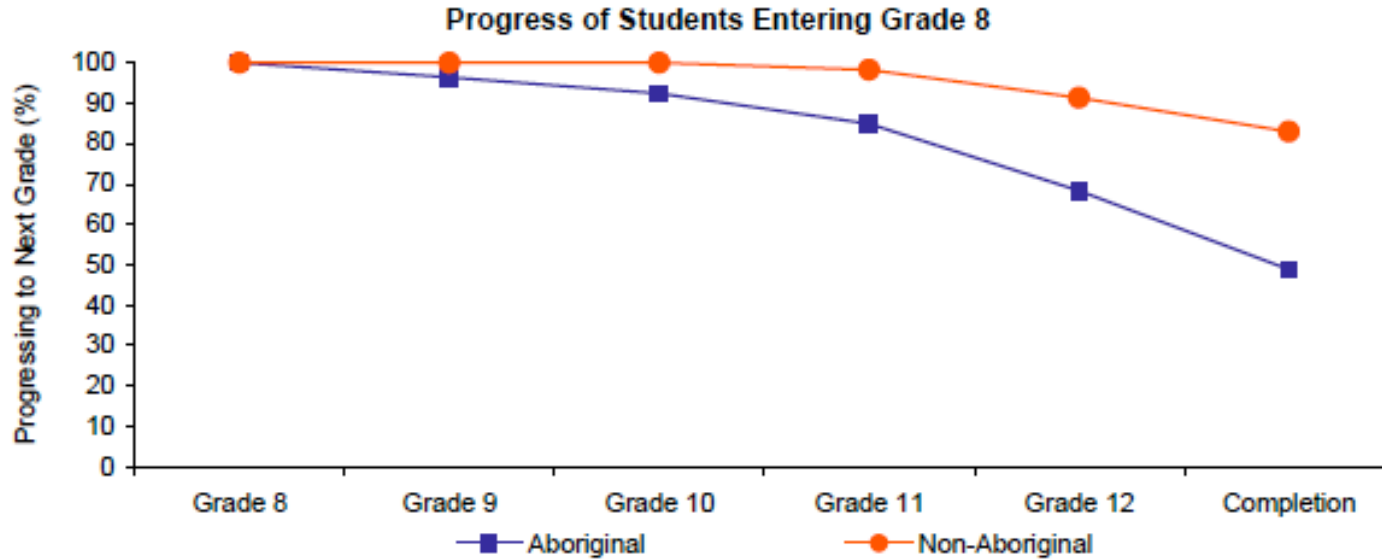
Source: Tindall Consulting 2009

### *Strengthening the Foundations*

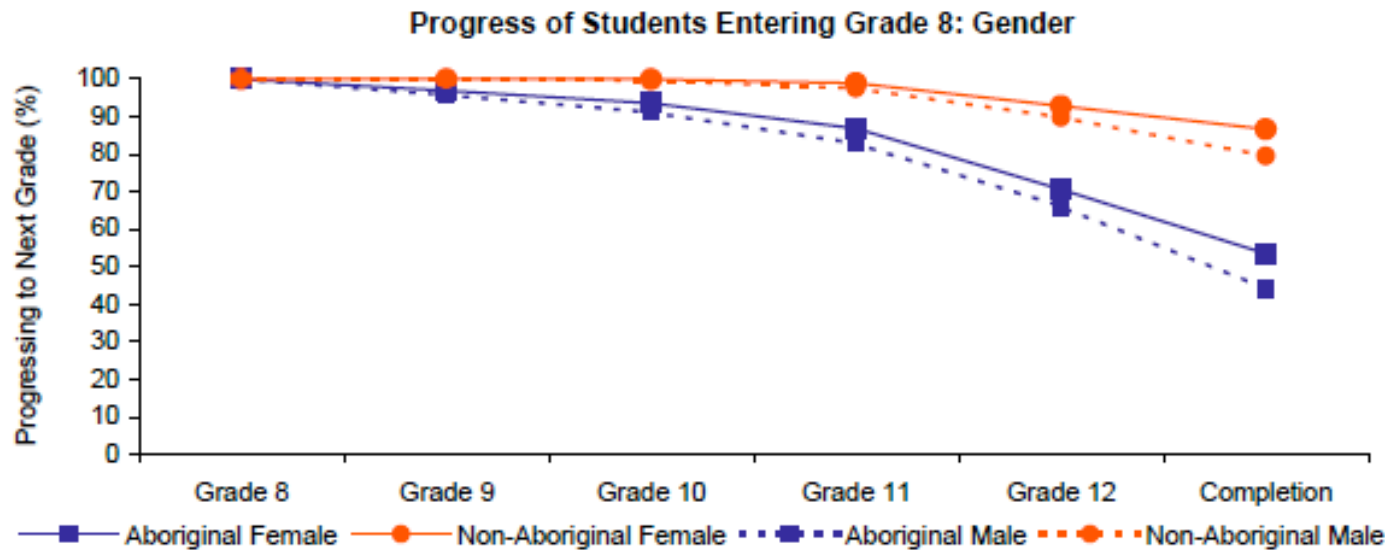
**Aboriginal  
education  
problems are  
cumulative  
from primary  
grades...**

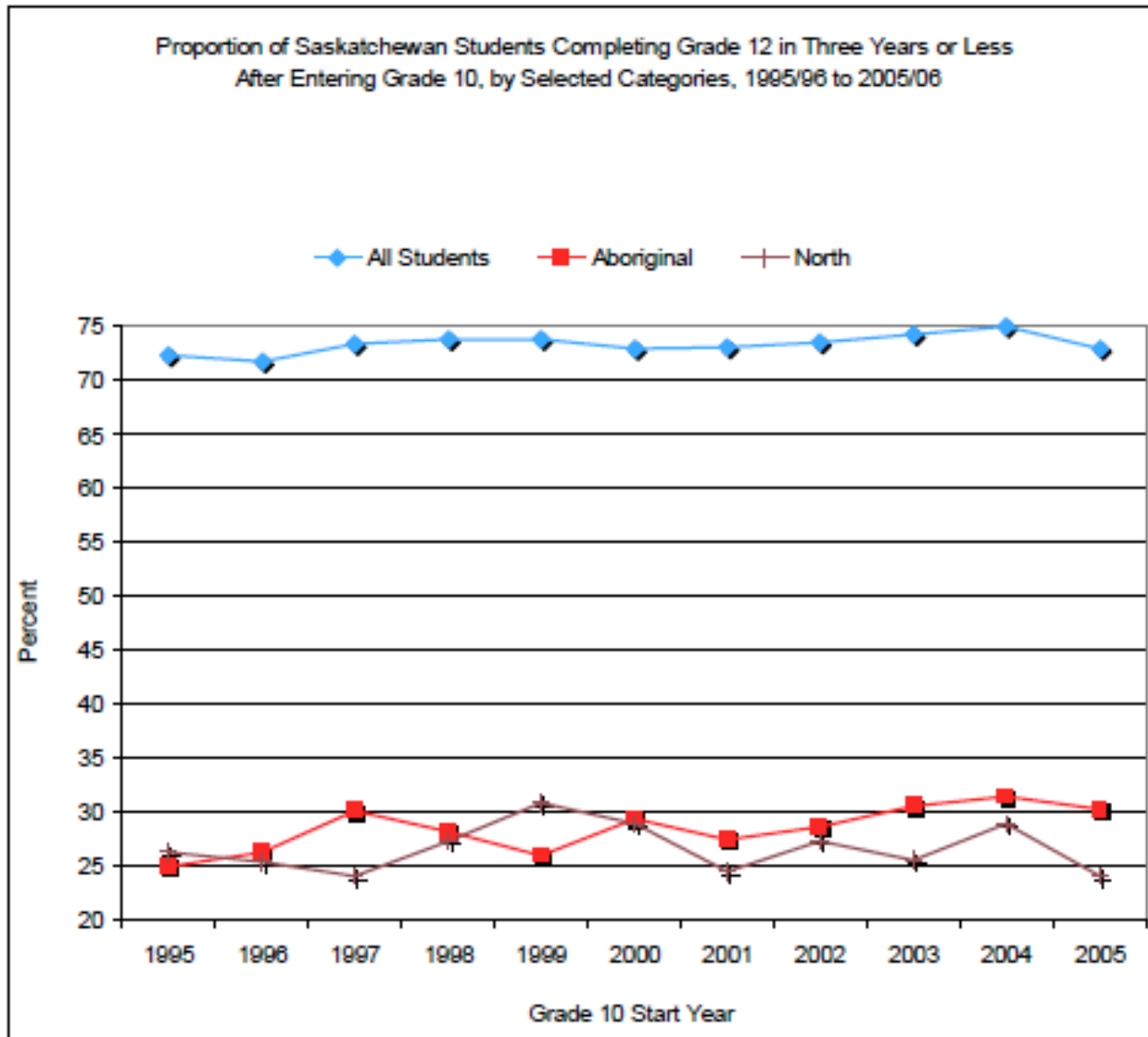
## Strengthening the Foundations

# BC retention among students entering grade 8, Sep. 2001



... leading to high dropout rates in upper secondary grades ...





***Strengthening  
the Foundations***

**... and,  
geographically,  
in northern  
districts**

*“Understanding the Aboriginal/Non-Aboriginal Gap in Student Performance”*

# The supply of and demand for education: an economist’s view

- Demand side factors
  - **State of labour market** (e.g., recent oil boom, welfare access in high-unemployment regions)
  - **Culture** (e.g., legacy of residential school, fear of assimilation\*)
- Supply side factors
  - **Family characteristics**
    - family income
    - parents’ education,
    - family mobility
  - **School quality**
    - district-level strategies
    - teacher quality (e.g., value of stable teaching staff)
    - student peer effects

\* In late March, the Environics Institute will release the ambitious **Urban Aboriginal Peoples Survey**, which shows high expectations among urban Aboriginals toward education achievement.

*“Understanding the Aboriginal/Non-Aboriginal Gap in Student Performance”*

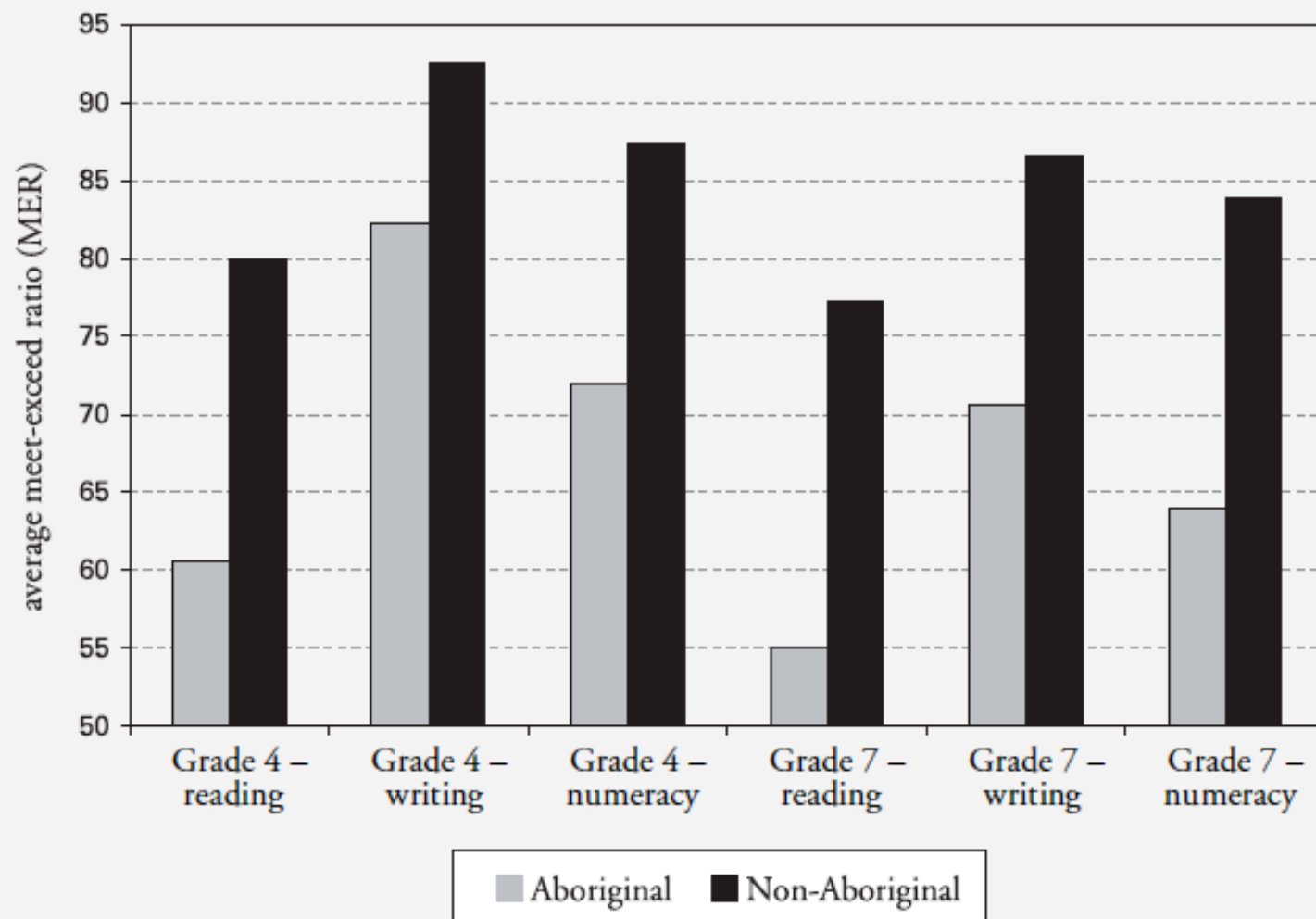
# Foundations Skills Assessment (FSA)

British Columbia is the only Canadian jurisdiction that assembles and regularly publishes detailed school-level evidence on Aboriginal student progress during primary and secondary education. Since the 1999/2000 school year, all B.C. students in Grades 4 and 7 have taken basic cognitive skills tests in reading, writing and numeracy. The Foundation Skills Assessment (FSA) data used in this study include results by school and by various characteristics of student populations, including gender and Aboriginal identity.

Published FSA results classify student performance in terms of three grades: “exceeding expectations,” “meeting expectations” and “not meeting expectations.” The most commonly used summary statistic is the ratio of number of school test scores in which students meet or exceed expectations to the number of test scores in a particular school, school district or the entire province. (See the Glossary for a fuller description.)

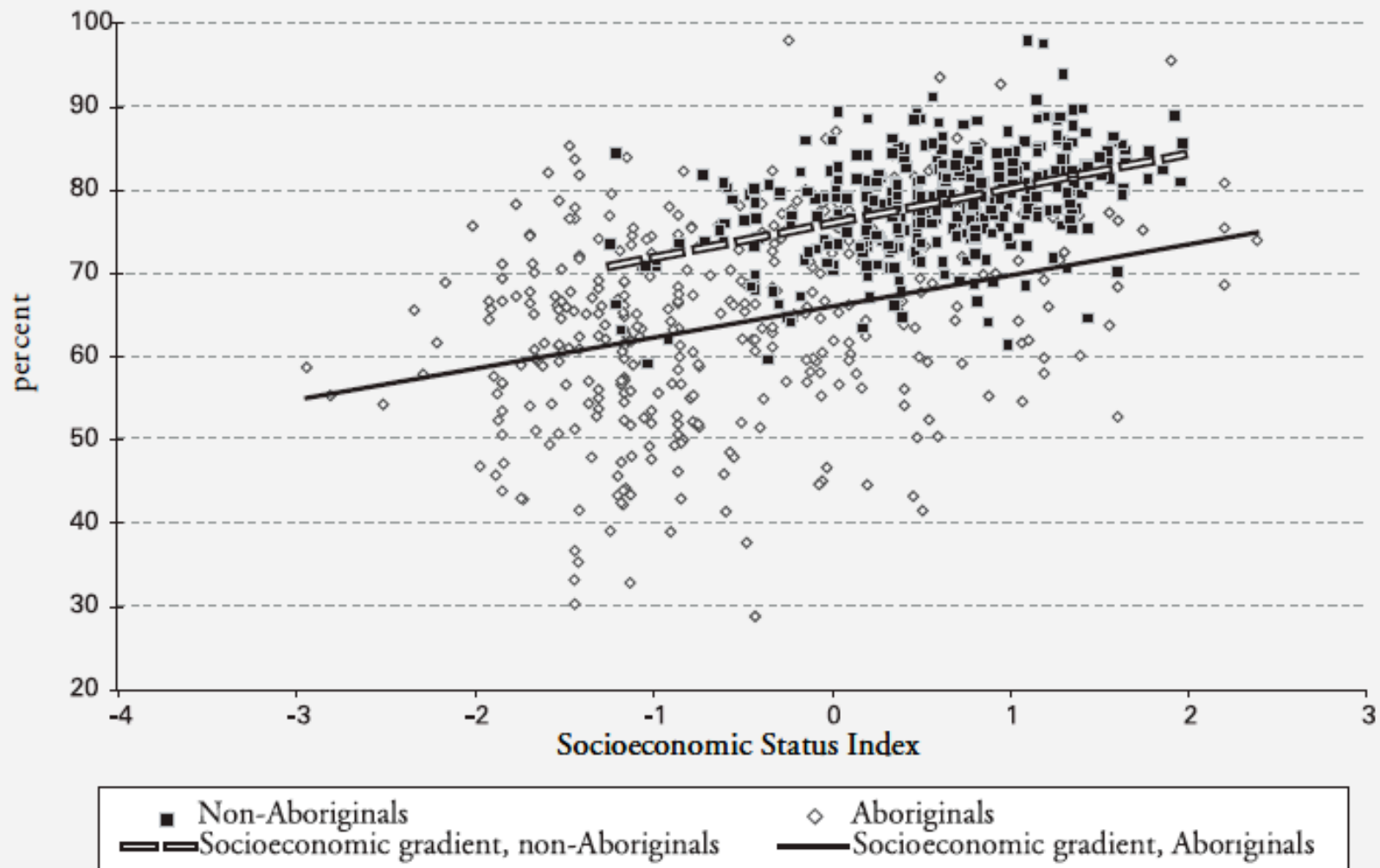
**Note:** Slides 11 – 18 summarize a study of Aboriginal student performance in 366 BC provincial schools. The study (Richards, Hove, Afolabi. “Understanding the Aboriginal / Non-Aboriginal Gap in Student Performance”) is available at <http://www.cdhowe.org>

Figure 3: Average FSA Performance, Aboriginal and Non-Aboriginal Students, by Subject and Grade, 2001/2002 – 2005/2006



## *“Understanding the Aboriginal/Non-Aboriginal Gap in Student Performance”*

Figure 6: Aboriginal and Non-Aboriginal School Meet-Exceed Ratios (MERs), by Socioeconomic Status Index (366 schools)



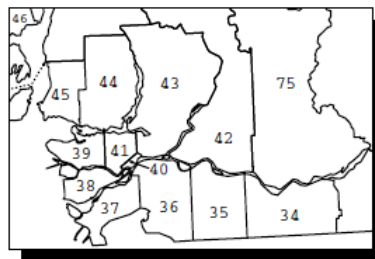
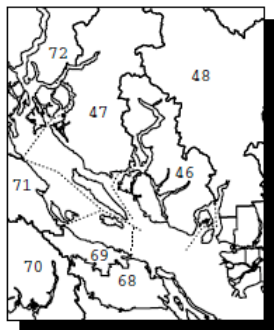
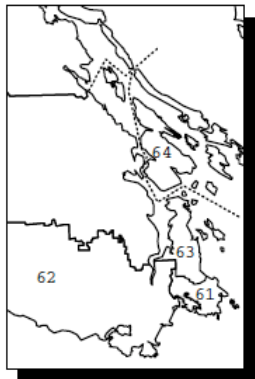
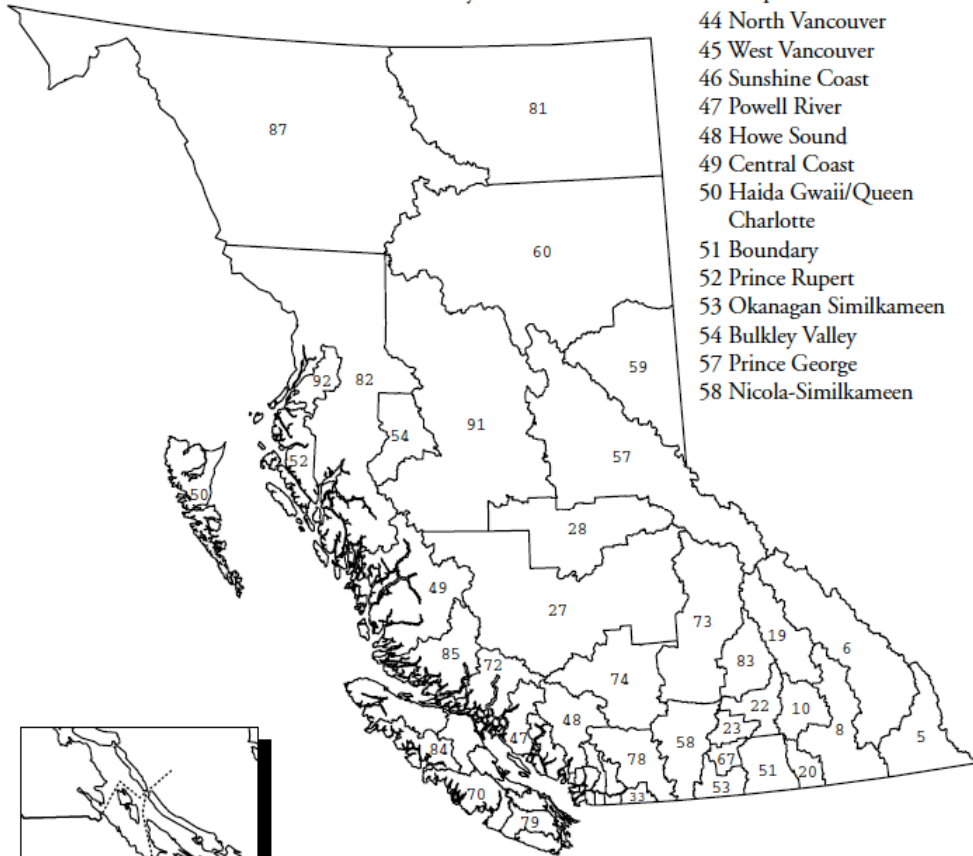
5 Southeast Kootenay  
 6 Rocky Mountain  
 8 Kootenay Lake  
 10 Arrow Lakes  
 19 Revelstoke  
 20 Kootenay-Columbia  
 22 Vernon

23 Central Okanagan  
 27 Cariboo-Chilcotin  
 28 Quesnel  
 33 Chilliwack  
 34 Abbotsford  
 35 Langley  
 36 Surrey

37 Delta  
 38 Richmond  
 39 Vancouver  
 40 New Westminster  
 41 Burnaby  
 42 Maple Ridge-Pitt Meadows  
 43 Coquitlam  
 44 North Vancouver  
 45 West Vancouver  
 46 Sunshine Coast  
 47 Powell River  
 48 Howe Sound  
 49 Central Coast  
 50 Haida Gwaii/Queen Charlotte  
 51 Boundary  
 52 Prince Rupert  
 53 Okanagan Similkameen  
 54 Bulkley Valley  
 57 Prince George  
 58 Nicola-Similkameen

59 Peace River South  
 60 Peace River North  
 61 Greater Victoria  
 62 Sooke  
 63 Saanich  
 64 Gulf Islands  
 67 Okanagan Skaha  
 68 Nanaimo-Ladysmith  
 69 Qualicum  
 70 Alberni  
 71 Comox Valley  
 72 Campbell River  
 73 Kamloops/Thompson  
 74 Gold Trail  
 75 Mission  
 78 Fraser-Cascade  
 79 Cowichan Valley  
 81 Fort Nelson  
 82 Coast Mountains  
 83 North Okanagan-Shuswap  
 84 Vancouver Island West  
 85 Vancouver Island North  
 87 Stikine  
 91 Nechako Lakes  
 92 Nisga'a

***“Understanding the  
 Aboriginal/Non-  
 Aboriginal Gap in  
 Student  
 Performance”***  
**BC**  
**school**  
**districts**



Dependent Variable: Aboriginal Meet-Exceed Ratio (MER)

|   | (1)                | (2)            | (3)                | (4)                |
|---|--------------------|----------------|--------------------|--------------------|
| Number of Aboriginal test scores  |                    |                | -.00349<br>(-4.40) | -.00264<br>(-3.84) |
| Square of number of Aboriginal test scores  |                    |                | 3.53E-06<br>(2.45) | 2.58E-06<br>(2.06) |
| Aboriginal families with trades<br>and above as highest education level (percent) | .00687<br>(3.45)   |                |                    |                    |
| Median Aboriginal family income (dollars)   | 7.79E-06<br>(4.06) |                |                    |                    |
| Aboriginal SES index value  |                    | .185<br>(6.26) | .125<br>(4.56)     | .0972<br>(4.04)    |
| Non-Aboriginal meet-exceed ratio (MER) <sup>d</sup>                               |                    |                | .0176<br>(1.68)    | .0348<br>(3.96)    |
| <b>School District Fixed Effects</b>  |                    |                |                    |                    |
| Abbotsford school district  |                    |                |                    | .284<br>(2.36)     |
| Burnaby school district   |                    |                |                    | -.484<br>(-2.11)   |
| North Vancouver school district   |                    |                |                    | -.729<br>(-2.62)   |
| Powell River school district  |                    |                |                    | -.507<br>(-2.23)   |
| Howe Sound school district  |                    |                |                    | -.619<br>(-2.62)   |
| Saanich school district   |                    |                |                    | -1.21<br>(-5.18)   |
| Okanagan Skaha school district  |                    |                |                    | .424<br>(2.39)     |
| Cowichan Valley school district   |                    |                |                    | -.550<br>(-3.90)   |
| Coast Mountains school district   |                    |                |                    | -.308<br>(-2.36)   |
| Vancouver Island North school district  |                    |                |                    | -.506<br>(-2.56)   |
| Adjusted R-squared  | .09                | .09            | .35                | .53                |

**“Understanding  
the Aboriginal/  
Non-Aboriginal  
Gap in Student  
Performance”**

**A slide that  
only an  
economist  
could  
love...**

**“Understanding the Aboriginal/Non-Aboriginal Gap in Student Performance”**

# The top and the bottom

**Note:** The study forecast the expected MER for Aboriginal students in each of 366 schools, spread across 43 school districts. In this table, districts were ranked by the percent of schools whose Aboriginal students performed above forecast.

Top five ...

Table 2: School Districts, Ranked by Share of Schools with Aboriginal MER above Forecast

| District Name               | 1<br>Aboriginal MER<br>(percent) | 2<br>Non-Aboriginal<br>MER<br>(percent) | 3<br>District<br>MER gap<br>(1-2) | 4<br>Number of<br>Schools Above<br>Forecast | 5<br>Number of<br>Schools Below<br>Forecast | 6<br>Percent Above<br>Forecast MER<br>[4/(4+5)] |
|-----------------------------|----------------------------------|---|-----------------------------------|---|---|---|
| Kootenay-Columbia           | 73.1                             | 76.3                                    | 3.1                               | 3   | 0   | 100.0   |
| Abbotsford <sup>a</sup>     | 72.5                             | 79.2                                    | 6.7                               | 9   | 2   | 81.8  |
| Okanagan Skaha <sup>a</sup> | 75.1                             | 80.2                                    | 5.1                               | 4   | 1   | 80.0  |
| Fraser-Cascade              | 68.6                             | 83.9                                    | 15.3                              | 4   | 1   | 80.0  |
| Comox Valley                | 68.2                             | 78.9                                    | 10.7                              | 7   | 3   | 70.0  |

... bottom five

|                                     |      |      |      |   |   |     |
|-------------------------------------|------|------|------|---|---|-----|
| Bulkley Valley                      | 53.4 | 82.2 | 28.8 | 0 | 3 | 0.0 |
| Nicola-Similkameen                  | 57.0 | 76.1 | 19.1 | 0 | 5 | 0.0 |
| Saanich <sup>b</sup>                | 35.6 | 82.9 | 47.4 | 0 | 3 | 0.0 |
| Cowichan Valley <sup>b</sup>        | 44.5 | 75.5 | 30.9 | 0 | 8 | 0.0 |
| Vancouver Island North <sup>b</sup> | 49.8 | 75.9 | 26.1 | 0 | 4 | 0.0 |

# Aboriginal Education Enhancement Agreements

+

**\$1000/Aboriginal student/year**

For example:

the **Okanagan-Skaha Agreement** contains ...

- statement of purpose
- goals, indicators, targets
- performance data
- Aboriginal Education Planning Council

## **Preamble**

The Aboriginal Education Enhancement Agreement is an agreement between the local aboriginal communities (Status On-Reserve First Nations, Other First Nations, Métis, Inuit, and other off-reserve people of aboriginal ancestry), School District 67 (Okanagan Skaha), and the Ministry of Education of the Province of British Columbia. The Agreement establishes the structures and processes that the parties and other partners commit to use to achieve ongoing improvement in the school achievement of aboriginal learners attending School District 67 (Okanagan Skaha) schools. The goal, indicators, and targets of the Agreement are living dimensions with which the parties will work together in good faith to reflect growth in the outcomes which are ambitious, meaningful, relevant, realistic and attainable for the program and the learners.

## *“Understanding the Aboriginal/Non-Aboriginal Gap in Student Performance”*

**Table 3: Correspondence of District MER Rankings and Policy Initiatives in Aboriginal Education**

|                                    |            | Date of First Enhancement Agreement <sup>c</sup> | Existence of Joint District-Community Advisory Committee <sup>d</sup> | Existence of “Frontline Educator” Committee <sup>e</sup> | Publishing of Annual Reports <sup>f</sup> |
|------------------------------------|------------|--|---|--|---|
| <b>High-Performing<sup>a</sup></b> | District 1 | 1999   | Yes (since 1994, institutionalized as a council)                      | Yes  | Yes                                       |
|                                    | District 2 | 2001   | Yes (since 1989, institutionalized as a council)                      | Yes  | Yes                                       |
|                                    | District 3 | In process                                       | Yes (since 1994)  | Yes (not yet regularized)                                | Yes                                       |
|                                    | District 4 | In process                                       | Yes   | No   | No  |
| <b>Low-Performing<sup>b</sup></b>  | District 5 | 2008   | Yes   | No   | No  |
|                                    | District 6 | In early stages                                  | Yes (separate committees for different First Nations communities)     | No   | No  |
|                                    | District 7 | 2006   | Yes   | Yes  | No  |

- Notes:
- a. Fifty percent or more of district schools included in the sample realized school-level MERs above forecast (see Table 2).
  - b. Fewer than 50 percent of district schools included in the sample realized school-level MERs above forecast.
  - c. This is the date of signing of the Aboriginal Education Enhancement Agreement among the district, local Aboriginal communities and the B.C. Ministry of Education. Note that Districts 1 and 2 have now implemented their second Enhancement Agreement, which represents a longer commitment to Aboriginal education.
  - d. The existence of a joint district-community advisory committee is a measure of collaboration between the district and local Aboriginal representatives. Although all districts included have such a committee, they have been in operation in the top three districts for more than 10 years and are more highly institutionalized in terms of decision-making responsibilities.
  - e. The existence of a “frontline educator” committee is a measure of coordination between the district and individual schools. These committees (of teachers, principals, support workers and band education councilors) meet regularly and are responsible for directing their findings up to the district-level, decision-making body and down to the school level.
  - f. The publishing of regular reports on Aboriginal education is a measure of transparency and accountability in terms of attaining specific goals.

*“Understanding the Aboriginal/Non-Aboriginal Gap in Student Performance”*

## Conclusion

We have introduced several recommendations arising from our own and others’ statistical analyses: early childhood education programs targeted to at-risk groups improve student performance, especially in early grades; school-district policies that concentrate Aboriginal students in one or a few schools will probably yield disappointing outcomes; enabling Aboriginal families to choose a “good school” with high non-Aboriginal student performance may improve overall outcomes; and, finally, there are lessons to learn from school districts displaying superior performance.

After allowing for socioeconomic characteristics and in-school dynamics, some districts appear to play critical roles in creating impressive Aboriginal education outcomes; other districts are achieving much less impressive outcomes.

In sum, relatively successful districts emphasize Aboriginal education success as a long-term priority, involve Aboriginal leaders and the broader community, use objective data on Aboriginal student performance in design of policy and follow through on policy implementation.

Our investigation strongly suggests that the school district represents an important foundation on which to base improvements. District-level strategies are not the only piece in the puzzle surrounding Aboriginal student outcomes. They are, however, an area where greater policymaking attention should be devoted.

*“Strengthening the Foundations”*

# Recommendation #1

*Early childhood education (ECE) is a valuable investment, particularly for children from marginalized communities few of whose members have a tradition of formal education. All Aboriginal children should have access to ECE, either on- or off-reserve as is the case.*

## **Question**

Is ECE a candidate for more ambitious tripartite arrangements?

**Note:** Slides 20 - 23 summarize recommendations from “Strengthening the Foundations”.

*“Strengthening the Foundations”*

## Recommendations #2, #4

*2. Provincial education ministries should expand existing provincial precedents that enable school districts to undertake discretionary Aboriginal education initiatives.*

*4. Provinces should enable local Aboriginal organizations and individuals to participate in school/district governance where numbers warrant.*

### **Observations**

- School districts are, in provincial systems, the locus for a great deal of what is good – and bad – in Aboriginal education.
- BC Aboriginal Enhancement Agreements are worthy experiments.

*“Strengthening the Foundations”*

## Recommendation #3

*To improve quality of school management, bands should form school authorities ... Responsibility for the relevant schools ... should lie with trustees of the school authorities directly elected by band members. As inducement to bands to consolidate school management under school authorities, INAC should offer a significant – at least 25 percent – increase in per student funding for schools organized into school authorities.*

### **Potential tactics**

Offer the fiscal incentive nationally to any group of bands interested, but simultaneously launch a major pilot project in one INAC region (e.g., SA, MB or AB) where major actors in native organizations, universities and provincial education ministry may agree to cooperate.

*“Strengthening the Foundations”*

# Recommendations #5,#6

*5. Provincial education ministries, band councils, and First Nations school authorities (where they exist), should engage in comprehensive performance measurement activities, and results should be publicly reported. ...*

*6. The provinces should undertake more aggressive affirmative action to encourage Aboriginal post-secondary students to become teachers; and provincial teacher training institutions should require courses in Aboriginal history/culture for all students aspiring to a career as teachers.*

## **Observations**

- Collecting and reporting core competency outcomes data is valuable, but controversial.
- More Aboriginal teachers may well lower turnover of teaching staff, which is a factor in low outcomes.