



GOING FOR GOLD

Boosting Educational Attainment in Western Canada

Chisholm Consulting

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GOING FOR GOLD

The Western Canadian Economy
in the International Arena

Canada*West*
FOUNDATION

GOING FOR GOLD

Western Canada's economic prosperity is not only good for the West, but for Canada as a whole. But the West cannot rest on its laurels. Like the athletes training for the forthcoming Winter Olympics in Vancouver, western Canada needs to be at the top of its game if it is to continue to compete successfully in the international economic arena, especially as its competitors step up their games. If we are not successful, our standard of living will fall.

The GOING FOR GOLD Project is examining how best to position western Canada in the global economy through a series of research papers, surveys and practical public policy recommendations.

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Western Economic
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Canada

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Leading the Way: The GOING FOR GOLD Project Research Paper Series

The primary goal of the Canada West Foundation's GOING FOR GOLD Project is to ensure that Canadians make the right public policy decisions for improving the ability of the country and its regions to compete in the upper echelon of the global economy. The ultimate goal, however, is to ensure that Canada experiences the long-term economic prosperity that underpins a high quality of life and an inclusive and caring society in which all citizens can participate and thrive.

The GOING FOR GOLD Project's Research Paper Series helps achieve these goals by providing thoughtful and timely information combined with practical options for improving public policy's role in fostering Canada's economic competitiveness. The diversity of topics covered by the series is intentional and highlights the many facets of public policy that will need to be working in concert if western Canada—and by extension Canada—are to succeed in the global economy in the decades ahead.

We cannot rest on our laurels and we cannot be reactive. We must take proactive steps today to ensure a prosperous tomorrow. The countries that fumble the public policy ball will fall behind in the global economy and see the opportunities available to their citizens shrink. Much of what must be done is beyond the scope of public policy; it is just one factor, but it is a critical factor. Bad economic policy will hamstring us just as good public policy will propel us forward.

It is important to note that winning in the global economy does not mean that other regions and other countries must lose. Even though only one competitor can rank first, healthy competition can bring out the best in all countries. There is much that Canadians can achieve by working with international partners. This, in turn, will improve economic outcomes both at home and abroad. There is also much that Canada can learn from the experiences of other jurisdictions and this is a key element of the research papers.

There is much to discuss and there is much to be done. Ask any Olympic athlete if their training is ever complete and they will say that they are always training, preparing, and searching for the competitive edge. The same is true of public policy aimed at improving our economic competitiveness—it will always be a work in progress.

The authors of the papers were given the freedom to explore key topics as they saw fit. As a result, the series does not provide a complete set of policy recommendations or a master plan for global economic dominance. Nor does it represent the "top 10" things that must be done to make western Canada more competitive. Rather, it provides a set of useful *examples* of what can and should be done combined with provocative recommendations across a broad range of relevant policy files.

For more information about the GOING FOR GOLD Project, please do not hesitate to contact me at roach@cwf.ca.



Robert Roach
Director of Research

Executive Summary

Labour force educational attainment in western Canada still lags that of several other Canadian provinces as well as some of our international competitors. This is a concern because education is a critical determinant of long-term labour force productivity. Higher educational attainment in the labour force can be achieved either through education and training or through greater in-migration of more highly skilled labour. The focus of this report is on improving the educational attainment of western Canadian students.

Among OECD countries, Canada ranked high in terms of overall education attainment in 2004, with 22% of its labour force having achieved a university education. In the same year, however, 30% of the US labour force had a university education, while in Norway and Denmark it was 29% and 25% respectively.

Western Canada's labour force has a lower level of educational attainment than Canada overall. BC and Alberta have seen greater improvement in this regard during the past five years than Saskatchewan or Manitoba.

We could be doing better at helping students to complete high school and enroll in post-secondary education in western Canada. While the high school graduation rate has risen in every Canadian province during the past decade, approximately 9.5% of young workers age 20-24 in the three-year period between 2002-03 and 2005-06 still had no high school diploma. The drop out rates were even higher in Manitoba, Saskatchewan and Alberta at 12.6%, 10.3% and 11.3% respectively. The problem is even more acute in rural communities. In rural Manitoba and Alberta, drop out rates were over 20% in the same period.

Results from Statistics Canada's 2000 Youth in Transition Survey (YITS) show that high school graduates from the western provinces are among those most likely to delay entry to post-secondary education or not to attend post-secondary in the same year. More recent data from

2003 shows that, in the western provinces, the post-secondary participation rates at age 19 were lower than the national average. This reinforces the observation that a greater share of western Canadian students is inclined to delay post-secondary attendance or choose not to attend at all.

So why do more students drop out in the western provinces? The explanation arises from unique obstacles related to geography, community context and cultural differences.

- Academic performance in community context: While children in western Canada perform academically as well as, or sometimes better than, those in the rest of Canada, those living in rural and Aboriginal communities have less exposure to adults with high levels of education. In this community context, children do not always achieve to their fullest potential.
- Economic choice: The abundance of high-paying jobs in Alberta or Saskatchewan tempts many high school students who are struggling academically or who come from low-income families to leave school early or to rule out post-secondary education.
- Cultural differences: Aboriginal students account for approximately 14% of the population in Saskatchewan and Manitoba. Their high rate of drop out and low post-secondary participation are largely related to cultural loss, family history of drop out, poverty, the incidence of single-parent families, and high mobility between schools and on- and off-reservation communities.
- Delivery of programs in rural communities: Schools in small towns and geographically scattered communities (which characterize the prairie provinces) cannot always provide the infrastructure required for career programs such as mechanics. Rural students who would thrive in these programs

may not have the opportunity to do so and are inclined to leave school earlier and enter the workforce.

Other important considerations that block post-secondary participation for many students in the western provinces include:

- Family expectations regarding educational attainment in rural communities: A high school graduate with no clear career plan in mind and whose family places less value on higher education is more likely to take an unskilled job and indefinitely postpone college or university attendance.
- Geography and perceived lack of local opportunities: High school graduates throughout smaller and rural communities in western Canada do not have local opportunities to attend post-secondary school or an entry point to obtaining a degree. There are also fewer professional jobs waiting in their home communities upon graduation. Geographic distances also present a physical and psychological barrier for those living in northern or remote communities.
- Financial constraints: Low income and lack of access to credit both present difficulties to many students, both urban and rural, particularly those who do not live near a college or university and need to move to another town or city.

A comparison of selected educational programs and initiatives now in place in the western provinces, Ontario, New Brunswick and Prince Edward Island, as of summer and fall 2008, shows that the principal difference lies in how these programs are delivered and the circumstances (social, geographical, economic) in which they are delivered. Many programs are also in a state of evolution.

By the same token, each province offers examples of promising practices to reduce drop outs, and to foster

post-secondary participation. One of the most notable is the minimum high school leaving age of 18 in New Brunswick (buttressed with legislation that does not allow students to work during school hours), which is now being contemplated in a few other provinces. Ontario is also planning to withhold drivers' licenses from students under 18 if they are not in school.

The Netherlands and Denmark offer up some of the newest examples of educational models to keep students in school. In the Netherlands, the government has responded to high unemployment rates among people aged 15-24 by implementing a spate of educational reforms. And as part of its national economic strategy, the Danish government has implemented many initiatives to help meet its objectives of ensuring that all young people should complete a general or vocational post-secondary education program and that over 50% of youth will complete higher education.

The lower rate of educational attainment in the western provinces cannot be ascribed to government programs (or lack thereof). Our review of these has shown that each province has a broad array of programs and initiatives in place to encourage graduation and ready students for the labour force. But the western provinces face unique challenges to delivering their programs and educational reforms as a result of geographic distance, a significant Aboriginal population, and a tight labour market that attracts students into the workforce prematurely.

From our research and interviews with provincial education ministries, it appears that there are not presently many interprovincial initiatives that deal with the issues of drop outs and encouraging post-secondary enrolment. While provincial cooperation appears to be growing, there could be greater cross-pollination of information, successes and ideas among the provinces. Our research has found that there are many successful precedents and educational reforms, both domestic and international, for the western provincial education ministries to draw from.

Abstract

This report compares the performance of students in western Canada with students in other Canadian provinces with respect to dropouts, graduation and post-secondary participation. The objective is to identify the factors that suppress graduation and the pursuit of post-secondary education in western Canada and, in turn, a lower level of labour force educational attainment.

The primary reasons for higher dropout rates in western Canada include community context, economic choice, cultural differences and the challenges of delivering programs in geographically scattered rural communities. Many students are blocked from continuing in post-secondary education because of lower family expectations, geography, a perceived lack of opportunities and financial constraints.

All the provinces reviewed offer examples of promising practices to reduce dropouts and to foster higher post-secondary participation. One of the most notable is the minimum high school leaving age of 18 in New Brunswick. The Netherlands and Denmark have both been successful at reducing dropouts due to educational reforms enshrined in their national economic strategies.

1. Introduction

Although it has been rising over the past decade, labour force educational attainment in western Canada still lags that of several other Canadian provinces and some of our international competitors. This is a concern because education is a critical determinant of long-term labour force productivity. In countries where continual improvements are made to “human capital” through education and training, the labour force becomes more productive, with corresponding income gains.¹

Higher educational attainment of a population can be achieved either through education and training or through greater in-migration of more highly skilled labour. Given the complexity and breadth of educational attainment issues, we have narrowed the focus of this paper to the “domestic” education aspect only—that is, the education outcomes for the domestic labour force.

Objectives

In this paper, we endeavour to determine why the educational attainment gap exists between the western provinces and other jurisdictions and what needs to be undertaken to bolster graduation rates and post-secondary participation. In so doing, we address four questions:

- How does Canada compare internationally in terms of educational attainment?
- Why has educational attainment in western Canada been lower than other provinces?
- What programs are presently in place to bolster post-secondary participation?
- What successful models exist outside western Canada to guide us?

Our goal is to bring new information and models to the discussion of Canadian productivity and to formulate meaningful recommendations for improvement to western Canada’s education system.

Methodology

The results of this paper are based on both a literature review and a combination of telephone/email and in-person interviews with education institutions, government agencies and statistical agencies. The scope of the assignment did not allow for a comprehensive survey, but we have achieved interesting and relevant information by conducting select interviews in those jurisdictions where educational attainment is the highest (and lowest), or where the best models have been developed.

2. How Does Western Canada’s Labour Force Compare?

Our Productivity is Lagging

International or regional competitiveness is driven to a large extent by comparative productivity gains. Real labour productivity measures the efficiency of the labour force, that is, the amount of real GDP per hour worked. The more output that can be produced by one “unit” of labour, the more productive that labour is. And the labour force is generally rendered more productive through capital investment, R&D, or improving the quality of labour through education and/or skills training. Productivity improvements made today mean sustained economic growth—and more investment—tomorrow.

Compared to its international competitors, Canada’s productivity growth has lagged many of the OECD industrialized countries since the mid 1990s. Between 1995 and 2006, the average annual growth in GDP per hour worked was 1.6% in Canada, compared to 1.9% for the OECD countries and 2.2% for the US.

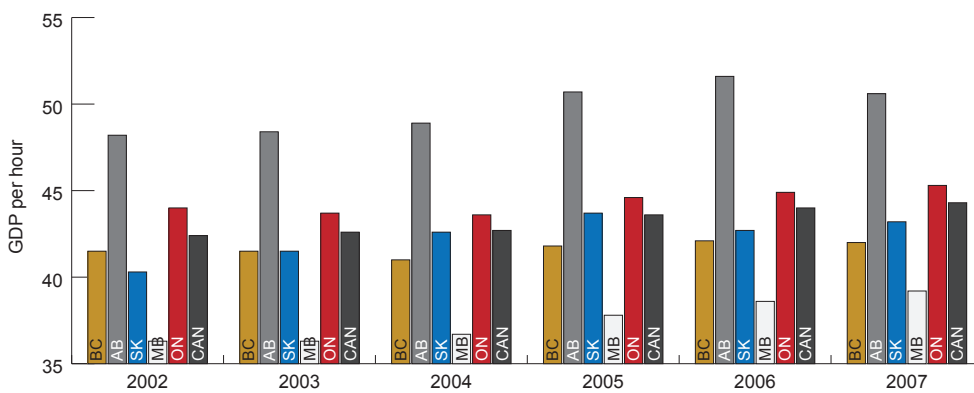
Ireland, Korea and the Slovak Republic were the leaders during this period, with annual productivity gains of 4.1%, 4.5% and 5.0% respectively.² The reasons for slow Canadian productivity growth include (but are not limited to) stalled productivity growth and capital investment after the economic slowdown of the 1990s, as well as high unemployment rates and part-time employment in the early part of this decade.

In absolute terms, the western provinces (with the exception of Alberta) have lower productivity levels than Ontario or the national average, but real productivity in Alberta, Saskatchewan and Manitoba has risen at higher rates than the national average during the past five years, while BC’s growth rate lagged (Statistics Canada 2008).

Western Canada’s Labour Force Educational Attainment is Comparatively Low

In most countries, one form of post-secondary education dominates—either university or college. Canadian students have the choice of two comparable systems of education after high school, both of which require high school graduation.

Figure 1: Real Labour Productivity, Provinces and Canada, 2002 to 2007 (GDP per hour)



| | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 |
|------------------|------|------|------|------|------|------|
| British Columbia | 41.5 | 41.5 | 41.0 | 41.8 | 42.1 | 42.0 |
| Alberta | 48.2 | 48.4 | 48.9 | 50.7 | 51.6 | 50.6 |
| Saskatchewan | 40.3 | 41.5 | 42.6 | 43.7 | 42.7 | 43.2 |
| Manitoba | 36.3 | 36.3 | 36.7 | 37.8 | 38.6 | 39.2 |
| Ontario | 44.0 | 43.7 | 43.6 | 44.6 | 44.9 | 45.3 |
| Canada | 42.4 | 42.6 | 42.7 | 43.6 | 44.0 | 44.3 |

Source: Statistics Canada

OECD statistics show that, in terms of overall educational attainment, Canada ranked number one in the OECD in 2004, with the highest proportion (45%) of population between 25 and 64 with a college or university credential. In the US, 39% of the same population category had college or university, compared to 37% in Japan, 35% in Sweden, 34% in Finland and 32% in Denmark.³ It is important to note, however, that the Canadian college statistics are inflated because the Labour Force Survey does not make a distinction between post-secondary non-tertiary and tertiary-type B education.⁴

A more accurate picture is available from comparing university

Figure 2: Level of Educational Attainment in the Population Aged 25 to 64, OECD Countries, 2004 (%)

| | Less than College | College | University | College or University |
|---------------|-------------------|---------|------------|-----------------------|
| Canada | 55 | 22 | 22 | 45 |
| OECD Average | 75 | n/a | n/a | 25 |
| United States | 61 | 9 | 30 | 39 |
| Denmark | 68 | 7 | 25 | 32 |
| Finland | 66 | 17 | 17 | 34 |
| Norway | 68 | 2 | 29 | 32 |
| Japan | 63 | 17 | 21 | 37 |
| Korea | 70 | 8 | 22 | 30 |

Source: OECD Education at a Glance 2006. Note: Numbers may not add due to rounding.

education, which has a consistent definition among OECD countries. In 2004, Canada ranked among the top OECD countries in terms of those that had achieved a university education (22%). In the same year, however, 30% of the US labour force had a university education, while in Norway and Denmark it was 29% and 25% respectively.⁵

Western Canada’s labour force has a lower level of educational attainment than Canada overall, Ontario and some eastern Canadian jurisdictions. Figure 3 illustrates that, while the share of BC workers age 25 to 54 with post-secondary education has risen in each of the past five years, Alberta’s share has been more variable, while that of the other prairie provinces has increased only incrementally.

Why do the western provinces lag the rest of country? We discuss this question in the next section, but the bottom line is that the western provinces need to catch up to the rest of Canada. Like all other industrialized countries, the Canadian economy

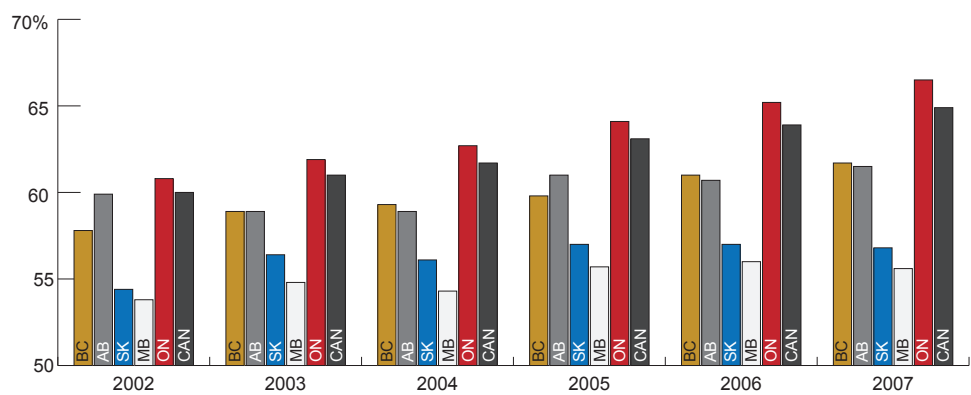
is increasingly knowledge-based, and having an appropriately skilled labour force is critical to economic growth, whether in traditional industries such as construction, or new industries such as information technology. The remainder of this report is devoted to understanding how this has evolved and what is needed to improve western Canadian educational attainment.

3. What Influences Educational Pathways in High School?

Many Factors Affect the Choice to Complete High School

A child’s success in high school and choice regarding post-secondary education is determined by myriad factors, some of which come into play long before s/he reaches high school age. Sometimes as early as Grade 3, students can be identified who are at risk of not completing high school later on (Alberta Education 2006). And by the time a child reaches high school, there are several important background factors that will

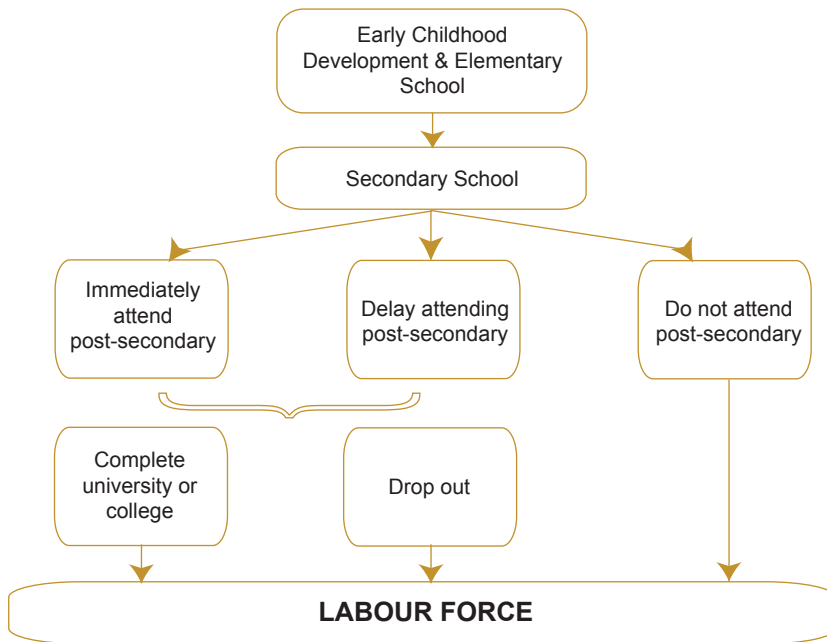
Figure 3: Percent of Labour Force Age 25-54 with a Post-Secondary Certificate, Diploma or Higher, Provinces and Canada, 2002 to 2007



| | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 |
|------------------|-------|-------|-------|-------|-------|-------|
| British Columbia | 57.8% | 58.9% | 59.3% | 59.8% | 61.0% | 61.7% |
| Alberta | 59.9 | 58.9 | 58.9 | 61.0 | 60.7 | 61.5 |
| Saskatchewan | 54.4 | 56.4 | 56.1 | 57.0 | 57.0 | 56.8 |
| Manitoba | 53.8 | 54.8 | 54.3 | 55.7 | 56.0 | 55.6 |
| Ontario | 60.8 | 61.9 | 62.7 | 64.1 | 65.2 | 66.5 |
| Canada | 60.0 | 61.0 | 61.7 | 63.1 | 63.9 | 64.9 |

Source: Statistics Canada, Labour Force Survey

Figure 4: Education Pathways to the Labour Force



influence his or her pathway to graduation and post-secondary participation:

- family factors such as parents’ education, attitude toward education, income and stability;
- student factors including academic success, school involvement, physical or mental disabilities, drug use and language skills;
- community and work influences (peer group, working longer than 20 hours per week) may both attract a student away from school; and
- school factors such as negative experiences with teachers or other students, poor program choice or flexibility.

Any of these factors can combine to shape a student’s decision about whether to complete or drop out of high school or to go on to post-secondary school. Secondary schools and ministries of education across Canada (and indeed around the world) have the challenge of engaging more students to complete high school, and to encourage them go on and attend post-secondary school. More and better strategies and tools are needed to keep children in high school and boost their post-secondary school participation. In so doing, this will ultimately affect students’ pathways into the labour market and the

general level of labour force educational attainment.

In the face of a growing and critical shortage of skilled workers, we could be doing better at helping students to at least complete high school in Canada. While the high school graduation rate has risen in every Canadian province during the past decade, approximately 9.5% of young workers age 20-24 in the three-year period 2002-03 to 2005-06 still had no high school diploma.⁶ The drop out rates were even higher in Manitoba, Saskatchewan and Alberta at 12.6%, 10.3% and 11.3% respectively. (BC’s drop out rate was below the national average at 7.4%.)

The drop out rate is even higher for small town or rural high school students, where post-secondary and employment opportunities are fewer. During the three year period 2002-03 to 2005-06, the average Canadian drop out rate for workers age 20 to 24 that lived in cities was 8.5%, compared to 14.9% for those in small towns or 16.6% in rural communities.⁷ And the results were even more dramatic for Manitoba and Alberta, with rural drop out rates of

Figure 5: High School Dropout Rate, 20- to 24-Year Olds, Average from 2002-2003 to 2005-2006⁸

| | Total (Average) | Large Cities ⁹ | Small Towns | Rural Areas |
|-------------------------|-----------------|---------------------------|-------------|-------------|
| Canada | 9.5 | 8.5 | 14.9 | 16.6 |
| Newfoundland & Labrador | 8.9 | 6.4 | 11.1 | 13.1 |
| PEI | 8.9 | 7.1 | 11.6 | 11.8 |
| Novia Scotia | 8.5 | 6.9 | 13.7 | 12.0 |
| New Brunswick | 9.4 | 7.7 | 11.7 | 12.2 |
| Quebec | 11.3 | 10.0 | 19.0 | 18.5 |
| Ontario | 8.4 | 7.8 | 13.2 | 14.9 |
| Manitoba | 12.6 | 10.5 | 16.5 | 21.0 |
| Saskatchewan | 10.3 | 8.9 | 11.4 | 16.8 |
| Alberta | 11.3 | 9.9 | 17.0 | 21.7 |
| British Columbia | 7.4 | 6.7 | 12.6 | 17.3 |

Source: Statistics Canada, Labour Force Survey

Figure 6: High School Drop Out Rates by Country, 2002¹⁰

| | Drop Out Rate (%) |
|----------------------|-------------------|
| Norway (2003) | 4.6 |
| Slovak Republic | 5.5 |
| Czech Republic | 5.9 |
| United Kingdom | 8.0 |
| Switzerland | 8.4 |
| Poland | 8.4 |
| Sweden | 8.6 |
| Austria | 9.9 |
| Finland | 10.1 |
| Canada | 10.9 |
| United States (2001) | 12.3 |
| Germany | 14.2 |
| France | 14.5 |
| Australia | 18.5 |

Source: OECD INES-Network B, Special YALLE data collection

21% and 21.7% respectively. (Quebec's rural dropout rate was 19% in the same period.)

In 2002, Canada's drop out rate was lower than that in the United States, Germany, France or Australia. Nevertheless we lag behind nine other OECD countries, as shown in Figure 6. To date, Norway enjoys the lowest OECD high school drop out rate of 4.6%.

Research has shown that high school drop out rates are also influenced by gender, family background and income levels. Statistics Canada data and several surveys consistently show that males drop out at a higher rate than females, across every province. And a Statistics Canada survey conducted in 2003 demonstrated that, across all provinces, the secondary school drop out rate was highest for students with family income in the lowest quartile.¹¹ Aboriginal families account for a disproportionate amount of low income families, and in many communities, a big share of drop outs from high school.

Graduation rates also underscore the proportion of young people who do not complete high school in our country. Statistics Canada data show that, on average, only 72.1% of Canadian

Figure 7: High School Graduation Rate, Provinces and Territories, 1999/2000 and 2005/2006

| | 1999/2000 | 2005/2006 |
|---------------------------|-----------|-----------|
| Canada | 73.0 | 72.1 |
| Newfoundland and Labrador | 82.8 | 79.4 |
| PEI | 88.1 | 86.0 |
| Nova Scotia | 79.8 | 82.3 |
| New Brunswick | 86.0 | 85.7 |
| Quebec | 72.5 | 76.4 |
| Ontario | 73.5 | 70.4 |
| Manitoba | 72.8 | 74.6 |
| Saskatchewan | 82.8 | 83.9 |
| Alberta | 63.6 | 67.9 |
| BC | 72.3 | 73.9 |

Source: Statistics Canada. 2008. *Summary Public School Indicators for the Provinces and Territories, 1999/2000 to 2005/2006*. Note: The number of graduates is as of the end of a school year, while population estimates are as of July 1 of the corresponding year. Late graduates are included, while those from private schools are not. For this reason, the methodology underestimates the "final" graduation rate and cannot be used to infer the drop out rate.

students completed secondary school in 2005/2006.¹² The Maritime provinces and Saskatchewan had graduation rates above 82% in this year. Manitoba and BC were close to the national average at 74.6% and 73.9% respectively, while Alberta was among the bottom four provinces and territories at 67.9%. The territories, not shown here, had graduation rates below 67% in 2005/2006.¹³

From the foregoing we can conclude that students are more inclined to drop out of high school in the western provinces (particularly Manitoba and Alberta) compared to other jurisdictions, and that the problem is greater in rural and small town communities, and in low-income and/or Aboriginal families.

The western provinces' poorer performance in drop outs and graduation rates has a direct affect on labour force educational attainment. Of the four western provinces, BC has the highest educational attainment, although it is still below the national average, as well as having lower drop out and higher graduation rates. Saskatchewan's labour force educational attainment has lagged far behind the national average, despite its having one of the lowest drop out rates in the West. Manitoba's labour force

has the lowest level of educational attainment level in western Canada, and its high school drop rate is the highest. Alberta has been more variable than the other provinces. Alberta’s educational attainment peaked in 2005, and has grown only incrementally since then.

High school completion explains only part of future educational attainment in the labour force. We also need to look at the transition to post-secondary education and, ultimately, to the labour force.

Transition to Post-Secondary Education

Investing in a post-secondary education generates tremendous benefits both at the individual and the aggregate social level. The most common pathway is to graduate immediately to post-secondary education, complete the program within the expected length of time and move directly into the labour force. But students also have the choice of delayed entry to post-secondary school or not attending at all and entering the workforce permanently. Like high school graduation, this decision is influenced by many personal, social and economic factors.

Results from Statistics Canada’s Youth in Transition Survey (YITS) show that respondents in Newfoundland and Labrador, Manitoba and Alberta were most likely to delay entry to post-

Figure 8: Choice of Post-Secondary Attendance by 20-Year Olds, by Province (%)

| | Immediately | Delay | Do not Attend |
|---------------------------|-------------|-------|---------------|
| Newfoundland and Labrador | 49% | 31% | 19% |
| PEI | 50 | 20 | 30 |
| Nova Scotia | 66 | 15 | 19 |
| New Brunswick | 58 | 16 | 26 |
| Quebec | 77 | 17 | 6 |
| Ontario | 62 | 21 | 17 |
| Manitoba | 51 | 25 | 23 |
| Saskatchewan | 53 | 17 | 30 |
| Alberta | 45 | 25 | 29 |
| BC | 51 | 19 | 30 |

Source: Tomkowicz, J. and T. Bushnik 2003

secondary education in 2000, while Quebec was least likely (Tomkowicz and Bushnik 2003). (The latter can be at least partly explained by the CEGEP system in Quebec that smoothes the transition from high school to post-secondary.) Figure 8 illustrates that 20-year olds in the western provinces, PEI and New Brunswick were more likely than other provinces *not* to attend post-secondary in the same year.

While province of residence was the only significant predictor of *delayed* post-secondary enrolment, several demographic, family and experiential factors were key predictors of *non-enrollment* in post-secondary. These were:

- being male;
- having a dependent child;
- being a member of a visible minority group;
- parents’ education and attitudes;
- poor academic or social experience in high school; and
- working more than 20 hours per week.

More recent data from 2003 show that, in the western provinces, the post-secondary participation rates at age 19 were lower than the national average or any of the other provinces.¹⁴ This reinforces the observation that western students are more inclined to delay attendance at post-secondary or choose not to attend at all.

Once students have finished post-secondary school, their decision to stay in the province of study or move to another has an impact on the distribution of labour force educational attainment across the country. The availability of job opportunities obviously plays a big role in attracting new workers, as well as other attributes like quality of life or location of family. Results from the National Graduate Survey carried out by Statistics Canada in 2000 showed the following (Statistics Canada and Council of Ministers of Education 2007):

- a large share of students graduating from Saskatchewan, Manitoba or Maritime post-secondary institutions left the province within two years of graduation; and

- Alberta and the Maritime provinces attracted many new workers within two years of their graduation.

Why Are the Western Provinces Lagging?

There is no simple answer to why young people quit high school, or do not continue on into post-secondary education. A child's disengagement from school generally occurs over time, and is the culmination of combined personal, family, economic, school or community aspects. Quitting high school is the final outcome of a process. This raises the question of whether some factors that trigger high school drop out may be more prevalent in the western provinces.

- **Academic performance:** High school students in the western provinces perform as well in academics, or even better than, their counterparts in other provinces. The School Achievement Indicators Program (SAIP) measures academic achievement across the country, based on samples of 13- and 16-year old students in mathematics, reading, writing and science. Periodic tests since 1993 have shown that students from the western provinces have generally performed on par with the national average, or sometimes significantly higher, in all subject areas.¹⁵ Alberta in particular has ranked consistently among the top performers in science and mathematics in all years the tests were taken.¹⁶
- It has been demonstrated nevertheless that student reading scores are lower in rural schools than urban schools across Canada.¹⁷ The foremost reason for rural-urban reading differences is not necessarily family but community setting. Rural or small communities are often characterized by parents with lower education levels and incomes and occupations that do not necessarily require university education. The general level of occupations and education of parents determines the community setting in which children learn to read. A good reader will perform well in either a rural or urban school, but more likely better in the urban school, because of the higher level of education in his or her community commensurate with an urban labour market.¹⁸ The rural-urban reading gap is a reality in provinces with many geographically distant small or rural communities (e.g., Manitoba), but more research is needed to know its extent.
- **Economic choice:** The abundance of high-paying jobs in Alberta and Saskatchewan has strong allure for high school students who are struggling academically or come from low-income families. Many new young workers can sustain a comparatively high standard of living by going to work in the oil and gas or construction sectors either before or directly after they leave high school. Also, students who work more than 15 or 20 hours per week while they are in school have a harder time staying in school. A school district supervisor in Northwest Alberta told us that part-time work is a huge distraction for many children living close to town and that it often hurts their school performance. In fact, rural children who live far from town are usually bussed home from school and more inclined to work at the home farm and go directly to post-secondary school upon high school graduation.¹⁹
- **Cultural differences:** Aboriginal students still fare poorly in Canadian schools, and the governments of the western provinces are now actively seeking ways to reverse their high rates of drop out. In Saskatchewan and Manitoba in particular, Aboriginals represent over 14% of the population (even higher in smaller communities). The reasons for their high rate of drop out and low post-secondary participation are myriad and complex but cultural loss, family history of drop out, poverty, and the incidence of single-parent families are the most commonly cited. High mobility between schools and on- and off-reservation communities adds to this, making it difficult for many Aboriginal students to achieve the stability they need to succeed academically.²⁰ Thus a significant part of the Aboriginal population in Manitoba and Saskatchewan do not complete school or proceed to post-secondary education.
- **Delivery of programs in rural communities:** While school programs in each province are designed to be delivered equitably to all rural and urban schools, the reality is that it is not always possible. Schools in larger cities and towns can provide the infrastructure required for programs such as mechanics, but this is not always the case in small town or rural schools. Thus rural students who would thrive in these programs may not have the opportunity to do so, and are inclined to leave school earlier and enter the workforce. This is an issue that affects all provinces in Canada, but is a bigger problem in those jurisdictions with many small

and geographically scattered communities, such as the Prairies.

The foregoing are reasons that at least partly explain the lag in educational attainment in the western provinces. They also factor into the decision of many who do graduate high school but either delay or avoid pursuing post-secondary education. Other important considerations that may block post-secondary participation, particularly by students from the western provinces, include:

- **The educational attainment** in rural communities is again an important consideration. In many rural communities of the western provinces and throughout Canada, there is a higher likelihood of parents having no post-secondary attainment, but still making a living in resources, manufacturing, agriculture or a small town business. A high school graduate with no clear career plan in mind and whose family places less value on higher education is more likely to take an unskilled job and indefinitely postpone college or university attendance.
- **Geography and lack of local opportunities:** High school graduates throughout smaller or rural communities in western Canada do not have local opportunities to attend post-secondary school or an entry point to obtaining a degree. There are also fewer professional jobs waiting in their home communities upon graduation. The prospect of attending a college or university in a distant city may appear to be an insurmountable obstacle, particularly when the graduate may not be informed about his or her options and how to achieve them.

Geographic distances can also be a physical and psychological barrier in northern and remote communities. Over 50% of Saskatchewan residents and more than 40% of the residents of Newfoundland and Labrador live beyond commuting distance of a university.²¹ In contrast, much smaller percentages of the populations of Ontario (9%), Nova Scotia (13%), and Prince Edward Island (14%) live more than 80 kilometres from the closest university.²² In Prince Edward Island, where college campuses spread around the province, they are effective at serving rural students.²³

- **Financial constraints:** Low income and lack of access to credit both present difficulties to many students, both urban and rural, particularly those who do not live near a college or university. In 2007, real per capita disposable incomes in BC, Saskatchewan and Manitoba were below the national average and Ontario, although it should be acknowledged that the cost of living was also lower in Saskatchewan and Manitoba.²⁴ Nevertheless, given that the average incremental cost of attending a university away from the family home was over \$5,000 in 2003, this may seem a more onerous burden for families in these provinces.²⁵ And students in BC now graduate with the highest level of student debt—an average of \$15,513 in 2006, a 57.5% increase between 2000 and 2006.²⁶

The higher incidence of delayed participation in post-secondary education in the western provinces proves that more students are taking the “non-traditional” path, that is, putting off further education until they are older. Among these is a high proportion of “first generation” students, those whose parents never enrolled in post-secondary education. Research in the US has shown that first generation students are generally older, lower-income and independent, compared to non-first generation students.²⁷ Their choice of programs and post-secondary institution is more influenced by financial and personal constraints, and the need to complete coursework more quickly. Research has also shown that first generation students have difficulty persisting in and attaining graduation. But as post-secondary participation continues to rise throughout Canada over the next generation, the number of first generation students will decline.

4. Comparing School Initiatives and Programs

Review by Province

At the high school level, each provincial school system has developed initiatives and programs to encourage graduation and to help inform students about their post-secondary and career paths and how to get there. Given the breadth and diversity of provincial education systems in our country, it is not realistic or effective to try comparing all programs offered

or their outcomes. So our approach here is to review key programs and initiatives in the western provinces and other selected provinces with the highest graduation rates or labour force educational attainment. The objective is to see if there are any Canadian models that could be adopted in the western provinces.

The following results show that the provincial education ministries, on the whole, offer similar curricula in their high schools. Students across the country have a range of choices about their program of study, including public schools, Catholic schools, Francophone schools, private schools, and charter schools. They can also access a range of unique programs — including home education, online/virtual schools, outreach programs and alternative programs. Each ministry of education also offers a website that details high school curriculum and requirements, alternative education options and programs, and information on post-secondary options and financing, as well as vocational programs that lead directly to the workplace upon graduation. And most of these websites have direct links to career, labour market, post-secondary options and funding information sources.

The difference between the provincial education ministries lies in how these programs are delivered, and the circumstances (social, geographical, economic) in which they are delivered. And many are in a state of evolution, as the education ministries adapt to new challenges, and approaches to educating and readying students for the labour force.

The following is a comparative summary of *selected* programs, policies and initiatives now in place in the western provinces, Ontario, New Brunswick and Prince Edward Island, as of summer and fall 2008.

Initiatives and Programs to Boost High School Success

British Columbia

- Students and parents are informed about graduation requirements, starting in Grade 11. The “Planning 12” course is mandatory and a graduation requirement.
- Information about post-secondary schools and labour market shortages are posted regularly at high schools and also brought to attention of specific students by counselors.
- Student programs are individualized where necessary.

Alberta

- All publicly funded school jurisdictions in Alberta have videoconferencing capabilities and Alberta is emerging as a leader in using this technology in teaching and learning.
- Schools and districts can offer an alternative school year calendar.
- A province-wide High School Completion Symposium was held in 2006; toolkits have been distributed to encourage discussion and follow-up action in communities and to create local solutions to high school drop outs.
- Outreach programs for students who cannot/will not attend regular school due to personal circumstances started in the mid-1990s.

Saskatchewan

- Supports to Learning are offered which includes Special Education and Intensive Supports, SchoolPLUS, Diversity, Caring and Respectful Schools, Provincial Alternative Special Needs Schools, Youth in Custody, Early School Entrance, Early Childhood Intervention Programming, and English as an Additional Language.
- Student tracking program is in place for K-12 with particular emphasis on the success of Aboriginal students. Educators are working with Aboriginal leadership to eliminate education gap between Aboriginal and non-Aboriginal students.
- Native Studies 10, 20 and 30 are offered in schools and counted as a Social Sciences credit.

Manitoba

- Students can earn high school credits with school- or student-initiated courses.
- Making Education Work is a five-year research pilot project funded jointly by the Province of Manitoba and the Canada Millennium Scholarship Foundation at a cost of \$3 million. This project involves 277 Aboriginal high school students in both the program and study groups in three First Nation high schools and three provincial high schools across the province. The goal is to determine what supports will assist Grade 10-12 students to meet their graduation requirements and enter post-secondary school. Features of the program include a Grade 10-12 Aboriginal MEW curriculum consisting of academic and personal supports, individual career development and guidance, cultural development, community service activities and supports, parental involvement, tutors and mentors. Program implementation for the students began in the fall of the 2006-2007 school year, with completion planned for October 2010. (<http://www.edu.gov.mb.ca/mew/community.html>)
- To reduce high school student mobility, particularly among Aboriginal students, community-based institutes are being established to offer locally-based opportunities, such as apprenticeship classes.
- Technology education program, and IB and advanced placement options available.

Ontario

- The province-wide Student Success Strategy has been implemented to create better transitions from elementary to secondary school and to boost high school graduation and post-secondary enrolment. It includes a grade 8-9 transition plan for students at risk of dropping out of high school. This includes more teachers, additional intensive professional development and improved tracking of students and their progress. (http://ogov.newswire.ca/ontario/GPOE/2006/05/30/c8542.html?lmatch=%3C=_e.html)

New Brunswick

- As of July 1, 1999, students enrolled in NB schools are required to stay in school until they graduate or turn 18. (The provincial labour law states that no child under 18 can work during school hours.)
- Three-year plan to restructure and improve the Anglophone school system's Skilled Trades and Technology Education (STTE) program was unveiled May 2008.
- New Brunswick announced its Model Schools Project in May 2008, designed to research improved teaching and leadership practices in high schools, to challenge students with real-world issues and problems that must be solved through integrated use of math, science and literacy skills. Model schools will employ a project-based learning approach to foster critical thought and problem-solving skills across the entire curriculum. (<http://www.gnb.ca/cnb/news/edu/2008e0712ed.htm>)
- NB Alternative Education Program offered for kids at risk of dropping out.

Prince Edward Island

- Opportunity for students at risk to spend semester at Holland College to experience 6 career related programs.
- Montague Alternative Education program available for grades 7-12.

Life Skills Programs in High School Curricula

BC: Grade 12 Transition Course is compulsory for Grade 12 graduation.

Alberta: Grade 12 Transition Course (CALM).

Saskatchewan: Career Guidance for Middle Level (grades 6-9) available; Sask School Telecast also includes curriculum on life transition.

Manitoba: Career development courses are optional, not compulsory, for Grade 12 graduation.

Ontario: Grade 10 career studies compulsory; optional in Grades 11 and 12.

New Brunswick: Personal Planning and Career Development part of yearly curriculum. In grades 9 and 10, it is 40 hours total; each student in grades 11 and 12 completes personal development and career planning curriculum, and creates a personal portfolio.

PEI: Transition course offered but not compulsory for high school graduation.

Preparation/Funding for Post-Secondary and Career Options

British Columbia

- The BC Ministries of Education and Advanced Education, as well as ITA BC (Industry Training Authority), are jointly funding the Accelerated Credit Enrolment in Industry Training (ACE IT) program for high school students. The program enables students to take courses for high school graduation credits, while simultaneously working toward a college or apprenticeship program. Local employers are involved in the development of ACE IT programs, and students who complete these programs typically have very good success in finding employment. (<http://www.itabc.ca/Youth-ACEIT.php>)
- High school vocational programs include:
 - Secondary school apprenticeship (can do jointly with ACE IT);
 - Career Technical Centres (CTCs) are partnerships between school districts and public post-secondary institutions to maximize student achievement in trades and technology programs; and
 - Cooperative programs.

- Information on post-secondary options and career development integrated into BC Ministry of Education website (<http://www.bced.gov.bc.ca/careers/>).

Alberta

- Planning for Post-Secondary Education – guides for grade 6, 9 and 12.
- Offers Registered Apprenticeship Program (grade 10-12), and Youth Apprenticeship Program (grade 7-12).
- Information on post-secondary education, career paths and financial resources are integrated into Alberta Learning Information Service website (<http://www.alis.gov.ab.ca/learning/pset/planning.asp>).
- Other online resources include:
 - Career planning website;
 - Alberta Occupational Profiles; and
 - Apprenticeship and Industry Training website.

Saskatchewan

- Sask School Telecast provides curriculum support and includes career and occupation information.
- Saskatchewan's Graduate Retention Program (GRP) is a refundable income tax credit to rebate up to \$20,000 of tuition fees paid by eligible graduates. The goal is to keep graduates in Saskatchewan. This initiative replaces the previous Graduate Tax Exemption beginning January 1, 2008. Eligible programs must be equivalent to at least six months of full-time study and must result in a certificate, diploma, or undergraduate degree, or provide certification to journeypersons. The graduate will receive 10% of the maximum for the year of graduation and the subsequent three years and then 20% of the maximum rebate over the next three years. (<http://www.gov.sk.ca/news?newsId=a235974d-c5db-4444-a9ad-229d159fff7f>)

- Information on student loans at Advanced Education, Employment and Labour website (<http://www.aeel.gov.sk.ca/about/>).

Manitoba

- College Expansion Initiative underway to provide new entry points for degree for rural students.
- The Government of Manitoba and the Canada Millennium Scholarship Foundation initiated Future to Discover (FTD) in 2007, a pilot project aimed at educating high school students about occupational and post-secondary choices. The project involves 1,050 Manitoba high school students, and is providing interventions to address the key factors that dissuade youth from attending post-secondary school after high school: career indecision, lack of interest in higher education and financial obstacles. Approximately 30% of project participants come from families with no history of post-secondary education. The project offers extra support to students from low-income families. The project's interventions address both students' and parents' lack of information about the opportunities for post-secondary studies, financial aid options, and the economic and social advantages that a higher education may offer. (<http://news.gov.mb.ca/news/index.html?archive=week&item=2355>)
- Senior Years Apprenticeship Option (SYAO) allows students to start apprenticeship while still in high school. Students must be 16 and enrolled as grade 11 or 12 student and can earn maximum of 8 credits while accumulating apprenticeship hours which can be used later if they pursue further apprenticeship in a trade.
- Information on post-secondary options, careers and financial assistance integrated into Manitoba Advanced Education and Literacy website (<http://www.edu.gov.mb.ca/ael/unicoll/index.html>).
- Manitoba Competitiveness, Training and Trade lists scholarship and awards in the trades (http://www.gov.mb.ca/tce/apprent/awards/scholarships_awards.html).

- Youth Leadership Scholarship: 200 scholarships of \$500 each are available to Manitoba grade 12 graduates to use at any recognized Manitoba post-secondary institution.

Ontario

- As part of its Student Success Strategy, Ontario Ministry of Education has widened the choice of career program options to include:
 - Specialist High Skills Majors enables students to concentrate on a career path that matches their skills and interests. Each major is a bundle of 8-10 courses in the student's selected field. The program is for students planning university, college or apprenticeship after high school.
 - Expanded Co-op program allows students to apply two co-op credits towards their compulsory high school graduation requirements, with no limit on earning optional co-op credits. Applies to students who will attend university, college, or apprentice in a trade. Publicly supported by Mike Holmes, TV personality and a co-op employer.
 - Dual Credit Program is for students who choose to participate in apprenticeship training and post-secondary courses, earning dual credits that count toward their high school diploma and their post-secondary diploma, degree or apprenticeship certification.
- Information on post-high school career options and financing, including how to deal with life events (from losing your wallet and having a baby to dealing with a personal loss), can be found on the government of Ontario website (http://www.gov.on.ca/ont/portal!/ut/p/cmd/cs/ce/7_0_A/s/7_0_252/_s.7_0_A/7_0_252/_l/en?docid=004441).

New Brunswick

- The Youth Apprenticeship Program (YAP) is a two-year, two-phase program that students may access upon the completion of either grade 10 or 11. Cooperating employers

provide school district Youth Apprenticeship Coordinators with workplace job descriptions that are posted in area high schools in the late spring. Students in either grade 10 or 11 interested in the Youth Apprenticeship Program have access to the job postings and make application for the intended position. Employers receive the resumes of those interested in the position being offered.

- A plan to restructure the Anglophone school system's Skilled Trades and Technology Education (STTE) program was unveiled in May 2008. STTE will collaborate with Department of Post-Secondary Education, Training and Labour to develop dual enrolment opportunities where community colleges recognize high school credits in their programs and lead to high school students receiving credit for work done in trades-related high school courses.
- New Brunswick Tuition Tax Cash Back provides a tax rebate of up to \$10,000 equal to 50% of total eligible tuition costs against provincial personal income tax payable to post-secondary students working in New Brunswick and filing a provincial income tax return. This rebate applies to all full- and part-time post-secondary students who attended a university, community college, or approved private institution. This incentive has been adopted in other provinces.
- Tuition freeze in place.

Prince Edward Island

- Youth Apprenticeship, or Accelerated Secondary Youth Apprenticeship Program (ASAP), allows high school students to get a head start on post-secondary training while earning credits for their high school diploma.
- The George Coles Bursary, announced April 2008, is available to PEI students registered in a full-time program at UPEI, Holland College or Collège Acadie Î.-P.-É. Students attending UPEI will receive \$2,000 in their first year of study. Students registered in a 2-year program at Holland College or Collège Acadie Î.-P.-É. will receive varying amounts based upon the rate of tuition. The bursary is intended to encourage Island students to further their education after high school and to support PEI's publicly funded post-secondary institutions.

- The PEI Department of Education and Holland College offer a \$1,000 award to students working toward Grade 12 who are registered in the Accelerated Secondary Apprenticeship Program (ASAP) and who will be pursuing further training at the college or through apprenticeship. Half of the award is applied to tuition at Holland College and the other half is a cash award to the student. The aim is to attract more students to the PEI trade sector, which is now experiencing a labour shortage.
- Information on post-secondary options provided on PEI Learning and Skills website (<http://www.gov.pe.ca/index.php3?number=81146&lang=E>).

Transition and Satisfaction Surveys

British Columbia

- Annual satisfaction surveys are conducted (and results made public) of students, parents and school staff on achievement, human and social development, and safety.

Alberta

- Surveys of Satisfaction with Education were carried out in 2006 and 2007 that obtained opinions from senior high school students, parents of K-12 students, parents of children with severe special needs, teachers, school board members, superintendents and the public.
- The Employer Satisfaction Survey has been conducted every other year since 2001 to assess employers' satisfaction with recent graduates and overall responsiveness of Alberta's education system to their human resource needs.
- High school to post-secondary transition rates are calculated by tracking grade 10 students for four and six years, then determining the percentages who have enrolled in an Alberta post-secondary institution or apprenticeship program within the tracking periods.

Saskatchewan

- Survey of post-secondary graduates conducted in 2007.

Manitoba

- Part of national graduates survey carried out by Statistics Canada in 2000.

Ontario

- Employer Satisfaction Survey undertaken in 2005.
- Double-cohort study of grade 12 grads in 2003, 2004 and 2005.
- Post-secondary graduation surveys/employment profile undertaken in 2005.
- Survey of Early High School Leavers, 2005.

New Brunswick

- Survey of 2002 NB high school grads.
- 2003-2004 survey of students in grades 6 to 12 to find out their knowledge about post-secondary and forms of funding, and how they envision paying.
- High school graduate follow up survey conducted 2005.
- Grade 12 exit survey carried out in 2006.

Prince Edward Island

- Annual survey conducted of PEI high school graduates' expectations.

5. Summary of Findings

As discussed earlier in this report, each provincial education ministry must deliver their high school programs within the context of a unique set of geographic, social and cultural circumstances. This makes it impossible to isolate which programs are most effective at encouraging graduation and post-secondary attendance. It also makes it pointless to “drill down” into comparisons of specific programs. Nevertheless, we can make a few summary comments about the provinces based on our limited review.

- British Columbia enjoys the highest labour force educational attainment of the western provinces, due in part to the fact that a major proportion of its population—and hence its labour market—is urban. The Ministry of Education has made improved literacy and education attainment a major goal throughout the province. It has made the grade 12 transition course compulsory for graduation and conducts an annual survey of high school graduates. The graduation rate has risen in the past five years.
- Alberta’s high school drop out and comparatively low graduation rates persist as its buoyant economy tempts many high school students to enter the workforce or delay attending post-secondary school. In the past five years, the Alberta government has worked with communities to understand this chronic problem and to help create local solutions for boosting graduation. The Alberta government also makes a grade 12 transition course compulsory, and has been one of the most proactive provinces in surveying graduates and employers in an effort to meet labour market needs.
- Saskatchewan has among the lowest educational attainment in Canada and a high rate of drop out. Many more students in Saskatchewan are inclined to delay post-secondary attendance, due in part to lower household incomes, remoteness from education institutions, and cultural differences. The Saskatchewan government is working to improve educational access for students in remote communities and Aboriginals and it tracks student progress. It also offers a refundable income tax credit to Saskatchewan post-secondary graduates, one of only a few provinces to do so. The purpose of the credit is to retain Saskatchewan high school graduates, with the long-term aim of addressing the province’s labour market shortages.
- Manitoba faces the same geographic and cultural challenges as Saskatchewan and has one of the lowest graduation rates and post-secondary enrolment rates in the country. Since 2000, the Manitoba government has expanded the capacity of community colleges and endeavoured to create more points of entry for rural students. Manitoba has also made closing the educational gap for Aboriginal students a priority. This is what is driving

two important new pilot projects (described earlier), which could serve as a model to the other provinces.

- Ontario's exemplary Student Success Strategy for grades 7-12 has focused on providing more high quality course options inside and outside the classroom and more one-on-one supports for students. Its unique approach to widening the curriculum for academic and vocational students, helping failed students "recover" credits, and offering differentiated instruction and additional financial support for "first generation students" (as well as many other initiatives) have been successful in raising the graduation rate. The Student Success Strategy presents a good model to other provinces. Ontario also tracks its success by surveying high school and post-secondary graduates, as well as employers.
- New Brunswick has a comparatively high graduation rate and a significant share of its grads go on immediately to post-secondary education. It is the only province in Canada to have a compulsory leaving age of 18, and it has been a leader in offering financial incentives such as a tuition freeze, a tuition tax cash-back credit to post-secondary grads, and bursaries for students planning to study a trade within the provinces.
- Prince Edward Island has one of the highest graduation rates of all jurisdictions in Canada, but a comparatively large percentage of graduates delay attending post-secondary or do not attend at all. This most likely relates to lower household incomes, since neither geography nor cultural differences are major obstacles in PEI. Those who do attend post-secondary are well-served by education institutes in PEI, although many leave the province to attend university. The bursary recently announced for post-secondary students is an incentive to attract more students into a PEI university and college.

Some Best and Promising Practices in Canada

Each province, including those in western Canada, has developed innovative approaches to boosting high school graduation and post-secondary enrolment. In Ontario, the Student Success Strategy represents an ambitious and comprehensive approach

to improving the transition into secondary school and widening the number of program choices as a means to ensure graduation. Manitoba, too, has implemented a province-wide strategy to create more college opportunities, particularly in rural areas. And the Alberta Mentoring Partnership program announced in June 2008 has committed \$3.7 million over the three years to provide mentorship to kids at risk, with the goals of lowering school absenteeism, cutting violent behaviour and drug and alcohol use.

New Brunswick is the only province in Canada to legislate a minimum leaving of age 18. Its effectiveness is based on provincial labour legislation that prohibits school-age students from working full-time during school hours, until they have reached age 18.

Ontario is now planning legislation to deny drivers' licenses to high school drop outs under 18. When this legislation comes into effect, students applying for drivers' licenses would be required to show proof to the Ministry of Transportation that they are still enrolled in school. This penalty is expected to be implemented when Ontario schools have established a wider choice of courses and add more co-op and apprenticeship programs to keep at-risk students in school.

In addition to province-wide initiatives, many tangible successes at lowering the number of high school drop outs and encouraging graduation and post-secondary enrolment are also being realized at the local level through community or school district based initiatives. There are many examples including:

- The **Bridge Network** in the Grand Prairie School District is an alternative school that supports students who cannot attend a traditional school. This includes teens in grade 10 or higher and under age 20 who are employed, suffer from chronic illness, pregnant, parenting, or going through a crisis. It offers the flexibility and resources to meet students' day-to-day needs, with the goal of getting them to complete high school.
- The **Pathways to Education** program, established in Regent Park, Ontario in 2001, offers integrated academic, social, financial and counseling support to children at risk of dropping out of high school. Since its inception, the Pathways program has reduced drop out rates from 56% to

10% in Toronto's Regent Park, and significantly decreased attendance problems.²⁸ This successful program has since expanded to five additional communities in Ontario and Quebec.

- The **At Risk Mentorship Program** for high school students is offered by Lambton Kent District School Board in Ontario. Grade 12 students are matched as mentors to grade 10 students who need to recover credits they missed in their grade 9 program. The grade 12 students tutor their grade 10 students in literacy, numeracy and organizational skills; they also gain a practical understanding of the theory they have learned and engage in seminars to discuss theory.

Some provinces have made sharing information about practical successes a priority in teacher professional development and school district planning. For example:

- Alberta Education profiles successful education initiatives on a quarterly basis in its Promising Practices newsletter (<http://education.alberta.ca/media/768325/kkis2-final.pdf>);
- Ontario annually profiles winners and projects of Premier's Awards for Teaching Excellence (<http://www.edu.gov.on.ca/teachingawards/bios2008.html>); and
- the Council of Ministers of Education compiled *Best Practices in Increasing Aboriginal Post-Secondary Enrolment Rates* in 2002 <http://www.cmec.ca/postsec/malatest.en.pdf>.

Some International Models

The Netherlands

Improving secondary education as part of national labour market reforms²⁹

The Dutch high school drop out rate exceeds that of most neighbouring European countries and it has stagnated at the same level for the past decade. Because they quit school too early, many jobless youths in the Netherlands are at risk of joining the ranks of the long-term unemployed, with immigrant youths disproportionately affected. More than one in five

unemployed people aged 15-24 had been looking for work for more than a year in 2006. Existing reforms in place to combat absenteeism and drop outs include the following:

- the blitz on dropouts policy gives vocational schools more responsibility to track their students' career path at the graduation age of 16;
- greater spending on upper secondary vocational schools;
- the establishment of an Early School Leavers Regional Report and Coordination Centre in municipalities localizes responsibility and follow up; and
- under the Netherlands Qualification Law, teens under 18 years of age are required to be full-time students if they have not successfully finished a basic education.

The Netherlands government has made it a priority to halve the numbers of early school leavers over the next five years through greater investment in vocational training, and through the cooperation of government, schools, parents, businesses (e.g., through work placement), social agencies and municipal governments. Extra resources will be directed to low-income neighbourhoods, including the establishment of Youth and Family Centres, intended to provide parental support and care of at-risk youth. By 2009, it also plans to introduce mandatory study/work to force high school drop outs to opt for one of these, or both. Those who decline to do either may be subject to a sanction of government benefits.

The OECD recommends even further measures to encourage graduation and post-secondary enrolment:

- More participation in early childhood education, and ongoing intervention to stave off school failure.
- Implement rigorous evaluations of youth training and employment programs at the municipal level to improve understanding of what works in local projects before they are implemented in other towns and cities.
- Provide "second-chance" opportunities for secondary school drop-outs, and possibly study grants to subsequently attend vocational school and acquire a qualification.

- Provide “one-stop shops” at the local or municipal level to help disengaged youth work on more than one problem at a time – education, labour market opportunities, housing, health care, etc.
- Develop more radical measures to help the hardest-to-place young people. This could include residential courses with a focus on remedial education and work experience with adult mentoring.

Denmark

Boosting graduation and post-secondary enrolment as part of a national economic development strategy

In 2006, the government of Denmark formulated a national globalization strategy to ready its economy for the future. One of the platforms of this plan is to make Denmark’s primary and lower secondary school system a top world performer. Two key mandates are that all young people should complete a general or vocational upper secondary education program (comparable to technical or community college), and that over 50% of youth will complete higher education (comparable to a university bachelor’s degree). Some key initiatives to ensure improved graduation rates from lower secondary school (high school) include the following.

- Starting at approximately age 12, provide special attention and support to students who appear that they may not start or finish an upper secondary education program. Better transition to upper secondary school can be achieved by introducing students to upper secondary programs sooner.
- Establish mentoring schemes for students who lack sufficient adult contact; assign a mentor from the Youth Guidance Centre.
- Upgrade the caliber of educational and vocational guidance counselors by creating a bachelor program leading to professional accreditation in this field.

Two initiatives to reduce post-secondary drop out are the following:

- Make curriculum more flexible and workplace-oriented to allow students to be exposed to the professional workplace in their field of study. This could partly reduce the number of drop outs.
- Implement a reward system for municipalities (which are responsible for ensuring that youths complete school) that raise the number of 18 year olds who have taken or completed a general or vocational upper secondary education.

Norway

Reducing high school drop out by reforming vocational education programs

In 2003, Norway had the lowest high school drop out rate of all OECD countries at 4.6%. This is the outcome of education reforms that took place in Norway, Finland and Sweden between the mid-1980s and the mid-1990s. The main thrust was on reforming vocation programs in order to keep students in school. All three countries adopted the following changes to vocational education:³⁰

- the programs were revised to give a broader basis of knowledge at the beginning, with specialized training offered later in a broad range of vocations; and
- vocational and general education were more closely integrated with the aim of ensuring that students who choose a vocational stream could pursue post-secondary studies later on.

In addition, the Norwegian education system implemented the following:³¹

- A standard path was developed for high school students to follow in order to become qualified workers in most trades: the “2+ apprenticeship model,” which comprises two years of school and then two years of apprenticeship (after grade 9).
- Employers were motivated to take on and train high school apprentices. Incentives included reducing apprentice wages from 80% to 50% of qualified workers’ wages and

offering employers the approximate equivalent of the cost of one year of schooling, plus a completion bonus if the apprentice passes the final trade examination.

- New apprenticeship classifications were designated in white collar and service occupations.
- Follow-up services for high school drop outs were implemented.

Within the first year of education reforms, the percentage of students who followed a normal progression (i.e., moving from one grade to the next without dropping out or being held back) increased by 10%, while that of vocational students following a normal progression increased from 30% to 58%. In the same year, the number of apprenticeship contracts rose by 22% with a significant gain in the proportion of these going to youth under 20.

The follow-up services proved to be highly effective as well. Two years after the reforms were initiated, 89% of drop outs were receiving assistance from follow-up services. And within three years, 97% of those contacted by the follow-up services were either in school, employed, or participating in a labour market scheme.

6. Conclusions and Recommendations

Canada is a world leader in terms of post-secondary attainment, but the western provinces have some catching up to do if they are to compete with other countries in traditional and new industries. Saskatchewan and Manitoba in particular have a big gap to close in this regard.

Students in the western provinces, particularly Manitoba and Alberta, are more inclined to drop out of high school, with the greatest attrition occurring in small towns or rural communities. Geographic isolation, financial constraints, a greater proportion of Aboriginal families and/or no obvious post-secondary education or career entry points can all contribute to the decision not to finish high school, and/or not to go on to post-secondary education.

The lower rate of educational attainment in the western provinces cannot be ascribed to government programs (or lack thereof). Our review of these showed that each province has a broad array of programs and initiatives in place and evolving to encourage graduation and post-secondary enrolment. In some areas, the western provinces are leading innovators in developing strategies to boost graduation, particularly in the case of Aboriginal students. But the western provinces face unique challenges to delivering their programs and educational reforms as a result of geographic distance, a significant Aboriginal population, and a tight labour market that attracts students into the workforce prematurely.

From our research and interviews with provincial education ministries, it appears that there are few interprovincial initiatives dealing with the issues of drop out and encouraging post-secondary enrolment. While provincial cooperation appears to be growing,³² there could be greater cross-pollination of information, successes and ideas between the provinces. Our research has found that there are many successful precedents and educational reforms, both domestic and international, for the western provincial education ministries to draw from.

Recommendations at the School/Community Level

- **Schools and communities need to work together to combat high school drop out.** The community is where the outcome of leaving school early is generally experienced in the form of chronic unemployment, low income, and many social costs. So efforts to boost graduation in western Canadian provinces (and throughout Canada) should involve change at both the school and community level. One successful example of this was the implementation of tracking and follow-up services for high school drop outs at the community level in the Netherlands.
- **Bring families into the picture.** Family attitude toward education is a major determinant of how children fare in school. Where families are disengaged, or place less value on education, schools must make them part of the equation in keeping their children motivated and learning.
- **Mentoring and one-on-one guidance and tutoring is a powerful way to keep kids at risk engaged in school.** In both European and Canadian schools where graduation

rates have improved, this has been an integral part of the program. Students who are mentored feel connected and motivated to attend school and know that someone cares about them.

- **Early childhood education and literacy development boost brain development and reduce future high school drop outs.**

Recommendations at the Provincial Level

- **More research is required to better understand how community context affects the rural-urban reading gap, and what can be done to offset this.**
- **The western provinces need to continue refining their education systems to address the obstacles of rural isolation and perceived lack of opportunities.** Rural students need more individualized guidance about what opportunities will arise from post-secondary education, how to get there and how to complete it. This is particularly true for “first generation” students.
- **In those provinces where it has not already been done, high schools should consider expanding the number of career option programs.** The Ontario Student Success Strategy is a good example of this. The appeal of programs that combine high school credit with college or apprenticeship programs (e.g., ACE IT in British Columbia) is that it gives students a preview of what the occupation or industry would be like, and encourages them to enter directly into post-secondary without spending years trying to decide what to take. In short, it accelerates post-secondary transition. It can also enable the provinces to work toward reducing some labour market shortages.
- **Provide more local points of entry to post-secondary for rural students.** Manitoba is doing this by increasing the number of its colleges, and the ways in which distance learning is delivered such as independent study, net based study, group based study, telecourses, video-conferencing, and web course tools.
- **Consider subsidies or a system of loan forgiveness for students of rural or remote communities who want to attend post-secondary school within the province.**

General Policy Recommendations

- **We recommend that the western provinces work together and set a higher graduation target as part of an overarching economic development or labour market strategy.** The Netherlands has set this precedent by proposing to reduce the number of early school leavers by half during the next five years.
- **Continue building inter-jurisdictional collaboration as a way to create more solutions, dovetail programs and disseminate information and winning practices.**
- **For those provinces that adopt a minimum leaving age of 18, educational policy and labour legislation need to be dovetailed to achieve full effectiveness.** In New Brunswick, the minimum leaving age restriction is “given teeth” by the provincial labour act which has been modified to preclude people under age 18 from working during school hours. □

Endnotes

- 1 Productivity is also enhanced by capital investment or improving capital intensity.
- 2 OECD. *Compendium of Productivity Indicators 2008*.
- 3 Ibid.
- 4 Ibid.
- 5 OECD. *Education at a Glance, 2006* (Table A1.3a), as cited in Council of Ministers of Education, Canada. Statistics Canada. *Education Indicators in Canada. Report of the Pan-Canadian Education Indicators Program 2007*. Table D.6.1.
- 6 Canadian Council on Learning website. Statistics Canada and Labour Force Survey.
- 7 Ibid.
- 8 Table taken from Canadian Council on Learning website. <http://www.ccl-cca.ca/CCL/Reports/CLI/2007Resources.htm>.
- 9 Census Metropolitan Areas and Census Agglomerations.
- 10 Table taken from Canadian Council on Learning website. <http://www.ccl-cca.ca/CCL/Reports/CLI/2007Resources.htm>.
- 11 Statistics Canada, 2003 Youth in Transition Survey (YITS), Cohort A. YITS is a Canadian longitudinal survey sponsored by HRSDC to assess major transitions in the lives of young people pertaining to education and work. Beginning in 2000, the same group of people were surveyed every two years. It involved two different age groups – 18 to 20 years old, and 15 years old. The results can be found on the Statistics Canada website.
- 12 Statistics Canada. *Summary Public School Indicators for the Provinces and Territories, 1999/2000 to 2005/2006*. Catalogue No. 81-595-M – No. 067. Table A.8.
- 13 Ibid.
- 14 Statistics Canada. *2003 Youth in Transition Survey. Cohort A*.
- 15 Council of Ministers of Education, Canada. Statistics Canada. *Education Indicators in Canada. Report of the Pan-Canadian Education Indicators Program 2007*. Table C4.
- 16 Ibid.
- 17 Cartwright, F. and M. Allen. 2002. Statistics Canada. *Understanding the Rural-Urban Reading Gap*.
- 18 Ibid.
- 19 Conversation with representative of Grand Prairie School District, June 2008.
- 20 Conversation with representative of MB4Y, Manitoba Education, Citizenship and Youth, August 2008.
- 21 Frenette, M. 2002. *Too Far to go on? Distance to School and University Participation*. Statistics Canada, Business and Labour Market Analysis.
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- 24 Alberta's average per capita income was well above all other provinces.
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- 27 Nunez, A. and Cuccaro-Alamin, MPR Associates, Inc. and National Centre for Education Statistics. 1998. *First-Generation Students: Undergraduates Whose Parents Never Enrolled in Postsecondary Education*. Statistical Analysis Report. US Department of Education. Office of Educational Research and Improvement.
- 28 News release, Bell Canada website, October 12, 2007.
- 29 OECD. 2008. *Jobs for Youth: Netherlands*. Conference proceedings – English summary.
- 30 Canadian Council on Learning website. *Lessons in Learning. Good news: Canada's high school dropout rates are falling*. December 2005. <http://www.ccl-cca.ca/CCL/Reports/LessonsInLearning/LiL-16Dec2005.htm>.
- 31 Ibid.
- 32 Conversation with representative of the Manitoba Ministry of Education, Citizenship and Youth, Sept. 2008.

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