Literature Review on Factors Affecting the Transition of Aboriginal Youth from School to Work

cmec

Council of Ministers of Education, Canada

Conseil des ministres de l'Éducation (Canada)

Founded in 1967, CMEC is the collective voice of Canada's ministers of education.
It provides leadership in education at the pan-Canadian and international levels
and contributes to the fulfillment of the constitutional jurisdiction for education
conferred on the provinces and territories.

•

Literature Review on Factors Affecting the Transition of Aboriginal Youth from School to Work

Also available in French under the title:
Analyse documentaire des facteurs affectant la transition des études au marché du travail pour les jeunes autochtones

Submitted by:
David Bruce and Amanda Marlin
Rural and Small Towns Programme
Mount Allison University

Updated by
Helen Raham

•

This report was written under contract to the Council of Ministers of Education, Canada (CMEC).
The opinions expressed herein are those of the authors and not necessarily those of CMEC.

•

Table of Contents

Executive Summary

Introduction

While Aboriginal peoples represent Canada's fastest-growing population, their education and employment outcomes lag significantly behind the rest of the population. This literature review examines the challenges faced by Aboriginal youth in completing their education and the factors that impede or foster their successful transition from school to work.

Research Objectives and Methods

The purpose of this review is to identify existing evidence in the literature relevant to the success of Aboriginal youth in completing their education and transitioning to the labour market. The following questions guided our research:

1. What are the educational and employment outcomes for Aboriginal youth in Canada in comparison with non-Aboriginal young people?

2. What are the career aspirations of Aboriginal youth, and how do these compare with those of non-Aboriginal youth?

3. What barriers do Aboriginal young people face in completing their education and transitioning to the labour market?

4. What is known about their education-to-employment pathways and the supports that can enhance their success?

5. How successful are Aboriginal youth in attaching to the labour market, and what are their employment experiences?

6. What can be learned from the international literature on these themes?

7. What are the implications of these findings for Canadian policy and research?

This review considers the available secondary evidence related to these issues. It does not provide analysis of primary data or review programs and policies, but it does review literature that discusses these items. Relevant literature was drawn from peer-reviewed journal articles, key government departments and agencies (reports, documents, and policy and program reviews), Canadian policy research and related organizations, Aboriginal-related postsecondary research, and other organizations. Additional literature was found by cross-referencing collected material, and by accessing comparative international literature on this topic. Once the literature was assembled, a meta-analysis of the findings and recommendations was conducted against a variety themes and sub-themes.

EDUCATION AND EMPLOYMENT SUCCESS

There is strength in the Canadian literature on education and employment outcomes for Aboriginal people. Thirty-three percent of Aboriginal people aged 25–54 do not have a high school diploma. Fewer Aboriginal people pursue postsecondary education; therefore, there are proportionally fewer Aboriginal people with postsecondary qualifications. Among those who do pursue postsecondary education, a similar number of Aboriginal and non-Aboriginal people graduate from these programs. However, the attainment of a minimum of a bachelor's degree or higher among those who complete postsecondary education is lower for Aboriginal people than for the larger population. The attainment of an apprenticeship or trades certificate is about the same or slightly higher among Aboriginal people who complete postsecondary education as among non-Aboriginal people. There is very little literature evaluating whether program level and field of study may have an influence on Aboriginal students' postsecondary completion rates.

Employment rates are lower and unemployment rates are higher for Aboriginal people than for non-Aboriginal people. Aboriginal women face different barriers than Aboriginal men in terms of completing their education and participating in the labour market. It is well documented in the literature that, despite additional barriers to access, Aboriginal women are consistently more successful at postsecondary completion than Aboriginal men. More Aboriginal women than Aboriginal men who pursue postsecondary education find employment.

Age and geographic location are variables related to education and employment outcomes for Aboriginal people that are cited frequently in the literature. Aboriginal people living in eastern Canada have better education and employment outcomes than those living in western Canada. The education gap between Aboriginal people and the total population, measured as a percentage of the population 15 years of age and over who did not complete high school, is highest in Quebec. A higher percentage of Aboriginal people living in large urban centres have a university degree as their highest level of educational attainment than do Aboriginal people living in small communities. Also, their labour force participation rates are higher and their unemployment rates are lower than those of Aboriginal people living in small communities. Among on-reserve Aboriginal students, successful completion of programs for those enrolled in college are significantly higher (63 per cent) than those enrolled in university (38 per cent).

CAREER ASPIRATIONS AND REALITIES

There is little systematic literature on the career aspirations of Aboriginal people and their demonstrated ability to achieve those aspirations. Fewer Aboriginal youth aspire to pursue postsecondary education than their non-Aboriginal peers, but the educational goals of both groups who wish to pursue some type of postsecondary education are quite similar.

The findings from one survey of Aboriginal youth (aged 12–18) demonstrated a wide interest in professional careers and a low interest in trades. The most popular career choice among the respondents was business owner, followed by doctor, lawyer, teacher, and engineer. Younger

respondents chose high-profile, prestigious occupations. Young women gravitated toward occupations such as doctor, lawyer, and artisan. Young men tended to identify occupations such as athlete, officer, and engineer.

Other research notes the desire of Aboriginal youth to adopt careers that will enable them to serve their home communities or to express and strengthen their culture. These career ambitions tended toward public service (health, education, policing, etc.); traditional occupations such as trapping, hunting, herbal medicines, and various forms of Aboriginal art.

There is little correspondence between the career aspirations of some Aboriginal youth and the education level they expect to achieve, which, typically, is much lower than the education required to qualify for those careers. Several of the desired careers appear to be either idealistic or unattainable for many Aboriginal youth without interventions to assist them to complete the education and training necessary to qualify for those occupations. Thus, the roles of skilled academic and career counsellors are vital for Aboriginal youth, as is ready access to information about a broad range of careers, career pathways, and role models.

Transition Pathways

When Aboriginal students enrol in further education to develop a career, they begin on the path of transitioning to the workforce. There are many routes to full-time employment, and transition times vary according to factors such as length of training program, full- or part-time status in studies, apprenticeship arrangements, dual credit programs, as well as the job search process. Employed Aboriginal youth are more likely than employed non-Aboriginal youth to have entered the labour market as a high school dropout, a "second chancer," or as a holder of only a high school diploma. Those who do enrol in postsecondary programs are more likely than non-Aboriginal students to exit prematurely or to take longer to complete. Risk factors strongly correlated with low persistence in postsecondary education have been identified as poor academic performance, disinterest, financial strain, Aboriginal ancestry, male gender, age, and dependants. Struggling secondary students, high school dropouts, unemployed adults, mature students, and those from remote and isolated communities are most vulnerable in terms of making a successful transition to the workforce. These groups in particular will benefit from holistic intervention programs that provide multiple services and supports. The number of innovative programs to support successful transitions for Aboriginal students at both secondary and postsecondary levels is rapidly increasing.

Success and Satisfaction in the Labour Market

Aboriginal people aged 25–64 are 50 per cent less likely to be employed full-time than non-Aboriginal people. Aboriginal people in general are under-represented in high-skilled jobs in the private sector and have a higher proportion than non-Aboriginal people in primary industries, construction, accommodation and food services, and the public services. The incomes of Aboriginal people increase as their levels of educational attainment increase. Aboriginal females with a university degree earn more than non-Aboriginal females with the same education. The wage gap (36 per cent) between Aboriginal and non-Aboriginal people in the workforce can be correlated with education, where lower

levels of educational attainment mean lower wages. Other factors affecting the wage gap include the skill level, with higher skill levels of an occupation leading to larger wage gaps.

There is less evidence in the literature to explain why Aboriginal postsecondary graduates successfully attach themselves to the workforce. We do know that work experience, apprenticeship, and internship opportunities can lead to full-time employment. We also know that many Aboriginal youth prefer to find employment in their home communities, and that a strong partnership presence of the Aboriginal community in training and employment initiatives is beneficial. There is little literature concerning racism and discrimination experienced by Aboriginal people in their places of work, although wage disparities are evident in the statistics. The lack of role models or mentors to support Aboriginal youth in many workplace situations is a source of dissatisfaction.

EMPLOYER PRACTICES AND PERCEPTIONS

The mining, oil and gas, and construction and trades sectors appear to be the most active in recruiting Aboriginal people into the labour force. Recruitment initiatives commonly include such strategies as offering internships, work experience, summer employment, apprenticeship, and co-op opportunities, and networking with Aboriginal organizations, school districts, and training institutions to identify potential candidates. While some companies have established Aboriginal inclusive employment policies and practices, the vast majority of employers have not established such guidelines. Employer surveys on hiring Aboriginal workers have uncovered concerns related to basic skill levels, training completion rates, and the potential for cultural misunderstandings that may impact working relationships. Some studies have ascertained that employer perceptions of Aboriginal workers often stem from prejudices and assumptions that reflect historical stereotypes. There are three areas for improvement in the way employers attract and retain Aboriginal workers: employers' understanding of Aboriginal culture, their networking practices, and the career development opportunities they offer Aboriginal workers.

BARRIERS TO SUCCESSFUL TRANSITIONS

There is a large body of literature concerning the systemic challenges experienced by Aboriginal people in their work and learning. Educational and socioeconomic disadvantage, geography, culture, family, and history have a powerful influence on Aboriginal youth and their prospects for success.

COMPARATIVE THEMES IN THE INTERNATIONAL LITERATURE

A brief look at key trends in the development of transitions programming for Indigenous young people in Canada, Australia, New Zealand, and the United States provides an international perspective on practices, programs, and policy directions. The Canadian literature identifies common elements of successful programs and identifies the lack of a cohesive transition system in Canada as a serious issue. The importance of community involvement in the design and delivery of programs is a common theme, as is the requirement for more holistic programming in challenging contexts such as Canada's north. The Australian literature emphasizes the necessity for cultural fit in programming for youth, and Indigenous community ownership and involvement in training and employment initiatives. The

provision of career development services and an explicit curriculum to equip Indigenous youth with career management skills has recently emerged as a dominant theme in the Australian discourse. Important strands of the American literature address various federal initiatives, community partnerships, university preparation programs, and evaluations of various intervention models for Native American and other disadvantaged youth. The New Zealand literature highlights a number of interrelated themes on improving transition rates for Māori learners: student engagement, cultural fit, pedagogy, alternative pathways, and career education.

POLICY IMPLICATIONS

The evidence gathered in this literature review flags important policy considerations for Canadian policy makers. Improving supports for Aboriginal youth as they transition from school to work, and creating viable alternative pathways for those who are not succeeding, will require collective efforts to address the identified need for:

- systematic provision of quality career development programs from Grade 7 to PSE
- mechanisms to improve orientation and preparation for postsecondary studies
- establishing and maintaining robust mentoring and role model programs
- increased financial and other related supports for PSE students
- establishing culturally relevant employment opportunities in Aboriginal communities
- an expanded private sector role in employment and training opportunities
- more comprehensive data collection to monitor program outcomes

SUGGESTIONS FOR FUTURE RESEARCH

This review has identified a number of gaps in the current literature that, if filled, would inform and enhance our understanding of the transitions of Aboriginal youth from education to the workforce. Further research opportunities include the following:

1. Conduct a qualitative analysis of transition issues by interviewing employers, policy and program officers, and Aboriginal people themselves.
2. Develop an integrated, long-term study of annual surveys of graduates to monitor changes in the outcomes for graduates and the differences in outcomes between Aboriginal and non-Aboriginal people.
3. Conduct a comprehensive review of the programs and services designed to support Aboriginal people in their transition from education to the labour force — and report on the best practices.
4. Conduct research examining career aspirations of Aboriginal youth, with a view to developing appropriate information and services for them.
5. Conduct research on appropriate human resource strategies targeted at attracting and retaining Aboriginal employees that addresses issues such as labour market attachment and employers' information needs.

1. Introduction

Aboriginal peoples represent Canada's fastest-growing population, yet their education and employment outcomes lag significantly behind the rest of the Canadian population.

It has been forecast that over 400,000 Aboriginal youth will enter the labour market by 2016 (Brigham & Taylor, 2006). This forecast is supported by the fact that almost 20 per cent of Aboriginal people are in the 15–24 age range (Statistics Canada, 2009a). Evidence from a variety of studies summarized in this literature review indicates that Aboriginal youth face more difficulties and barriers in making a successful transition to the labour market than non-Aboriginal youth. One of the major themes throughout the literature is that Aboriginal people are at risk of social exclusion (Fleury, 2002) and that they frequently experience difficulties in their school-to-work transitions (Thiessen, 2001). Despite many gains in education and employment outcomes (Hull, 2005), Aboriginal people remain one of the most vulnerable groups in Canada (Kapsalis, 2006).

The difficulties faced by Aboriginal youth also represent a significant challenge for Canadian society. Today's economy requires higher levels of education and skills for meaningful employment, especially in current and emerging knowledge sectors. Higher levels of education are known to improve socioeconomic well-being, including employment level and health. Increasing the number of Aboriginal people with postsecondary education would not only benefit these individuals, their families, and their communities, but would also address Canada's labour force challenges and improve the economy. This "social and economic imperative" (ACCC, 2011, p. 5) suggests a need to strengthen existing policies and programs to better support Aboriginal youth in their transition from education to employment.

This literature review is designed to support that process by examining the available evidence on the school-to-work transitions of Aboriginal youth and the factors that influence their success. The report that follows begins with an explanation of the methodology used to collect and analyze the information referenced in this report. It presents an overview of the current education and employment outcomes for Aboriginal people. Next, it examines the career aspirations of Aboriginal people and the pathways for transitioning from school to work. The evidence on Aboriginal peoples' participation in the labour market and their attachment to the labour force is reviewed, as is the information available on employer perceptions and practices. We then consider the literature on systemic barriers known to affect the success of Aboriginal youth. This is followed by a brief overview of dominant themes in the transitions literature from Canada, Australia, New Zealand, and the United States. The concluding sections of the report offer a summary of the findings, outline their implications for policy, and provide suggestions for further research.

1.1 DEFINITIONS

In Canada, Aboriginal people include the subgroups of First Nations, Métis, and Inuit peoples. A further distinction is made between Aboriginal people living on reserve (on-reserve) or off reserve (off-reserve). Status Indians, a subgroup of Aboriginal people, refers to Registered or Treaty Indian. It should be noted that not every study reviewed here distinguishes between different sub-groups of Aboriginal people, and thus important distinctions may be masked. The term *Indigenous* refers to the descendants of the original inhabitants of Australia in most instances, but is also used collectively to refer to first peoples in the context of multiple countries. Descendants of the original inhabitants of the United States are referred to as Native Americans. New Zealand's first peoples may be Māori or Pasifika.

2. RESEARCH OBJECTIVES AND METHODS

2.1 PURPOSE AND OBJECTIVES

This review was commissioned by the Council of Ministers of Education, Canada (CMEC). Its purpose is to examine the literature concerning the school-to-work experiences of Aboriginal youth and those factors that impede or foster their success in the transition from education to the labour force.

The following questions guided the research:

1. What are the educational and employment outcomes for Aboriginal youth in Canada in comparison with non-Aboriginal young people?

2. What are the career aspirations of Aboriginal youth, and how do these compare with those of non-Aboriginal youth?

3. What barriers do Aboriginal young people face in completing their education and transitioning to the labour market?

4. What is known about their education-to-employment pathways and the supports that can enhance their success?

5. How successful are Aboriginal youth in attaching to the labour market, and what are their employment experiences?

6. What can be learned from the international literature on these themes?

7. What are the implications of these findings for Canadian policy and research?

2.2 LITERATURE REVIEW METHODS

This research was conducted over the span of several years. The initial research was conducted in 2010, with a primary focus on the literature concerning transitions at the postsecondary level. A second phase of the research was undertaken in March 2012 to update the previous findings and broaden the focus of the review to include the literature related to secondary school transitions for Aboriginal youth.

The literature search was largely conducted on-line. Preference was given to the most current research, and studies that were Aboriginal-specific. Greater weight was assigned to large-scale, longitudinal research; comparative studies; and meta-analyses where available. The report does not provide analysis of primary data, nor does it review programs and policies, but it does review

literature that discusses these items. While the primary focus of this review was Canada, this report also draws on research from Australia, New Zealand, and the United States. As each of these countries has a significant indigenous population whose education and employment indicators lag behind that of the broader population, the related literature for each jurisdiction was also reviewed for its capacity to help inform policy and practice in Canada.

Relevant literature on the school-to-work transitions of Aboriginal people was found in peer-reviewed journal articles, government reports, papers from relevant organizations, and international reports from Australia, New Zealand, and the United States. In all, some four hundred sources were examined in the preparation of this report.

Within Canada, an effort was made to review relevant reports from all jurisdictions and include the perspectives of key stakeholders. Peer-reviewed articles include those found in the *Canadian Journal of Native Education*, the Council for the Advancement of Native Development Officers' *Journal of Aboriginal Economic Development*, the *Journal of Canadian Studies*, the *Canadian HR Reporter*, the *Canadian Journal of Education*, and the *Canadian Review of Sociology and Anthropology*. Journal databases such as the Canadian Business & Current Affairs ProQuest, the Canadian Periodical Index, the Canadian Research Index, and LexisNexis Academic were also searched.

Key government departments and agencies, including Indian and Northern Affairs Canada, Human Resources and Skills Development Canada, Statistics Canada, and ministries and departments of education, were canvassed for relevant reports, documents, and policy and program reviews. Policy research produced by organizations such as the Canadian Policy Research Networks, the Centre for the Study of Living Standards, the Canada Millennium Scholarship Foundation, the Caledon Institute of Social Policy, and the Canadian Council on Learning was also obtained and reviewed. The review also considered the relevant works of postsecondary organizations and Aboriginal organizations and research institutions, including the Association of Canadian Community Colleges (ACCC), the Association of Universities and Colleges of Canada (AUCC), the National Aboriginal Health Organization (NAHO), the Centre for Native Policy and Research, the Aboriginal Human Resources Council, the Atlantic Policy Congress of First Nations Chiefs, the Congress of Aboriginal Peoples, Mi'kmaq College Institute (Cape Breton University), Native Education Centre (British Columbia), Mi'kmaw Kina'matnewey (Nova Scotia), the Mi'kmaq Health Research Group, the First Nations Technical Institute, Gabriel Dumont Institute, the Aboriginal Knowledge Learning Centre, the Federation of Saskatchewan Indian Nations, Inuit Tapiriit Kanatami, the Assembly of First Nations, and Native studies centres at various universities.

International studies from Australia, New Zealand, and the United States were also reviewed. In Australia, literature from the Australian Department of Employment, Education, Training and Youth Affairs and the National Centre for Vocational Education and Research was reviewed. American studies were found in American journals such as the *Journal of American Indian Education* and *Preventing School Failure*, as well as from various American universities and research and policy organizations. Primary sources of information on the New Zealand system were accessed from the New Zealand Council for Education Research (NZCER), the New Zealand Ministry of Education, and various journals.

Additional literature was found by cross-referencing collected material. Once the literature was assembled, a meta-analysis of the findings and recommendations was conducted against a variety of themes and sub-themes.

2.3 LIMITATIONS OF THE LITERATURE REVIEW

The literature concerning the education and employment of Aboriginal people in Canada has its limitations. First, there are few sources of quantitative information apart from Statistics Canada, with the result that much of the literature is often a (re)analysis, presentation, and discussion of national surveys from Statistics Canada. While these data provide quantitative information and trends on education and employment outcomes, they do not provide the respondents' qualitative perspectives on their education and employment experiences.

Second, these data are collected from the Canadian population as a whole, and Aboriginal people are isolated as one subset for comparisons. The Aboriginal subset presents issues of small (and sometimes not reportable) sample sizes and potential misidentification of Aboriginal status (false negative and false positive self-identifications) (Dibbs & Leesti, 1995; Maxim & White, 2006). Full census data is available for only 65 per cent of reserve communities in Canada because many did not participate in the 2006 census (Statistics Canada, 2009b). In Quebec, Ontario, Saskatchewan, Alberta, and British Columbia, a total of 22 reserve populations were incompletely enumerated, and data for these communities were estimated. The number of these reserves is highest in Ontario (n=10) and Quebec (n=7) (Statistics Canada, 2008b).

Third, within the available literature, there is often a lack of context for the responses of survey participants (Thiessen, 2001). The hierarchical nature of the questioning precludes the gathering of information about previous levels of education. For example, a simple indication of one's highest level of education gives no indication of the relative success or limitations of earlier or previous educational pursuits and achievements (Mendelson, 2006).[1]

Fourth, there are significant differences from one study to the next in terms of the inclusion of all Aboriginal people in the collection of data. While Statistics Canada census data for 2006 is broken down for on- and off-reserve Aboriginal people and compared to data on the entire Canadian population, some other sources do not provide definitions for the terms *Aboriginal* and *non-Aboriginal*, making comparisons difficult.

---

1 Mendelson's (2006) comprehensive research on Aboriginal people and postsecondary education in Canada is frequently referenced in this literature review. Mendelson uses the census and the associated Aboriginal People's Survey in his report, and he examines the data by province and territory and by Aboriginal subgroup, along with other variables.

3. The State of Aboriginal Education and Employment in Canada

This section provides an overview of the current Aboriginal education and employment outcomes in Canada. The literature addressing these outcomes is very robust, including population census studies, statistical reports and analyses, and policy papers. It is difficult to compare many of the studies directly, however, owing to differences in data collection methods, years covered, and analysis subgroups.

3.1 Educational Attainment

With respect to high school completion, there is a significant gap between Aboriginal and non-Aboriginal learners. According to the 2006 census, 40 per cent of Inuit, 50 per cent of First Nations, and 75 per cent of Métis youth aged 20–24 have graduated from high school. For those living on reserves, the average high school attainment rate is 36 per cent for males and 42 per cent for females. This compares with an 89 per cent attainment rate for the larger population. Richards (2008) calculates that, nationwide, 40 per cent of Aboriginal youth aged 20–24 lack high school certification, with Manitoba having the highest percentage (48.2 per cent) of non-completers, followed by Saskatchewan (43.4 per cent), Quebec (43.2 per cent), Alberta (42.3 per cent), Ontario (34.4 per cent), and British Columbia (32 per cent). Aboriginal students who do graduate tend to take longer and be older than their peers.

A smaller proportion of Aboriginal than non-Aboriginal people participate in postsecondary education programs. The numbers are steadily increasing, however, and the current Aboriginal enrolment in universities is estimated to be over 25,000 (AUCC, 2011). Maxim & White (2006) found that just over 35 per cent of Aboriginal youth covered by the Youth in Transition Survey (aged 18–20) participated in some form of postsecondary education as compared to approximately 54 per cent of non-Aboriginal youth. A separate study by Berger, Motte, and Parkin (2007) found that among the "class of 2003," about 65 per cent of Aboriginal high school graduates and 80 per cent of non-Aboriginal high school graduates had pursued some type of postsecondary education. Of those who pursue postsecondary education, the relative proportion of leavers, continuers, and graduates is similar for Aboriginal and non-Aboriginal students, but relatively fewer Aboriginal students pursue university studies (Hango & de Broucker, 2007; Maxim & White, 2006).

While it is important to remember that 35 per cent of First Nations reserves are not included in the Canadian census, when we compare the educational attainment of the entire Aboriginal and non-Aboriginal populations aged 15 and over in the most recent census (2006), we find that the proportion of the non-Aboriginal population with a postsecondary degree at the bachelor's level or higher is more than three times that of Aboriginal people (see Table 1). A higher proportion of the Métis population and a lower proportion of Inuit have completed a university degree than has the Aboriginal population as a whole, but these proportions are also far below the rate for the non-Aboriginal population

(see Table 2). The gap is not as wide between Aboriginal and non-Aboriginal people who have completed some other type of postsecondary certificate or diploma as their highest level of educational attainment. The rate for the Métis population approximates that of the Aboriginal population overall, while the rate for the Inuit population is slightly below that of the Aboriginal population overall. Among those who have completed an apprenticeship or obtained a trades certificate as the highest level of educational attainment, relatively more Aboriginal people (11.4 per cent), more Métis people (13.1 per cent), and fewer Inuit (9.6 per cent) have done so compared to non-Aboriginal people (10.8 per cent).

Table 1

Highest Level of Educational Attainment among Aboriginal and Non-Aboriginal Populations 15 Years of Age and Over, Canada, 2006

	Completed University Postsecondary Degree – Bachelor's or Above		Completed Postsecondary Certificate or Diploma		Completed Apprenticeship or Trades Certificate	
	Aboriginal	Non-Aboriginal	Aboriginal	Non-Aboriginal	Aboriginal	Non-Aboriginal
2006	5.8%	18.5%	16.1%	21.9%	11.4%	10.8%

Source: Statistics Canada, 2008a. Aboriginal Identity (8), Highest Certificate, Diploma or Degree (13), Major Field of Study – Classification of Instructional Programs, 2000 (14), Attendance at School (3), Area of Residence (6), Age Groups (10A) and Sex (3) for the Population 15 Years and Over, for Canada, Provinces and Territories, 2006 Census – 20% Sample Data. Catalogue number: 97-560-XCB2006036.

Table 2

Highest Level of Educational Attainment among First Nations, Métis, and Inuit Populations 15 Years of Age and Over, Canada, 2006

	Completed University Postsecondary Degree – Bachelor's or Above			Completed Postsecondary Certificate or Diploma			Completed Apprenticeship or Trades Certificate		
	First Nations	Métis	Inuit	First Nations	Métis	Inuit	First Nations	Métis	Inuit
2006	5.2%	7.0%	2.7%	16.1%	19.6%	13.5%	10.4%	13.1%	9.6%

Source: Statistics Canada, 2008a. Aboriginal Identity (8), Highest Certificate, Diploma or Degree (13), Major Field of Study – Classification of Instructional Programs, 2000 (14), Attendance at School (3), Area of Residence (6), Age Groups (10A) and Sex (3) for the Population 15 Years and Over of Canada, Provinces and Territories, 2006 Census – 20% Sample Data. Catalogue number: 97-560-XCB2006036.

These patterns of educational attainment are supported in other studies. Gionet (2009) reported gaps similar to those cited above for First Nations people relative to the non-Aboriginal population in the census for First Nations peoples. Using special tabulations from the 2001 census, Ciceri and Scott (2006) identified the Inuit as having the most significant education gaps relative to other Aboriginal subgroups and the population as a whole, and as facing the greatest challenges in addressing these gaps. Kapsalis (2006) also pointed out the same range of gaps for various Aboriginal groups relative to the non-Aboriginal population using 2001 data.

More recent data from the 2010 Labour Force Survey (Statistics Canada, 2011b) compare the postsecondary educational attainment of off-reserve Aboriginal and non-Aboriginal populations aged 15–64 years in the 10 Canadian provinces. These data show little difference between these two populations with respect to those who have obtained a trade (Aboriginal, 14 per cent; non-Aboriginal, 12 per cent) or completed college (Aboriginal, 22 per cent; non-Aboriginal, 24 per cent) as their highest level of educational attainment. Similar to the 2006 census results, however, a large gap remains between these two populations with respect to university completion of a bachelor's degree or higher (Aboriginal, 10 per cent; non-Aboriginal, 27 per cent).

3.2 EMPLOYMENT SUCCESS

Table 3 summarizes the employment and unemployment rates for the on- and off-reserve Aboriginal populations (including the First Nations, Métis, and Inuit subgroups), as well as the non-Aboriginal population. Table 4 breaks out each Aboriginal subgroup. Both tables compare 2001 and 2006 data, as reported in the censuses for those years. Generally, the employment rate increased and the unemployment rate decreased for all groups between 2001 and 2006, with the largest improvements being among the Métis and Aboriginal off-reserve populations. Employment rates are lowest and unemployment rates are highest among the Aboriginal on-reserve population. The employment rate for the Métis population in Canada exceeded that of the general non-Aboriginal population in 2006, and the employment rate for the Aboriginal off-reserve population improved by slightly more than 4 percentage points between 2001 and 2006.

Table 3

Employment and Unemployment Rates among Aboriginal and Non-Aboriginal Populations 15 Years of Age and Over[2], Canada, 2001 and 2006

	Employment Rates			Unemployment Rates		
	Aboriginal On-Reserve	Aboriginal Off-Reserve	Non-Aboriginal	Aboriginal On-Reserve	Aboriginal Off-Reserve	Non-Aboriginal
2006	39.3%	58.4%	62.7%	24.7%	12.2%	6.3%
2001	37.7%	54.2%	61.8%	27.6%	16.5%	7.1%

Source: Statistics Canada, 2008c. Labour Force Activity (8), Aboriginal Identity (8), Highest Certificate, Diploma or Degree (14), Area of Residence (6), Age Groups (12A) and Sex (3) for the Population 15 Years and Over of Canada, Provinces and Territories, 2006 Census – 20% Sample Data. Catalogue number: 97-560-XCB2006031; and Statistics Canada, 2003b. Selected Labour Force Characteristics (50), Aboriginal Identity (8), Age Groups (5A), Sex (3) and Area of Residence (7) for Population 15 Years and Over, for Canada, Provinces and Territories, 2001 Census – 20% Sample Data. Catalogue number: 97F0011XCB2001044.

---

2 Some of the differences in employment may be attributable to the inclusion of young adults (15–19 years of age) in the comparison. Since Aboriginal populations tend to be younger, some of the difference in employment rates may reflect the age difference.

Table 4

Employment and Unemployment Rates among First Nations, Métis, and Inuit Populations 15 Years of Age and Over, Canada, 2001 and 2006

	Employment Rate			Unemployment Rate		
	First Nations	Métis	Inuit	First Nations	Métis	Inuit
2006	48.2%	63.1%	48.9%	18.0%	10.0%	20.3%
2001	44.6%	59.4%	48.6%	22.2%	14.0%	22.2%

Source: Statistics Canada, 2008c. Labour Force Activity (8), Aboriginal Identity (8), Highest Certificate, Diploma or Degree (14), Area of Residence (6), Age Groups (12A) and Sex (3) for the Population 15 Years and Over of Canada, Provinces and Territories, 2006 Census – 20% Sample Data. Catalogue number: 97-560-XCB2006031; and Statistics Canada, 2003b. Selected Labour Force Characteristics (50), Aboriginal Identity (8), Age Groups (5A), Sex (3) and Area of Residence (7) for Population 15 Years and Over, for Canada, Provinces and Territories, 2001 Census – 20% Sample Data. Catalogue number: 97F0011XCB2001044.

In 2010, based on data from the Labour Force Survey for populations aged 25 to 54, excluding people living on reserves and in the territories, the Aboriginal employment rate in Canada was 65.8 per cent, compared with 80.9 per cent for the non-Aboriginal population. Unemployment rates in 2010 for the same two populations were 12.3 per cent and 6.8 per cent, respectively (Statistics Canada, 2011a, Table 3).

Based on the same data source, which excluded people living on reserves and in the territories, 45 per cent of Aboriginal young people in Canada aged 15–24 were employed in 2010, compared to 55.3 per cent for non-Aboriginal young people aged 15–24. In the same year, the employment rate for Métis youth aged 15–24 was 52.3 per cent, while the rate for First Nations youth in this age category and living off reserve was considerably lower, at 36.6 per cent (Statistics Canada, 2011a, Table 6).

Research has confirmed that lower educational attainment is a statistically significant predictor of a lower level of labour force success for Aboriginal people (Ciceri & Scott, 2006; Hull, 2005; Kapsalis, 2006). Hull's (2005) analysis found that just some postsecondary education (i.e., having started but not completed) is not enough to increase employment outcomes. In fact, partial postsecondary completion can lead to a decrease in employment success opportunities compared to completion of a secondary school certificate only (Hull, 2005).

An older study by Walters, White, and Maxim (2004) compared the results of the 1995 National Graduates Survey to 1997 employment outcomes for Aboriginal people with postsecondary educations. They, too, found evidence of a persistent employment gap, even at the highest education levels, with Aboriginal university graduates experiencing relatively low full-time employment and high unemployment levels compared to visible minority and non-Aboriginal university graduates. The authors observed that "[t]he results also show that the full-time employment levels and the unemployment levels of non-Aboriginal [people] are generally better for those with higher level credentials. In contrast, Aboriginal [people], both male and female, have better employment prospects if they have graduated from a trades or college program than from a university program. Thus, while Aboriginal males and females with university degrees report the highest earnings, they also report the lowest levels of full-time employment and highest levels of unemployment when compared with other university graduates" (Walters, White, & Maxim, 2004, p. 296).

By 2006, the employment gap had narrowed considerably for Aboriginal people with a university degree. The 2006 census results indicated the employment rate for Aboriginal people with a university degree (bachelor's or higher) was 77.1 per cent as compared to 74.7 per cent for the non-Aboriginal population. The unemployment rate for each of these groups was 7.5 per cent and 4.8 per cent, respectively (Statistics Canada, 2008c). Based on data from the 2010 Labour Force Survey for populations aged 25 to 54, excluding people living on reserves and in the territories, the employment rate for Aboriginal people who had completed postsecondary education was 76 per cent in comparison with 84.9 per cent of non-Aboriginals with the same level of education (Statistics Canada, 2011a, Table 5).

A number of labour market analysts and economists have highlighted the fact that Canada as a whole will benefit if the Aboriginal education and employment gap can be closed. Sharpe, Arsenault, Lapointe, and Cowan (2009) examined the hypothetical results of having Aboriginal Canadians reach the 2001 non-Aboriginal education and labour market outcomes in 2026. If this were to happen, the authors estimate a total increase in income levels of $36.5 billion by 2026. Tax revenues would be $3.5 billion higher annually, and government expenditures would decrease by as much as $14.2 billion as a result of increased social well-being among Aboriginal people. Canada's GDP could increase by an estimated $401 billion by 2026.

3.3 Variation in Educational Attainment and Employment Rates of Aboriginal People

The general education and employment disparities experienced by Aboriginal youth appear to be correlated to several factors, including gender, age, socioeconomic status, and geographical location, as well as program level and field of study.

3.3.1. Gender

Although both Aboriginal men and Aboriginal women have lower education and employment outcomes relative to the general population, Aboriginal women often face different and additional barriers from those faced by Aboriginal men. These barriers are in addition to the gender disparities between men and women in the general population (Native Women's Association of Canada, 2009). In particular, they note that Aboriginal women often experience higher levels of racism, have a greater responsibility for the upbringing of their children, earn lower incomes, and have a greater exposure to violence than Aboriginal men.

The evidence suggests that, despite additional barriers to access, Aboriginal women are consistently more successful at postsecondary completion than Aboriginal men (Hull, 2005, 2009; Mendelson, 2006; Native Women's Association of Canada, 2004a, 2009) and are more likely to have a university degree (Mendelson, 2006). Kapsalis (2006) found that Aboriginal women were twice as likely as Aboriginal men to have a university degree. Hull (2009) found that, on the other hand, Aboriginal males living on-reserve are more likely than their female counterparts to have a trade certificate. This is also true of the Canadian population as a whole, with more men than women represented in the trades, and more women than men pursuing and completing university studies. Further research should investigate why Aboriginal women have been more successful at the university level.

The higher educational attainment of Aboriginal women is possibly responsible, at least in part, for the smaller gender-based employment gap between Aboriginal men and women (Ciceri & Scott, 2006; Hull, 2005; Mendelson, 2006; Statistics Canada, 2011a). Ciceri and Scott (2006) found the employment gender gap between Aboriginal men and women to be much smaller than that in the non-Aboriginal population.

A study by White, Maxim, and Gyimah (2003) focused solely on the labour force activity of Aboriginal (both registered First Nations and other Aboriginal) and non-Aboriginal women in Canada. They found that registered Indian women in particular are at a labour force disadvantage in that they have the lowest rates of participation and are most likely to be unemployed. Registered Indian women have a 42 per cent employment rate, compared to employment rates of 60 per cent and 65 per cent, respectively, for other Aboriginal and non-Aboriginal women. The influence of living on-reserve and higher incidence of dependent care should be taken into account when interpreting these results (Native Women's Association of Canada, 2009).

In addition, Aboriginal women with higher levels of education are more likely to be employed than are other Aboriginal women. A full 74 per cent of Aboriginal women with a university education were employed as compared to only one-quarter of those who had completed Grade 8 or less (White, Maxim, & Gyimah, 2003). On the other hand, Walters, White, and Maxim (2004) found that higher education does not always guarantee employment success for Aboriginal women when compared to other groups with the same education level. In fact, Aboriginal women who had completed a trade/college/university program had a higher probability of being unemployed than Aboriginal men and non-Aboriginal women and men.

Early child care and familial responsibilities affect Aboriginal women's ability to access and complete postsecondary education and gain employment (Orr, Roberts, & Ross, 2008). The Native Women's Association of Canada (2004b) comments that First Nations, Métis, and Inuit women and their children have certain basic needs when attending education or skills training programs. These include affordable housing, adequate funding for school supplies, safe and accessible child care, culturally appropriate and gender-specific sexual health education, transportation, telephone and Internet access, and resources such as mentoring in order to learn at home (Native Women's Association of Canada, 2004b).

Indeed, White, Maxim, and Gyimah (2003) found that the likelihood of being employed is lower when an Aboriginal woman in Canada has children who are minors. Ciceri and Scott (2006) found that the impact of dependants on employment was greater for Métis and Inuit women than for registered Indian women. The close familial and social ties often found on reserves were cited as a potential explanation. Contrary to both assumptions and other evidence, a survey by Hull (2009) found that, in general Aboriginal students attending postsecondary programs who at the time of application lived on-reserve and had dependants had higher postsecondary completion rates (59 per cent) than those without dependants (50 per cent). Furthermore, while women with dependants had higher completion rates than women without, men with dependants had lower completion rates. The analysis of the participants' responses to whether or not family responsibilities had affected their studies revealed that men who felt that family responsibilities interfered with their education had lower completion rates (39 per cent) than those who said they did not (59 per cent). Hull's findings

(2009) suggest that balancing education and familial responsibilities seems to be more difficult for Aboriginal men than for Aboriginal women.

Australian researchers examining this issue — Long, Frigo, and Batten (1998) — reported that Indigenous youth cite child care as an important barrier to furthering their education in order to get a better job, and noted that employment options for young Indigenous women were limited because they were expected to perform a range of family and domestic responsibilities, which affected their employment prospects. Using more recent population data from the 2006 national census to analyze the human capital implications of Indigenous education and employment participation rates, Biddle (2010) calculates the economic incentives of continuing education to be highest for Indigenous women, whose participation rates increase steadily from the age of 33 onward, after a dramatic decline between the ages of 18 and 25 when high numbers are employed and/or raising children. Between the ages of 19 and 21, only 17.8 per cent of Indigenous females were attending education, compared with 50.1 per cent of non-Indigenous females.

3.3.2. AGE

Age is an important factor to consider in the education and employment outcomes of Aboriginal people because of large differences both in their age distribution and participation patterns relative to the non-Aboriginal population. Many researchers have examined the impact of age on education and employment (Guimond & Robitaille, 2008; Hull, 2005; Richards, 2008; Sharpe, Arsenault, & Lapointe, 2007; Sharpe, Arsenault, Lapointe, & Cowan, 2009; Statistics Canada, 2003 [as cited in ACCC, 2005]; and Biddle, 2010).

Canada's Aboriginal population as a whole is much younger than the general population. In 2006, the median age of Aboriginal people was 26.5 years, as opposed to 39.5 years for other Canadians (Sharpe, Arsenault, & Lapointe, 2007). Similar demographic trends exist in Australia, New Zealand, and the United States. The median age of New Zealand's Māori peoples in 2006 was 23 years compared with 36 years for the population as a whole. According to 2010 data from the US Census Bureau, the median age for Native Americans was 29, compared with 37 for the total population. In Australia, 60 per cent of the Indigenous population was under 25 years of age in 2006, compared to 33 per cent of the non-Indigenous population (Biddle, 2010).

While younger Aboriginal people in Canada are attaining more education than their parents, they have not kept pace with the increase in education levels among other young Canadians (Richards, 2008). Table 5 shows the percentage of Aboriginal and non-Aboriginal populations that achieved various levels of education by age group, based on the 2006 census. For those who have a university degree at the bachelor's level or above as their highest level of educational attainment, the gap is 12.7 per cent for the total population aged 15 and over. That gap is only 9.9 per cent for the population that is 20 to 24 years of age, but it is more than 20 per cent for the population that is 25 to 34 years of age. These statistics suggest that, on a relative basis, the gap at this level of attainment might be closing somewhat, with the newest generation of Aboriginal youth completing postsecondary education.

In terms of achieving other postsecondary diplomas or certificates from a public or private college as the highest level of education, there is a 4.6 per cent gap between the attainment of Aboriginal and non-Aboriginal people aged 15 and over. The gap is widest for the youngest age groups: almost 11 per cent for those 20 to 24 years of age, and almost 6 per cent for those 25 to 34 years of age. The gap is almost negligible for the older age groups. This finding could potentially be attributed to the fact that Aboriginal postsecondary students take longer to complete postsecondary degrees (Canadian Council on Learning, 2009).

Slightly more Aboriginal than non-Aboriginal people have completed an apprenticeship or trades program as their highest level of educational attainment. Within the 20–24 age group, slightly more non-Aboriginal than Aboriginal people have this level as their highest educational attainment, but for the older age groups, the opposite is true.

Table 5

Highest Level of Educational Attainment among Aboriginal and Non-Aboriginal Populations, by Age Groups, Ages 15 and Over, 2006

	Completed University Postsecondary Degree – Bachelor's or Above		Completed Postsecondary Certificate or Diploma		Completed Apprenticeship or Trades Certificate	
	Aboriginal	**Non-Aboriginal**	**Aboriginal**	**Non-Aboriginal**	**Aboriginal**	**Non-Aboriginal**
All[3]	5.8%	18.5%	17.3%	21.9%	11.4%	10.8%
Ages 20–24	3.4%	13.3%	12.7%	23.6%	6.7%	7.4%
Ages 25–34	8.3%	29.8%	21.8%	27.5%	11.8%	10.4%
Ages 35–44	7.6%	25.4%	24.6%	27.2%	15.1%	12.6%
Ages 45+	6.6%	16.4%	18.7%	20.9%	14.7%	12.4%

[3]Source: Statistics Canada, 2008a. Aboriginal Identity (8), Highest Certificate, Diploma or Degree (13), Major Field of Study – Classification of Instructional Programs, 2000 (14), Attendance at School (3), Area of Residence (6), Age Groups (10A) and Sex (3) for the Population 15 Years and Over of Canada, Provinces and Territories, 2006 Census – 20% Sample Data. Catalogue number: 97-560-XCB2006036.

The relationship between age and employment is often curvilinear. The rate of employment increases with age until it plateaus and begins to decline as a person ages. For example, the workforce participation rate in 2001 for both Inuit men and Inuit women was highest for the 35–44 age group (Senécal, 2007). This relationship is similar for all Aboriginal and non-Aboriginal people, although Ciceri and Scott (2006) did find that, for non-Aboriginal people, an increase in age has a greater positive impact on the likelihood of employment.

_____

3 Some of the gaps in the "All" category may be a result of the difference in age structure of Aboriginal and non-Aboriginal populations, where Aboriginal populations tend to be younger.

As stated earlier, Aboriginal people are expected to account for a disproportionate increase in the general population between 2011 and 2017. In contrast, the overall Canadian working population is aging (Statistics Canada, 2006c). The Aboriginal population has often been cited as having the potential to fill the labour shortages that will be caused by Canada's aging population and low birth rate (Assembly of First Nations, 2005; Orr, Roberts, & Ross, 2008; Sharpe & Arsenault, 2010).

3.3.3. GEOGRAPHIC LOCATION

Many authors agree that 'place' (in terms of jurisdiction, as well as urban and rural settings) has a significant influence on the education and employment success of Aboriginal youth (Ciceri & Scott, 2006; Hull, 2005; Kapsalis, 2006; Mendelson, 2004, 2006; Senécal, 2007; Richards, 2011).

Comparisons of education and employment outcomes for Aboriginal people living in different regions of Canada show that those living in the east generally fare much better than those in the west (Hull, 2005; Mendelson, 2004, 2006; Richards, 2011). In fact, the Aboriginal and non-Aboriginal populations in the Atlantic provinces are close to parity in terms of secondary school completion rates, and Aboriginal people in those provinces have even higher rates of non–university program completion rates than the Canadian population at large (Mendelson, 2006). Hull (2005) also makes comparisons between Aboriginal subgroups, finding that the proportion of First Nations (registered Indians) with postsecondary education in the Atlantic region is higher than for First Nations elsewhere in Canada. The Métis in the North, the urban Inuit in Ontario (mostly in Ottawa), and in the western provinces also have higher percentages of postsecondary graduates than Aboriginal groups in other regions of Canada.

The educational attainment gap between Aboriginal and non-Aboriginal people based on the proportion of the population 15 years of age and over who do not complete high school varies from jurisdiction to jurisdiction. It is highest in the territories and Manitoba, where between 49 and 61 per cent of the Aboriginal population has less than a high school education. The gap is also lowest in the four eastern provinces (Statistics Canada, 2006b). The gap between Aboriginal and non-Aboriginal people aged 15 and over who have completed a university degree, diploma, or certificate at or above bachelor's level is 13 per cent across Canada. This gap is smaller in Saskatchewan (8 per cent) and in Atlantic Canada (with Nova Scotia and New Brunswick at 7 per cent, and Prince Edward Island and Newfoundland and Labrador with the smallest gap at 6 per cent) than in the rest of the provinces (Statistics Canada, 2006b). Mendelson (2006) suggests that the more readily available university programming targeted at Aboriginal students in Saskatchewan may be one of the reasons for the relatively small gap in that province. Institutions such as the First Nations University and Aboriginal teacher education programs (ITEP, NORTEP, and SUNTEP) offer advantages that mainstream institutions cannot offer (CAUT, 2010; Relland, 2007).

Hull (2005) compared the educational attainment levels of First Nations, Métis, Inuit, and Non-Status Indians. The proportion who had completed a postsecondary education was found to be lower for Registered Indians, Métis, and Non-Status Indians in Manitoba and Saskatchewan and for Inuit in Quebec than for Aboriginal people elsewhere in Canada.

When the educational attainment of those living in different-sized communities was compared, Hull (2005) found a positive correlation between the size of the community and the percentage of the population with a university degree. This correlation applied to both Aboriginal and non-Aboriginal populations (Hull, 2005). Hull (2005) also found, however, that the percentage of the population whose highest education level is a non-university diploma or certificate is roughly the same, regardless of the size of the community. This finding, too, applies to both the Aboriginal and non-Aboriginal populations.

Location also influences educational outcomes for Aboriginal youth. In rural, northern, and remote areas, long distances to the nearest school contribute to poor school attendance and completion. Those whose families migrate between reserves and the city and whose urban housing is tenuous may attend five or more schools a year (Phillips, 2008), with sizable negative effects on school attendance and achievement (Canadian Council on Learning, 2008). Youth who move from remote reserves to the city to attend high school face another set of problems, including isolation, culture shock, and absence of family supports (Fulford, 2006). Battiste (2005) writes that youth in these environments are more than twice as likely to drop out of school and four times less likely than their peers to enter postsecondary institutions. With limited opportunities to pursue postsecondary education while staying on-reserve, most students and workers are required to migrate to urban centres for better educational and economic opportunities (Barsh, 1994; Fleury, 2002; Hull, 2009; Consulbec, 2002).

The international literature points to similar disadvantages experienced by New Zealand Māori living outside urban centres, Native Americans living on reserves, and the quarter of Australia's Indigenous population who live in remote areas (Akpovire & Bhola, 2003; Biddle, 2010; Chapple, 2000). In addressing the impact of place on Indigenous Australians, Biddle (2010) notes that much of the gap in education participation rates can be explained by the fact that Indigenous Australians are more likely to live in remote parts of the country, where education institutions are more difficult and costly to access, basic services may be lacking, and there is likely to be a shortage of adequately trained teachers and student amenities.

In terms of employment outcomes and location, unemployment rates were lower and participation rates were higher in the western provinces than in the eastern ones. Based on Labour Force Survey data for the population aged 25–54 (excluding people living on reserves and in the territories), with the highest rates of Aboriginal employment in Manitoba (71 per cent), Alberta (69.7 per cent), and Saskatchewan (66.5 per cent) (Statistics Canada, 2011a, Table 3). Senécal (2007) found that the unemployment rates for the four Inuit regions in the Canadian North are lowest in northern Quebec and that the participation rates are highest in Northwest Territories.

Mendelson (2004) also reported that the unemployment rate for Aboriginal people living in cities was much higher than it was for non-Aboriginal people living in cities. Rates were 1.7 times higher in the larger cities in the eastern provinces and 2.4 times higher in the larger cities in the western provinces.

There is also evidence of an urban–rural divide. Mendelson (2004) used Statistics Canada data from 2001 to compare the unemployment and participation rates of large and small urban centres, rural areas, and on-reserve communities. Unemployment rates are highest on reserves and lowest in large

urban centres. Likewise, participation rates are strongest in large urban centres, followed by small urban and rural communities, then on-reserve communities. Ciceri and Scott (2006) also found that urban Aboriginal people had a higher likelihood of full-time employment than non-Aboriginal people. The fact that Aboriginal people tend to live in smaller communities has also contributed to this employment gap (Kapsalis, 2006).

3.3.4. Program Level and Field of Study

There is very little literature on the influence that Aboriginal students' program level and field of study may have on their postsecondary program completion rates. Hull (2009) found that among Aboriginal students living on-reserve at the time of application to a postsecondary institution, college completion rates are significantly higher (63 per cent) than university completion rates (38 per cent). In terms of field of study, the skilled trades programs had the highest completion rates (86 per cent), followed by business administration and management programs (70 per cent) and technical or paraprofessional programs (62 per cent). Those enrolled in general studies or upgrading had the lowest rates of completion (23 per cent).

Less detailed information was found on postsecondary attainment for all Aboriginal students (on- and off-reserve). Richards (2011) calculates from Statistics Canada 2008c, that among the Aboriginal cohort aged 25–34 in 2006, the largest proportion (21.8 per cent) had earned a college certificate; 11.8 per cent had earned a trades certificate; and 8.3 per cent held a university degree.

The lack of systematic tracking and reporting of Aboriginal success rates for the various postsecondary programs delivered across Canada is acknowledged by many, including ACCC (2010) and those governmental, institutional, and Aboriginal stakeholders consulted by the First Nations Statistical Institute (FNSI) in 2009. However, the literature provides a few examples to suggest that Aboriginal-specific programs can achieve high success rates on two key indicators: graduation and employment rates.

Relland (2007) notes that Saskatchewan's Aboriginal teacher education programs have had exceptionally high completion rates, successfully graduating over 2,300 Aboriginal educators as of 2007. Despite the fact that many of the students enrolled were from rural communities and lower socioeconomic backgrounds, and that they had little familiarity with a university setting, there is a 90 per cent employment rate for graduates of these programs. The Saskatchewan Indian Institute of Technologies (SIIT) reports that 62 per cent of its 2009-2010 graduates were employed in 2012, based on its annual graduate survey (Saskatchewan Ministry of Advanced Education, Employment and Immigration, 2012). The Native Social Worker Program at Sault College of Applied Arts and Technology reported that 100 per cent of students were employed within six months of graduation (AUCC, 2010). Additional success stories cited by the Standing Committee on Aboriginal Affairs include the Nunavut Sivuniksavut Program, which boasts an 80 per cent completion rate and 95 per cent employment rate for Nunavut high school graduates enrolled in the program, and a 90 per cent employment rate for graduates of the First Nations Technical Institute (Standing Committee on Aboriginal Affairs, 2007).

4. Career Aspirations and Realities

Young people's beliefs about the job relevance of education are one of the strongest predictors of future career pathways. Data from the Youth in Transitions Survey (YITS) show that Canadian youth aged 15 generally have high aspirations for their future careers and recognize the relevance of advanced education to achieving those goals (Looker & Thiessen, 2004). Unfortunately, the literature contains only a handful of studies that provide insights on the career aspirations of Aboriginal youth and on their demonstrated ability to achieve those aspirations.

One Canadian study was commissioned in 2002 by the Aboriginal Human Resource Council to determine the career information needs for Aboriginal youth between 12 and 18 years of age across Canada (Consulbec, 2002, p. 1). This study involved a survey of 433 Aboriginal youth who attended the National Aboriginal Career Symposium in Ottawa on October 23–24, 2001. The study asked respondents, who were mostly from Ontario and Quebec, about their dream job, jobs they respected, jobs they wanted to learn about, and the jobs they actually anticipated working in, and reported on the relationships among these variables. A second Canadian study (Bibby, 2009) explored the aspirations of 950 Aboriginal youth (800 living on-reserve; 150, off-reserve) as a subset of a larger national survey of 3,500 Canadian students aged 15–19.

Australian research in this area by Craven et al. (2005, 2006) examined the aspirations of 1,673 students (524 Indigenous and 1,149 non-Indigenous) attending the same secondary schools in both urban and rural regions of New South Wales, Queensland, and Western Australia. This study compared education and career ambitions, sources of career information, and barriers experienced by each group, as well as their capacity to distinguish between their desired goals and what was attainable. In a separate Australian study, Helme, Hill, Balatti, Mackay, Walstab, Nicholas, and Polesel (2003) utilized the data from a national survey of more than 20,000 upper secondary students, which included a sample of 451 Indigenous students in order to compare the career plans of Indigenous and non-Indigenous young people.

4.1 Aspirations

Both Consulbec (2002) and Bibby (2009) offer evidence that Canadian Aboriginal youth aspire to productive and fulfilling careers and are generally optimistic about their futures. The responses of 800 on-reserve students to a 2008 national survey of Canadian students aged 15–19, indicated that 84 per cent of these Aboriginal youth expected to get the job they want, and 79 per cent expected to be more comfortable financially than their parents (Bibby, 2009).

Aboriginal youth in the Consulbec study (2002) demonstrated a high interest in professional careers and a low interest in trades. The number-one "dream job" among the respondents was "business owner." The authors speculate that a business owner represents independence, autonomy, and self-reliance, and may be perceived as a career path that requires no PSE accreditation, one that is a result

of parental mentoring and perhaps one that involves wealth. Other popular dream jobs in order of frequency cited were medical doctor, lawyer, teacher, and engineer. Younger respondents chose high profile, prestige type occupations, including entertainer/performer and professional athlete, but these choices tended to decline as the age of the respondent increased. Young women gravitated toward occupations such as medical doctor, lawyer, and artisan. Young men tended to identify occupations such as athlete, officer, and engineer. These gender differences were found to be similar to those reported by non-Aboriginal youth in other studies (Craven et al., 2005; Taylor, Friedel, & Edge, 2009). On-reserve respondents in the Consulbec study (2002) identified firefighter, ironworker, teacher, carpenter, and nurse as possible occupational interests, while off-reserve respondents were more likely to choose computer programmer and accountant.

Aboriginal youth in the Consulbec study (2002) perceived themselves likely to work in jobs similar to their dream jobs. Mechanic replaced officer for males, and teacher and cook/chef replaced lawyer and performer/entertainer for females, in each group's list of top five anticipated occupations. The jobs most frequently identified by those living on-reserve were carpenter, cook, doctor, ironworker, band employee, and truck driver. The dream jobs they identified were those most respected overall. Young women showed more respect for a wider range of careers than young men did. Factory worker, plumber, casino/bingo worker, truck driver, and miner were among the least respected occupations (Consulbec, 2002).

In contrast to the findings in Canada, Native American students in the United States "consistently report lower educational goals than students of other ethnic backgrounds" (Peterson & Stroh, 2004, p. 2) and more modest career ambitions (Mau & Bikos, 2000). Similarly, survey research in Australia found that Indigenous students generally held low perceptions of their academic abilities, and had less ambitious post-schooling aspirations than their non-Indigenous peers (Craven et al., 2005, 2006; Helme et al., 2003). Approximately 40 per cent of Indigenous students surveyed planned to take a job after leaving school, and 25 per cent aimed to undertake vocational training. Only 32 per cent planned to enrol in university, in comparison with 80 per cent of non-Indigenous students who planned to do so. More Indigenous than non-Indigenous students reported being unaware of their career options and the educational pathways to achieve them, and indicated a primary reliance on family and friends for advice in this regard (Craven, 2006; Alford & James, 2007).

There is evidence that many Indigenous young people in both Australia and Canada want to work in jobs that connect with their culture and provide services to their community (Helme, 2010b; Fogarty & Schwab, 2009; Craven et al., 2005; Firman, 2007; Marlin et al., 2009; AUCC, 2011). Marlin et al. (2009) found that Aboriginal people obtain education in a particular field because they have recognized a need in their community, and return home after graduation with the hopes of filling the need. The AUCC (2011) reported similar motivation for Aboriginal graduates from universities and colleges across Canada who studied in programs that Aboriginal communities need most, such as health, education and business. Other youth aspire to traditional careers that are important to their culture and lifestyle, such as trapping, hunting, fishing, spinning, herbal medicine, and traditional art forms (Firman, 2007).

There are some notable parallels in the career preferences of Māori youth in New Zealand and Indigenous Australian youth. The latter tend to be clustered in five fields: welfare, health and

community services, Indigenous art, business management, and land care (Helme, 2010b; Fogarty & Schwab, 2009), and Māori students exhibit a preference for gaining qualifications in careers related to teaching, language and literature, creative arts, management, and business (New Zealand Min. of Education, 2010).

4.2   ASPIRATIONS AND CAREER PLANNING

While youth transitioning from school to work often assume that they "know about different career options and have adequate information to make decisions" (Taylor & Steinhauer, 2008, p. 47), the literature suggests a gap in quality career guidance programs for Aboriginal students.

Consulbec (2002) notes that many of the dream jobs youth identified in the survey require extensive postsecondary education and training at advanced levels. About 25 per cent (105 of the 433 respondents) stated that they expected to become medical doctors. Only 62 per cent of these students indicated they expected to complete a university education. Analysis of the realistic job opportunities available to these youth and their anticipated level of education suggested most were more likely to work in a job that they respected less than their dream job. These findings indicate a mismatch between the education required for specific careers and the educational intentions of students in their planned efforts to obtain those careers, and suggest a lack of advice and readily available information that is both reliable and practical (Consulbec, 2002).

Other regions of Canada also report a need for better career information services for Aboriginal students. A lack of career planning assistance negatively impacted the postsecondary-school-to-work transitions of Aboriginal people in Atlantic Canada (Marlin et al., 2009). Key informants in that study reported that students are not aware of what courses they need to take, and required more support at the postsecondary level. Participants who did not complete their postsecondary studies suggested that they would have benefitted if academic advisors and career counsellors had helped them choose the courses they needed. Others suggested a need for communities to outline the requirements for jobs that were available at home to help them design a path that would equip them for their chosen career. ITK (2005) has similarly identified a need for supporting Inuit students in Canada's North in determining their career path and becoming aware of the opportunities that exist and how to prepare for them.

A lack of understanding of the connection between education and career choice is also evident in the international literature. In studying the transitions of Navajo Native American students, Jackson and Smith (2001) found that while a few participants had established clear educational and career plans, the majority did not have a good understanding of what it would take to reach their goals. Jackson, and Smith (2001) found that Navajo students' uncertainty concerning postsecondary education revolves around four areas: vague postsecondary plans, anxiety about taking education risks, misunderstanding the relationship of careers to each other by defining the educational path in terms of obvious careers that had no relationship to each other, and failing to grasp the relationship of postsecondary training to careers. The work of Helme (2003, 2010a, 2010b) and her colleagues in Australia identified similar knowledge gaps among Indigenous students.

Overall, these findings point to a general weakness in the knowledge base that underpins Indigenous students' decisions about postsecondary education and their career preferences and opportunities. Consulbec (2002) reports that school guidance counsellors, classroom teachers, and relatives are the most common sources of career information for students, and observes that, in some cases, information may be based on assumptions about their needs and a "we know what's best for you" approach. The findings that Indigenous students' preferences are being directed to the vocational training sector (Craven et al., 2005; Helme et al., 2003), and that they have little knowledge of pathways to professional occupations (Sweet et al., 2009) support this theory. Taylor, Friedel, and Edge (2009) argue that a lack of clear education and career goals among Aboriginal youth stems from a lack of access to appropriate information about a broad range of careers, career development opportunities, programs that link school-work learning, as well as positive Aboriginal role models. As a consequence, many jurisdictions are placing increasing emphasis on the importance of providing all Aboriginal students with systematic, individualized, and hands-on career guidance programs.

4.3   ABORIGINAL REPRESENTATION ACROSS OCCUPATIONAL SECTORS

There is little literature concerning Aboriginal representation across occupational sectors. One study, by TD Bank Financial Group (2009), looks at Aboriginal people and their increasing interest in the market economy in Canada. The report shows the Aboriginal identity (First Nations, Métis, and Inuit) population by industry according to the Statistics Canada 2006 Census of Population. Industries that employ the highest numbers of Aboriginal people are primary resource industries, construction, accommodation and food services, and the public services (including public administration, health-care, social-assistance, and education sectors). Aboriginal people are under-represented in manufacturing industries, wholesale and retail trade, finance and insurance, and professional, scientific, and technical services.[4] Aboriginal participation in the resource sector has increased, and there have also been gains in entrepreneurship within all economic sectors (TD Bank Financial Group, 2009).

As reported by Statistics Canada (2011a), the highest proportions of Aboriginal workers aged 25–54, excluding people living on reserves and in the territories, were employed in sales and service (23 per cent); trades, transport, and equipment operation (21 per cent); and business, finance, and administration (17 per cent).

As noted earlier, non-Aboriginal students are more likely to aspire to and attend university programs than Aboriginal youth, who tend to be attracted to non-university, trades or college diploma programs (Maxim & White, 2006). Craven et al. (2005) found that technical and further education (TAFE) programs and courses are valued by Indigenous students in Australia and that the TAFE sector has been very successful in recruiting Australian Indigenous students and responding to their aspirations. This success has created the potential to promote an over-representation of Indigenous people in skilled labour and semi-professional occupations, and a subsequent and continued under-representation in university-trained professional programs and careers.

---

4 Further data on Aboriginal representation across employment sectors are available from Statistics Canada for Aboriginal/non-Aboriginal, for each of First Nations, Métis, and Inuit, and for on- and off-reserve, for each group. The data can also be broken down by gender and age for any or all of the variables. The data can be found at http://goo.gl/QVNiC

Similar to the situation in Australia, the 2001 Canadian census data demonstrates this over- and under-representation of Canadian Aboriginal people across National Occupational Classification categories A through D.[5] Using the 2001 census data, Kapsalis (2006) and Hull (2005) present detailed analyses, interpretations of the differences among the occupational classifications of the various Aboriginal identity groups and between genders, and comparisons with the non-Aboriginal population.

These studies are briefly summarized as follows.

Hull (2005) compared the sector of the labour force with any level of postsecondary education to their occupational level, gender, and identity group. His findings for Aboriginal people (including Registered Indians, Métis, Inuit, and Non-Status Indians) compared with non-Aboriginal people are shown here:

Level A occupations: Aboriginal (24 per cent)   Non-Aboriginal (35.2 per cent)

Level B occupations: Aboriginal (33.8 per cent)   Non-Aboriginal (34.2 per cent)

Level C occupations: Aboriginal (30.6 per cent)   Non-Aboriginal (26.1 per cent)

Level D occupations: Aboriginal (12.8 per cent)   Non-Aboriginal (7.3 per cent)

The same pattern holds true for people in the 18–24 age category (excluding students). Aboriginal people are less likely than non-Aboriginal people to be employed in high-skill occupations. They have approximately equal representation in skilled and semi-skilled occupations, and are over-represented in low-skilled occupations (Kapsalis, 2006).

Aboriginal women with postsecondary education are most likely to be in the highest occupation categories, whereas Aboriginal men with postsecondary education are more often employed in level D occupations.

Between 58 per cent and 69 per cent (depending on their identity group) of Aboriginal people who have completed a postsecondary certificate/diploma/degree are found in level A and B occupations compared to 77 per cent of non-Aboriginal people. Aboriginal women are generally more likely than Aboriginal men to be employed in level A occupations, with the exception of Métis women, where the reverse is true. Higher proportions of Aboriginal men are found in level B occupations than Aboriginal women.

Breaking down the occupational classifications into specific sectors and industries reveals evidence of differences between population groups, Aboriginal identity groups, and gender. Kapsalis (2006) found that Aboriginal workers, regardless of their education level, are most under-represented in high-skilled jobs in the private sector, including managerial positions; professional occupations in business and finance, engineering, computers, and medicine; and skilled technician and technologist occupations in engineering, computers, and health. They are over-represented in public sector management

5 The National Occupational Classification was developed by Human Resources and Skills Development Canada. Level A includes managerial and professional occupations. Level B includes technical and semi-professional occupations. Level C includes intermediate and semi-skilled occupations. Level D includes manual and other occupations requiring fewer skills.

positions; skilled positions in government and the cultural industry (paralegals, library technicians); semi-skilled positions in trades; and low-skilled positions in sales and labour. Approximately 35 per cent of Aboriginal workers are employed in the public sector (broadly defined), compared to 23 per cent of non-Aboriginal workers (Kapsalis, 2006). Aboriginal people are also under-represented in scientific occupations, particularly those related to engineering, math, and computers, but less so in the social sciences (Canadian Council on Learning, 2007a).

Hull (2005) reports differences between Aboriginal identity groups with postsecondary qualifications. First Nations men with postsecondary certification were most often found in government services, construction, and education/health/social services industries (47 per cent altogether). Another 10 per cent were in the primary industries (e.g., fishing, forestry, and mining), and a further 10 per cent were found to be in manufacturing. Inuit men with postsecondary certification were concentrated in a few industries to an even greater extent: over 25 per cent were in government services; 13 per cent were employed in the transportation, communication, and utilities sector; and an additional 13 per cent were in construction.

Almost 64 per cent of Registered Indian women with postsecondary certification were clustered in education/health/social services and government services. Métis women were slightly more likely than Métis men to be found in business and in education/health/social services and government services. There also tended to be more Non-Status Indian women than Non-Status Indian men in business services, and fewer Non-Status Indian women than Non-Status Indian men in government services. Tendencies among Métis and Non-Status Indian women were similar to those for non-Aboriginal women with postsecondary certification: the largest groups were found in education/health/social services, followed by business services and trades.

The Ajunnginiq Centre's study of capacity in the health sector illustrates the special challenges of developing the supply of Inuit professionals needed to service the Far North. The study reported that too few Inuit students are entering postsecondary programs and even fewer are choosing the health field. Those who do, tend to select northern colleges over southern ones, which offer more extensive health programs. Students choosing this field encounter a variety of challenges, such as course standards and prerequisites, financial burden (especially true for those who have families to support while attending school), and personal issues, such as motivation. The Ajunnginiq Centre report (2004) recommends that secondary students have access to detailed information about health careers and the postsecondary requirements, and receive formal instruction in money management, time management, and study skills to prepare them for more successful transitions into their chosen careers.

4.4 STRENGTHENING CAREER DECISIONS

We have seen from the statistics that many Aboriginal young people, for a variety of reasons, experience difficulties in negotiating the terrain between their goals and established employment in their chosen career. These challenges are elaborated upon in Section 8 of this report.

A further contributing factor appears to be a poor linkage between educational attainment and job requirements. Aboriginal people are more likely than non-Aboriginals to be either under- or over-qualified for their jobs (Ciceri & Scott, 2006). This suggests an improper alignment between educational attainment and/or program selection and career goals or employment opportunities available in the region.

A robust career guidance and development program could assist Aboriginal young people to understand their options and make wise career-related decisions during their high school years, including appropriate course selection and developing effective study habits to support their goals. Many believe that secondary schools do not adequately prepare Aboriginal students in general, and those living on reserves in particular, for the reality of the workforce or advanced studies (Battiste, Bell, & Findlay, 2002; Loizides & Zieminski, 1998 [as cited in Brigham & Taylor, 2006]; Malatest & Associates, 2004; Marlin et al., 2009; McCue, 2006; Orr, Roberts, & Ross, 2008; and Taylor & Steinhauer, 2008). Aboriginal youth often lack essential numeracy and literacy skills required for the workforce (Alford & James, 2007; Finnie & Meng, 2006), and they are frequently discouraged from taking rigorous coursework in middle and high school that will prepare them for success in postsecondary endeavours (Faircloth & Tippeconnic, 2010). If inadequate preparation for postsecondary education leads to dropping out (ACCC, 2005), then improving success rates for school-to-work transitions will depend upon reach-down programs that build the necessary career planning competencies in high school.

New research from Australia builds upon this concept. The authors of a comprehensive review of career development programs and policies in Australia conducted by the Centre for the Study of Post Compulsory Education and Lifelong Learning concluded that career development training must become the core business of schools and higher education institutions (Sweet et al., 2010).

The necessity for all youth to have sufficient career efficacy to manage their education pathway on leaving high school demands universal delivery of career development programs in the school system. This curriculum should equip each graduate with the following:

- a clear understanding of the future work and study options that are available to them and the extent to which these options meet career preferences and aspirations;

- an advanced capacity for self-assessment of skills, attributes, and preference and capacity to evaluate these attributes and make decisions against planned study and employment options;

- a strong capacity for information research and analysis relevant to career development and pathways exploration and evaluation;

- a detailed understanding of their planned study and work pathways; and

- knowledge and experience of the work environment in relation to the routines and expectations of work and employers (Sweet et al., 2010, p. 10).

The authors of the report go on to point out that implementing quality career planning for all students requires dedicated instruction time and curricula; hands-on, student-directed activities; and skilled and knowledgeable counselling services. The components of the program should include university orientation, study skills, coaching in preparing applications, exposure to role models/mentors from diverse occupations, access to job fairs, work experience opportunities, advice on accessing scholarships and financial support, and training in on-line research skills (Sweet et al., 2010).

In a companion literature review on career development services for Indigenous youth in Australia, Helme (2010a) highlights the importance of augmenting the basic program elements described above with additional multi-faceted supports found to be highly effective for Indigenous learners. These additional elements include mentoring, role models, highly coordinated individual case management for clients with complex needs, strong advocacy and liaison, and services that acknowledge young people's cultural heritage, including the involvement of family members and community members.

An external evaluation of such a program implemented in 2009 for Indigenous youth at Quirindi High School reports dramatic improvements in students' attendance and suspension rates, as well as their ability to set realistic career goals and to distinguish between long and short-term goals; 86 per cent of teachers reported students showed greater effort in class and were more self-sufficient in accessing assistance; 100 per cent of student reported an increase in cultural pride; and 86 per cent of parents reported improved social behaviour (Australian Government, 2011). The mentoring component of this careers program involved pairing students with older Indigenous youth as role models and mentors. This was believed to have contributed significantly to its success.

Likewise, in their review of school-to-work programs across Canada, Bell and O'Reilly (2008) highlighted the beneficial use of mentors, peer mentors, and advisors in 12 innovative programs. Mentors and success coaches have been found in the literature to foster youth resiliency by improving motivation, attendance, self-confidence, life-skills, healthy decision making, and coping skills (McCallum & Vella, 2006; McCluskey & Torrence, 2003; Satchwell, 2006; Crooks et al., 2010).

As a result, many schools and postsecondary institutions have established formal mentoring and Elder programs to help Aboriginal youth develop a sense of belonging and pride in identity (Gunn et al., 2004; MacCallum, et al., 2005; Satchwell, 2006). Mentoring is an integral component of Aboriginal student support programs such as Aboriginal TruStart at Thompson Rivers University, Martin Aboriginal Education Career Mentoring Programs, Pathways to Education Canada, Wayfinders Winnipeg, and many others.

5. Transition Pathways and Some Associated Programs of Support

This section explores the literature on transition pathways and the variety of supports available to Aboriginal youth as they move along the continuum from education endeavours to employment.

5.1 Pathways to Employment

Statistics Canada has identified a number of possible pathways for students transitioning from secondary, postsecondary, or training programs into the workforce (Hango & de Broucker, 2007). Figure 5.1 provides a general overview of these trajectories.

Figure 5.1 Pathways into the Labour Force
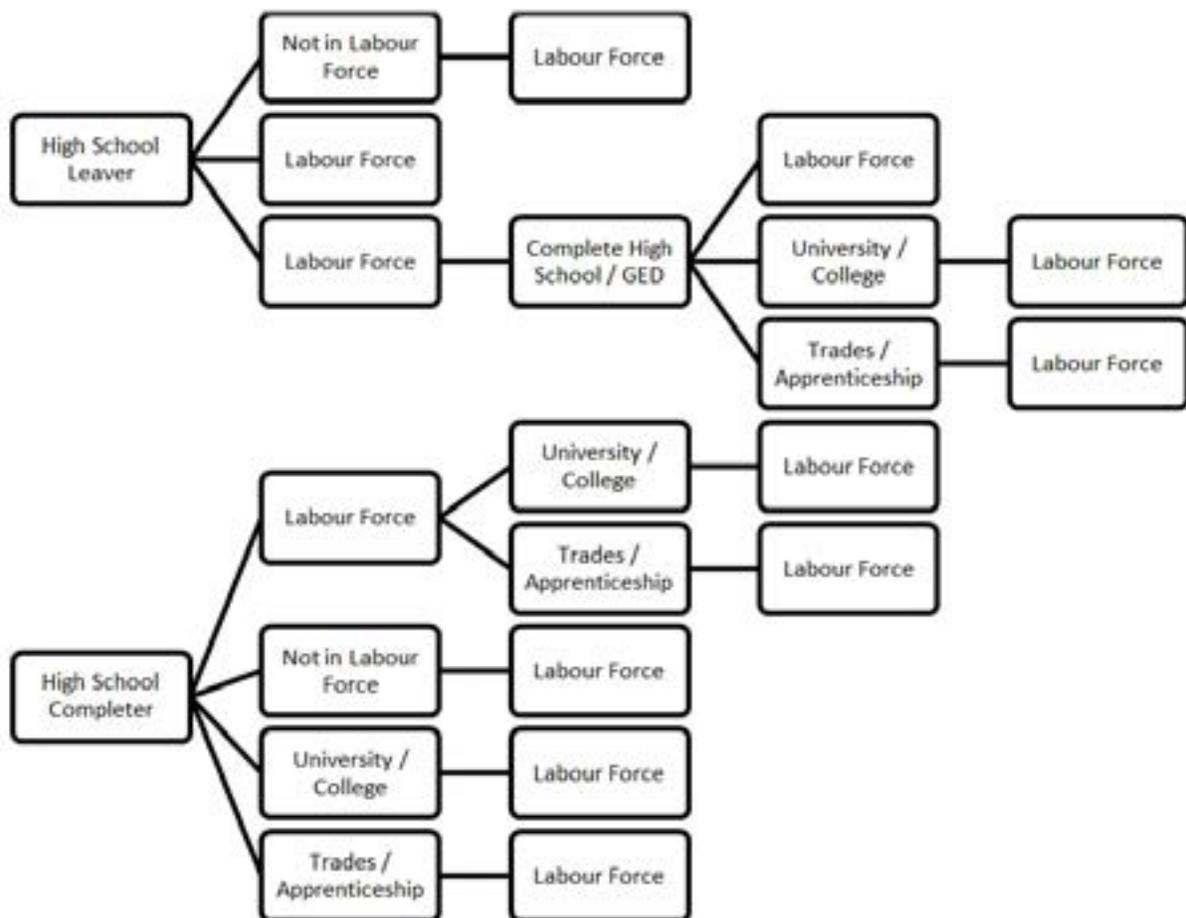
Generally speaking, youth leave high school as either "completers" or "leavers." Leavers may enter the workforce directly from school, defer entry until later in life for reasons such as childrearing, or enter the workforce temporarily before undertaking postsecondary education or training and re-enter the workforce after completion.

For completers, the paths are quite similar, with the additional possibility of taking one or more types of postsecondary education before entering the workforce. For both groups, any of these paths could be direct or indirect. For example, part-time work and part-time postsecondary education may be undertaken at the same time, or postsecondary education may be interrupted for work or life experiences before completion.

The length of the school-to-work transition period varies according to numerous factors such as length of training program, full- or part-time status in studies, apprenticeship arrangements, dual credit programs, and the job search process itself. In most OECD countries, including Canada, the transition period for most young people has been steadily increasing (Sweet et al., 2010). This is largely due to the rising demand for a highly skilled workforce and the increased number of educational opportunities and career pathways available to young people. A third factor contributing to longer school-to-work transitions is the weak link between education providers and labour markets, which often results in the need to switch programs and take additional coursework in order to find employment (Thiessen,2001). Additionally, a growing number of students are choosing to take non-linear pathways from school to work, as a result of career indecision or other life experiences during this period (Krahn & Hudson, 2006; Bell & O'Reilly, 2008; Thiessen, 2001). An important consequence of this longer transition is that it "extends the period during which young people require assistance with their educational choices and pathways planning, and increases the importance of well-organized information services" (Sweet et al., 2010, p. 21).

A number of patterns can be found in the limited data available for Aboriginal learners. Hango and de Broucker (2007) found that of 20 possible pathways to the labour market, employed Aboriginal youth are more likely than their non-Aboriginal counterparts to be represented in one of the following groups:

- high school dropouts (those who drop out of high school and enter the labour market)

- "second chancers" (those who dropped out of high school, but returned later and/or received some postsecondary training)

- high school diploma holders (those who graduated from high school and entered the labour market directly with no postsecondary education or training)

Analysis of data from the 2004 Youth in Transition Survey revealed that 26 per cent of the Aboriginal youth (aged 22-24) were "second chancers," and 13 per cent were dropouts who had not returned to school (Looker & Thiessen, 2008). These figures represent higher proportions than any other ethnic group in those categories. The common thread here is that, of those youth who find their way to the workforce, more Aboriginal than non-Aboriginal youth are likely to have left the education system early.

Those Aboriginal youth who remain in school tend to have a delayed entry to postsecondary, take longer to complete their program, and are more likely than non-Aboriginals to exit before completion. Youth in Transition Survey (2003) data reveal that almost a quarter of Aboriginal students in the 22–24 age bracket surveyed had dropped out of their PSE studies (Parkin, 2009). Research has identified a number of risk factors correlated with low persistence in postsecondary education: poor academic performance, disinterest, financial strain, Aboriginal ancestry, male gender, age, and dependents (Parkin, 2009). Low pathway mobility between colleges and universities poses a further barrier to continuing and succeeding in PSE for Aboriginal youth who tend to enrol in trades and colleges in higher numbers than their peers.

5.2   Targeted Support for At-Risk Youth

The foregoing confirms that some Aboriginal youth are particularly vulnerable as they negotiate the challenging terrain between school and the workforce and the need for a comprehensive range of strategies and supports for those who require assistance. A recent international scan of programming to assist struggling or disengaged Aboriginal youth reach their career goals (Raham, 2012) finds evidence to suggest the benefits of specific types of interventions for students in particular high-risk categories.

Struggling Secondary Students

These students may exhibit poor attendance, struggle with homework and academic grades, have low motivation, and have few role models at home to encourage school completion and planning for postsecondary. Their study and organizational skills are weak. They have no defined career goals and limited knowledge of postsecondary pathways, and they do not consider university an affordable option. Programming for these students should focus on developing aspirations for higher education, providing intensive academic support, career planning, financial incentives, role models and mentors, cultural development, and a personal advisor.

High School Dropouts, Aged 15–19

Alternative pathways for Aboriginal youth who have not succeeded in mainstream classrooms should be based on personalized learning plans derived from an assessment of their own strengths and interests and that recognize related prior learning wherever possible. Effective dropout recovery programs include alternative learning centres, mentoring programs, sports academies, culture-based schools, Outward Bound–type programs, apprenticeship and dual credit programs, technology, arts, and on-line learning options.

Older Dropout Youth, Aged 19–25

Unemployed older Aboriginal youth who have not completed high school are considered to be the most vulnerable and challenging population to reach. The longer they remain out of school and out of work, the less likelihood of their achieving a successful recovery into training and the workforce (Workforce Training and Education Coordinating Board, 2008; Sweet et al., 2010). It is their transition that is most fragile and most likely to end in failure without intensive intervention. These youth

require individualized training programs with intensive case manager support, incorporating financial and social services as needed.

Delayed PSE Entry

High school graduates who wander through a series of low-paying jobs and bouts of unemployment without building toward a future career are in double jeopardy. When they finally arrive at college or other forms of PSE/T, they tend to be older adults with low skills. This means they are less likely to be prepared for college and are more likely to have additional priorities to deal with while in college, including families and jobs (WTEB, 2008, p. 6). Strategic supports for students in this scenario include financial assistance, child care, dual credit options, paid apprenticeships, on-line courses, and an individual case manager.

Reserve/Rural/Remote Students

Postsecondary students from reserves, rural, and remote areas face special challenges related to adjusting to campus life far from family support, which can interfere with their studies. Programming services for these students should include early university orientation, housing assistance, childcare, mentors, cultural activities and supports, tutoring, and academic support.

5.3   Programs to Support Successful Transitions at the Secondary Level

The literature provides many examples of alternative programs that are opening doors for Aboriginal youth, enabling them to complete high school and pursue a career. Some programs are school-based; others are community-based. Many are collaborative initiatives involving multiple agencies.

Raham (2012) identifies a wide range of approaches. Some programs focus on academic support through tutoring, study skills, and homework centres, combined with career guidance and university orientation programs. Others use sports, recreation, and wilderness experiences as a vehicle to re-engage youth. Some prioritize social and emotional development through mentorships, role models, leadership training, and community service to build self-confidence and leadership qualities while helping youth explore possibilities and make thoughtful choices for learning and work pathways. Strong cultural programming is embedded in many models. A variety of programs support educational and career goals by addressing economic needs in the form of incentive plans, tuition-free courses, paid apprenticeships, annual scholarships, and mobility subsidies. The most holistic programs are referred to as comprehensive models. These provide multiple supports and services, which evidence suggests provides stronger outcomes by integrating cross-sector services and supports in a broader range of life areas to equip youth to function successfully in further education and career endeavours.

A few examples of these programs are illustrated in Figure 5.2. They are categorized by type according to their main focus, although many have multiple components and could fit under more than one category. Brief descriptions of these models and the evidence available on their effectiveness are found in the appendix. While most examples come from Canada, several international programs are listed in order to showcase successful initiatives in countries with significant Aboriginal populations.

Figure 5.2 Sample Intervention Programs for Aboriginal Youth at the Secondary Level

Dropout Recovery	Youth Opportunities Program (USA) Whitehorse Individual Learning Centre (YK) Winnipeg Collegiate Model School (MB)
University Preparation	Advancement via Determination (USA) Early College High School Initiative (USA) Aspiration Initiative (AU)
Career Planning	Jobs for America's Graduates (USA)
Mentoring	AIME (AU) Pathways to Education (CAN) Martin Aboriginal Education Initiative (CAN)
Vocational/Trades/Apprenticeships	Registered Apprenticeship Program (AB) Punnichy High School Career Transitions (SK)
Dual Credit	Registered Apprenticeship Program (AB) Aboriginal TruStart (BC)
Financial Incentives	University of Winnipeg Opportunity Fund (MB) Wayfinders (MB) Mobility Allowances (AU)
Comprehensive Models	Wayfinders (MB) Pathways to Education (CAN) Follow the Dream (AU)
Sports or Land-based	Sporting Chance Academies (AU) SAGE /Outward Bound (AB)

This list is not intended to be exhaustive, nor does it imply endorsement by CMEC.

The dropout prevention research and the transition literature collectively point to some underlying principles to guide programming for vulnerable youth. The American Youth Policy Forum (2011) defines the essential characteristics of effective programs as follows:

- **Multiple learning pathways.** Students who struggle in school or who are unmotivated require opportunity, information, and support to find an alternative program that will enable them to experience success. Comprehensive counselling and career guidance along with exposure to successful Aboriginal role models and career mentors will ensure students are aware of options that meet their goals and interests.

- **Connection to career goals.** For disconnected youth, learning is often most meaningful in applied settings that demonstrate the connection to jobs and workforce readiness. Education and training opportunities that are most successful with older youth and non-traditional students offer credit for a range of learning opportunities that teach the knowledge and skills necessary to progress to graduation and beyond. Innovative models such as the Registered Apprenticeship Program (RAP) and Punnichy Career Transitions are providing Aboriginal youth with opportunities to succeed through paid work experience and dual credit systems where they may simultaneously earn credits toward graduation and their postsecondary coursework or industry-recognized certification.

- **High expectations matched by support.** Alternative pathways to graduation must still embody rigorous learning objectives and quality instruction. Native American students enrolled in the AVID

college preparation program experienced a 100 per cent success rate in high school exit exams (Watt & Lewis, 2010). High expectations are also central to Winnipeg's Collegiate Model School, where at-risk youth given the opportunity to take their senior grades at a rigorous private school are rising to the challenge when appropriate supports are put in place.

- **Flexible schedules and settings.** Flexibility to meet individual needs is an essential feature of alterative programming. It must provide extended learning opportunities through self-paced on-line learning modules, community-based learning/homework centres equipped with tutors, dual campus programs, extended hours, and accredited summer work and volunteer experience.

- **Individualized supports and assistance.** Timely access to services to address specific academic, social, and other barriers increases the likelihood of successful program completion.

5.1 Postsecondary Pathways and Associated Programs of Support

As seen in Figure 5.1, young people who continue on to postsecondary education may take the university, college, or trades training pathway to employment. Most trades training takes place within the college sector in cooperation with industry training authorities and employers.

The Canadian college sector includes approximately 150 colleges, institutes, polytechnics, and cégeps, which offer a diverse range of programs, including certificate, diploma, apprenticeship, university transfer, distance, and degree programs. Over 80 institutions offer education and training programs specifically for Aboriginal students, and 87 offer targeted support services to help Aboriginal students feel welcome and connected and to succeed in their studies (see Figure 5.3). These colleges embed traditional knowledge in curriculum and offer wrap-around support services to ensure that learners graduate and transition to employment. They partner with Aboriginal communities and institutes to address specific community learning needs, and partner with industry to offer meaningful employment in Aboriginal communities (ACCC, 2010).

According to a survey of colleges conducted by ACCC in 2010, Aboriginal enrolment was highest overall in career/technical programs (28 per cent), followed by adult basic education/upgrading/GED programs (24 per cent). Another 11 per cent of Aboriginal students were enrolled in trades and apprenticeship programming. Approximately 7 per cent were enrolled in university preparation, university transfer, joint programs, or degree programs, while 6 per cent were enrolled in Aboriginal-specific career/technical programs. The remaining 20 per cent of Aboriginal students overall were enrolled in other categories, predominantly community-based programs and continuing education (ACCC, 2010).

Canada's university sector comprises approximately 95 public and private not-for-profit universities and university degree-level colleges. Many universities are also strengthening supports and curricula for Aboriginal students, and some have robust outreach programs in Aboriginal communities, providing educational support and mentoring opportunities to students, starting as early as the elementary level.

A synopsis of Aboriginal initiatives at each university can be found in *Answering the Call: The 2010 directory of Canadian university programs and services for Aboriginal students* (AUCC, 2010). The campus profiles in this directory were created from responses to three questionnaires distributed by AUCC in February 2010, and organized under categories such as recruitment and admission initiatives, Aboriginal-specific academic programming, outreach programs, transition programs, financial support, and campus services (e.g., child care, Elder in residence, Aboriginal centre). Unfortunately, no composite summary of services or breakdown of Aboriginal enrolment by program is available.

A recent report prepared for the Higher Education Quality Council of Ontario (Malatest & Associates, 2010) identified numerous promising practices for PSE institutions for increasing Aboriginal students' access to and participation in postsecondary education.

The most important of these are:

- an Aboriginal student services centre, which provides not only direct services but functions as a cultural centre with an Elder in residence, offering a place of belonging;

- a holistic approach to student support, including childcare, housing assistance, counselling, career guidance, and employment services;

- Aboriginal curriculum content delivered by Aboriginal instructors;

- tutors, academic skills courses, and study skills sessions for struggling students;

- well-established peer mentoring programs;

- distance education programs and learning modules that reduce the time on campus, allowing for more learning in the home community;

- networks with local employers to facilitate employment placements related to programs of study;

- liaison with local bands to provide role models and other support for Aboriginal students and recruitment opportunities; and

- Aboriginal access programs that provide the basic skills required to gain access to PSE and optimize success in academic programs (Malatest & Associates, 2010).

Furthermore, given the higher incidence of trade/college participation among Aboriginal students, there is a need for bridging programs to smooth mobility between college and university programs.

A number of these practices are reflected in current supports being provided for Aboriginal learners as identified by ACCC in a survey of its membership in 2010 and shown in Figure 5.3:

Figure 5.3 Percentage of Canadian Colleges Reporting Aboriginal Student Support Services

Academic counselling (94%)
Tutoring services (90%)
Personal counselling (90%)
Employment/career counselling (88%)
Job search training and support (79%)
Support to find housing (81%)
Financial counselling (78%)
Aboriginal student centre (73%)
Work placements or internships (73%)
Dedicated page on Web site for Aboriginal learners (67%)
Daycare on campus (62%)
Resident Elder services (49%)   Aboriginal mentorship program (47%)

ACCC. (2010). *Colleges Serving Aboriginal Learners and Communities: 2010 Environmental Scan* (p. 45)

The impact of providing targeted and culturally responsive supports such as these is illustrated in the success rates experienced by Saskatchewan's Aboriginal teacher education programs (ITEP, SUNTEP, and NORTEP). Many of the students enrolled were from rural communities and lower socioeconomic backgrounds, and had little familiarity with a university setting. About 80 per cent were women, many were mature students, and about 26 per cent were single mothers. Relland (2007) attributes the program's exceptionally high graduation rates (over 2,300 graduates at that time) to the supportive environment provided. The programs offered a variety of academic and personal supports including pre-university orientation, academic advising, tutorials, counselling, housing assistance, childcare assistance, university/urban adjustment assistance, career counselling, and personal development workshops. Coursework was infused with cultural elements such as Elder involvement, spiritual teachings, Aboriginal languages, and teaching practices based on traditional ways of knowing and participatory learning.

The trades and apprenticeship sector is also undertaking initiatives to recruit and support Aboriginal youth to choose career paths in the trades. Among these measures are dual credit, work experience, and paid apprenticeship programs; mobile training units for remote communities; and the provision of coordinated, comprehensive on-line information services regarding local training providers and entry processes for hundreds of trades in the provinces and territories.

The Saskatchewan Indian Institute of Technologies (SIIT) provides a uniquely First Nations environment for vocational, technical, and trades programming delivered on three urban campuses, in numerous smaller communities, and on-line. Between 2005 and 2009, SIIT's enrolment doubled to a total of 2,183 students, 89 per cent of whom are Aboriginal (ACCC, 2010).

The deep roots of the apprenticeship approach to learning in Aboriginal culture and history was noted by the Canadian Labour Force Development Board (1999) in its comprehensive report on Aboriginal participation in apprenticeship:

> The apprenticeship model of learning a trade has many similarities to the traditional means of passing on knowledge within Aboriginal society. Historically, shamans and medicine men or women took on young Aboriginal people to teach them the skills associated with these positions within the community. As with the current trades in today's marketplace, those who were chosen for these apprenticeship positions had to have exhibited both an interest and an innate ability. In addition, because the training lasted many years, these people had to make a significant commitment to learning (35).

Despite a cultural affinity for the apprenticeship process, Aboriginal youth, particularly those living on reserves, still experience numerous barriers to obtaining trades training and certification, including the lack of basic skills. A recent Canadian Apprenticeship Forum (2011) identified further supports that will be necessary to facilitate successful apprenticeship training and employment for youth in Aboriginal communities. These suggestions included promoting essential skills and career awareness programs at the high school level, incorporating cultural elements into training modules to increase their relevance to Aboriginal candidates, providing assistance with practical requirements such as driver's licences and application forms, recognizing relevant life experiences in candidate pre-qualifications, employability skills training, removing cost barriers, on-line mentoring opportunities, and relocation allowances.

6. Success and Satisfaction in the Labour Market

This section examines the factors that promote the successful attachment of Aboriginal youth to the workforce, and the factors which influence their job satisfaction. Indicators of success include employment status (full- or part-time work) and employment income. These two indicators are also closely connected to educational attainment. In particular, higher levels of educational attainment are associated with higher levels of labour market participation and higher employment rates (and therefore employment income) and with occupations that are likely to pay more.

6.1   Employment Status and Income

Ciceri and Scott (2006) looked at employment status and the factors that contribute to differences. They found that Aboriginal people aged 25–64, without regard for current labour force status, are 50 per cent less likely to be employed full-time (defined as 30 or more hours per week paid work or self-employment) than non-Aboriginal people. Among employed Aboriginal people, there is relatively little difference among identity groups, with Inuit having the lowest proportion working full-time (81 per cent) compared to First Nations (85 per cent) and Métis (86 per cent). Labour Force Survey data (2010), which excludes people living on reserves or in the territories, suggests greater parity between Aboriginal and non-Aboriginal workers (aged 25-54) with respect to part-time employment (Aboriginal, 13.1 per cent); non-Aboriginal 12.4 per cent). A higher percentage of Aboriginal (14 per cent) than non-Aboriginal (9.8 per cent) employees are temporary. Eleven per cent of Aboriginals are self-employed (Statistics Canada, 2011a, Table 4).

Aboriginal people in the workforce earn 23 per cent less, on average, than non-Aboriginal workers. There is also a small income gap between different Aboriginal identities, with First Nations people earning the least and Métis earning the most, on average (Kapsalis, 2006). In 2001, the average income of on-reserve residents was 49 percent of the average income for the total Canadian population, the average income for First Nations people was 58 per cent of the national average, and the Aboriginal population as a whole averaged 64 per cent of the pan-Canadian average income (Mendelson, 2006). In 2010, according to Canadian labour force survey data, Aboriginal employees earned an average of $847 per week while non-Aboriginal workers averaged $917 (Statistics Canada, 2011a, Table 4). It should be noted this excludes information on salaries of workers living on reserves and in the territories.

6.2   Education Return Rates

Many studies report that the employment rates of Aboriginal people increase as their education levels increase (Brunnen, 2003; Ciceri & Scott, 2006; Hull, 2005; Kapsalis, 2006; Maxim & White, 2006; Richards, 2008; Sharpe, Arsenault, & Lapointe, 2007 Walters, White, & Maxim, 2004). In fact, Ciceri and Scott (2006) found that Aboriginal college graduates are five times more likely to be employed than Aboriginal people without a degree or diploma. Furthermore, even though the overall levels of

education may be lower for Aboriginal people, their "rate of return" (gain in earnings as a result of increased education levels) from completing postsecondary education has been found to be much higher than that of non-Aboriginal people (Ciceri & Scott, 2006; Maxim & White, 2006).

Hull (2005) indicates that high school completion and a postsecondary certificate are two important thresholds where income increases significantly compared to those who do not reach these levels of education. In general, the earnings advantage of Aboriginal postsecondary graduates depends largely on the level of education obtained (Walters, White, & Maxim, 2004). Aboriginal Canadians with a bachelor's degree working full-time earn $55,000 a year average, compared to $37,000 for those with a certificate or diploma below bachelor's level. The earnings gap is larger for non-Aboriginal Canadians: those with a bachelor's degree earn $68,000 a year average, while those with a certificate or diploma below bachelor's level earn $43,000 (Statistics Canada, 2006a).

According to Sharpe et al. (2007), almost half of the 2001 income gap between Aboriginal and non-Aboriginal Canadians can be attributed to differences in educational attainment. Kapsalis (2006) found that 36 per cent of the wage gap between Aboriginal and non-Aboriginal people in the workforce (full-time paid workers aged 18–64) was attributable to education. Kapsalis also found that the higher the skill level of the occupation (as defined by the National Occupational Classification categories), the larger the wage gap between Aboriginal and non-Aboriginal full-time workers in the same job, to the disadvantage of Aboriginal people. The wage gap between the two groups is the largest (35 per cent) for those in managerial positions.

Gender also has an influence on income. Using data from the 1995 National Graduates Survey, Walters, White, and Maxim (2004) compare men and women of Aboriginal identities, of other visible minority identities, and of non-minority identities. According to this study, Aboriginal men with a university degree earn the most. Aboriginal females with a university degree also earn more than non-Aboriginal females with the same education. Walters et al. (2004) argue that "[t]here is a clear earnings premium for Aboriginal men and women if they obtain a university degree." The Native Women's Association of Canada claims that Aboriginal women with a university degree make more than their male counterparts. Furthermore, they state that there is still much work to be done to have more Aboriginal people pursue and graduate from postsecondary studies (Native Women's Association of Canada, 2009).

As a concrete example of the financial and social benefits of completing postsecondary education at both the personal and the macro level, Relland (2007) points to the 90 **per cent** employment rate for graduates of Saskatchewan's Aboriginal Teacher Education Programs (ATEP). Collectively, he notes, ATEP graduates earn in excess of $103.5 million annually (much of which recycles into the Aboriginal community), contribute in excess of $11,385,000 to federal and provincial tax coffers, and are helping to change the educational landscape of the province while serving as role models for Aboriginal and non-Aboriginal youth.

6.3   Employment Satisfaction

Job satisfaction can be measured in many ways, including employee perception of the value of the work, how closely it corresponds to his/her skill sets and interests, and the quality of the workplace environment. Positive employment experiences and satisfaction with work increase the level of attachment, while low levels of job satisfaction have been related to absenteeism and job turnover (Thiessen, 2001).

Various studies (Arthur & David-Petero, 2000, p. v; Brown, 2003; Dwyer, 2001; Jetté, 1994) have examined factors influencing workplace satisfaction among Aboriginal people. Arthur & David-Petero (2000) and Brown (2003) found that Aboriginal people, like others, want to feel welcome and to have meaningful employment in their chosen field that pays well and provides security and potential for advancement. A strong majority (73 per cent) of employed Aboriginal graduates of college and institute programs who were surveyed in BC reported that their job responsibilities were "very" or "somewhat related" to the training they had received (BC Ministry of Advanced Education, 2002). Aboriginal workers in the public sector have cited leadership experiences, education, and job assignments and training as the most important factors leading to their staying and advancing in their workplace (Dwyer, 2001).

Cultural differences often contribute to workplace experiences that negatively affect Aboriginal employees' satisfaction with their work (Jetté, 1994). Aboriginal people want to feel that their culture, beliefs, and ways of thinking and problem solving are respected and valued. However, they often find themselves in workplaces and situations that are incompatible with their values and beliefs (Dwyer, 2001). Brown (2003) states that organizations with a high Aboriginal turnover rate "just do not do the right things to make the few Aboriginal employees feel comfortable." In the face of persistent workplace dissonance, many have been shown to cease labour force activity altogether. A survey of 220 Aboriginal job-leavers in 2004 identified management style, lack of support, hostile workplace culture, discrimination, wages and working conditions, and lack of opportunity for advancement as the most common reasons for leaving their employment (Inclusion Network, 2004).

In response to the need for greater cultural competency in the workplace, the Aboriginal Human Resources Council (2011) has developed a series of workshops and on-line modules to provide employers and other institutions with information and strategies to advance Aboriginal inclusiveness in the workplace, noting there is a "strong social and business imperative for employers to master Aboriginal inclusion." *The Inclusion Continuum: Creating Workplaces of Choice for Aboriginal Talent* workshops explore historical and cultural roots; cross-cultural communication skills; and tools for recruiting, retaining, and advancing Aboriginal workers.

Racism and discrimination in the workplace take many forms, both personal and systemic. It is difficult to measure subtle forms of racism that exclude and isolate Aboriginal workers, undercutting their job success and satisfaction. Quantitative analysis of Canadian labour force data, however, provides convincing evidence that equity is still elusive for Aboriginals in the workplace on multiple measures, including employment opportunities, income, retention, and opportunities for career advancement (Kunz et al.,2000; Statistics Canada, 2010).

Similar disparities between Indigenous and non-Indigenous employees in Australia have been found in terms of income, types of jobs, promotions, responsibilities, and tenure. By way of example, a study of Indigenous health workers indicated one-third were dissatisfied with their jobs, citing lack of recognition as a professional, inequality compared to other health professionals, lack of recognition of the Indigenous health-care worker's role, differences in pay, and differences in qualifications required for appointments (Dollard, Stewart, Fuller, & Blue, 2001).

7. Employer Practices and Perceptions

Closely tied to labour force outcomes and satisfaction with labour market experiences are the attributes of current and potential employers of Aboriginal workers and their perceptions of the Aboriginal labour force. A few studies (Aboriginal Human Resource Council, 2008; Brigham & Taylor, 2006; Brown, 2003; Craven et al., 2005; Sammartino, O'Flynn, & Nicholas, 2003) offer information about employers' perceptions of Aboriginal people in Canada and Indigenous people in Australia that may influence their labour force attachment. Resources produced by government, industry councils, and large employers in the public and private sectors provide insights on organizational practices in recruiting and retaining Aboriginal people in the workforce.

7.1 Recruitment and Development of Aboriginal Employees

Employers who seek out and hire Aboriginal workers may benefit in a variety of ways, including (but not limited to) acquiring new market opportunities, a better understanding of customers, increased workplace diversity and cultural competence, better relationships and integration with the local community, the potential to reach and serve a growing Aboriginal market, and access to many training programs and funds aimed at increasing Aboriginal participation in the workforce (Canadian Tourism Human Resource Council, 2007; Aboriginal Human Resource Council, 2011; Aboriginal Skills and Employment Training Strategy (ASETS); Aboriginal Human Resources Development Strategy (AHRDS); Howard, Edge, & Watt, 2012).

Federal government agencies and programs to advance training and employment opportunities for Aboriginal people have increased employer awareness of the potential of the growing Aboriginal workforce to fill existing or looming labour shortages. Recruitment is most active in regions where high concentrations of Aboriginal people and shortages of skilled workers exist. Primary resource industries such as the forestry, mining, oil, and gas sectors actively recruit Aboriginal workers, especially in rural and northern areas (Aboriginal Human Resource Council, 2008). The construction industry and the trades sectors have also been proactive and successful in attracting and promoting Aboriginal workers (Craven et al., 2005; Construction Sector Council, 2005). School districts across Canada are scrambling to hire Aboriginal teachers and support workers to fill a growing demand (AUCC, 2011). The banking and financial services sector is building a reputation for leadership in Aboriginal workforce growth and development. The Royal Bank, for example, has committed in its *Diversity Blueprint: Priorities for 2009-2011* to "increasing the representation of Aboriginal people working at RBC, and meeting or exceeding employment equity requirements; developing ways to connect and mentor Aboriginal employees at RBC to support retention, supporting employee-led groups in the delivery of Aboriginal community outreach objectives, and providing a new learning program in Canada for RBC employees so they can better serve Aboriginal clients and assist RBC managers [to] attract and retain Aboriginal employees" (RBC, 2009, p. 3). According to a survey of Canadian businesses conducted by the Conference Board of Canada (Howard, Edge, & Watt, 2012), micro- and small businesses are most successful in recruiting Aboriginal workers: 20 per cent of micro-businesses and 24 per cent of small

businesses have 76 to 100 per cent Aboriginal employees. In contrast, 7.5 per cent of medium-sized businesses and 6.5 per cent of large businesses employ between 75 and 100 per cent Aboriginal workers.

A number of Canadian employers, industry sector councils, and public bodies such as school districts, have created organizational resources to support the successful recruitment, training, and advancement of Aboriginal employees (see, for example, Saskatoon School Boards, 2005; Edmonton Economic Development Corporation, 2006; Eco Canada; Aboriginal Human Resource Council, 2007, 2009b, 2011; Business Development Bank of Canada, 2012; Burlton & Drummond, 2009; Howard, Edge, & Watt, 2012). These documents confirm that employers are using a diverse range of strategies to recruit Aboriginal workers. These include the use of national Aboriginal employment Web sites linked to employment centres; paid and unpaid advertisements; hosting job fairs; creating work experience, co-op, apprenticeship, and internship opportunities; sponsoring summer employment programs and scholarships for students; networking with Aboriginal organizations, school districts, and training institutions to identify potential candidates; media outreach; and mobile recruitment/training stations for Aboriginal people in remote communities. Bruce et al. (2010) report the use of similar recruitment strategies in Atlantic Canada. Intern and co-op programs are deemed particularly useful, in that they give both parties an opportunity to discover whether there is a good fit and can often lead to permanent jobs (Burlton & Drummond, 2009).

Guidelines provided for the hiring process suggest that employers ensure job qualifications are barrier-free, entertain a wide range of equivalencies, engage Aboriginal service providers when necessary to overcome language barriers in the interview process, and ensure that those who make hiring decisions are familiar with matters and protocols affecting Aboriginal people. In addition, these employer resources articulate model practices for supporting Aboriginal employees on the job, addressing orientation, training, coaching and mentoring, feedback, grooming for advancement, and establishing an inclusive workplace culture. Such practices are consistent with a recommendation made by Kunz et al. (2000) to address the equity gap in employment outcomes for Aboriginal workers; namely, that "employment equity measures should move beyond recruitment to focus on retention and promotion" (4).

While inclusive employment practices and policies exist as models for other Canadian employers, the Aboriginal Human Resource Council (2009a) notes that "the vast majority of Canadian companies do not have Aboriginal recruitment strategies … and many have not embraced diversity and inclusion as a matter of practice and policy. In general employers seem to have little understanding of what constitutes effective inclusion strategy."(6) Very few companies have Aboriginals represented on their management teams or boards of directors (Corporate Knights, 2009). Corporate Knights, the Canadian Council for Aboriginal Business, and other agencies are seeking to encourage improvements in this area by conducting social responsibility evaluations of the corporate sector with respect to Aboriginal relations, producing rankings based on assessments in various categories including employment policies, governance, and community relations. Among the top employers in recent ratings are BC Hydro, Scotiabank, Suncor Energy, Syncrude, and Domtar.

In Australia, a 1999 survey of chief executive officers and senior managers of 229 businesses (Sammartino, O'Flynn, & Nicholas, 2003), revealed that 58 per cent (132 firms) employed Indigenous

workers. However, they were usually employed in very small numbers (less than 2 per cent of their workforces). Firms with Indigenous employees reported higher levels of policy documentation, training efforts, and dedicated officers in the areas of equal employment opportunities (EEO) and Indigenous employment. Almost all firms (95 per cent) with Indigenous employees had an EEO policy, and almost three-quarters of the firms engaged in EEO training. Eighty-three per cent of firms had documented EEO policies, as these are legislatively required in most jurisdictions in Australia. These firms also ranked the importance of having Indigenous employment policies and officers significantly higher than did the total sample. In the same study, and consistent with the fact that mining companies are known to recruit Indigenous workers living near their operations, mining firms ranked the importance of having Indigenous employment policies and employment officers significantly higher than did other organizations, and were also more likely to have these policies in place.

Within the education sector, both in Australia and in New Zealand, a number of coordinated national initiatives are under way to create more welcoming and supportive learning environments for Indigenous students and staff. These include large-scale professional development initiatives to strengthen the cultural competencies and understandings that all educators bring to their work. A recently established National Best Practice Framework provides Australian universities and PSE institutions with the tools to embed cultural competencies in their programming and to increase Aboriginal representation in their staff, administration, and governance structures. (MCEECDYA, 2012)

7.2 Employer Perceptions of Aboriginal Workers

A few studies offer information about employers' perceptions of Aboriginal people that may influence Aboriginal people's labour force attachment (Aboriginal Human Resource Council, 2008, 2009a; Brigham & Taylor, 2006; Brown, 2003; Sammartino, O'Flynn, & Nicholas, 2003).

Despite the business and demographic case for investing in Aboriginal workers, the Aboriginal Human Resource Council identifies a number of factors that deter employers from hiring. Most prominent of these are stereotypes and misunderstandings about Aboriginal people; low levels of formal education, which impede their training success; and sourcing Aboriginal candidates with the sustained interest to complete company training/orientation programs. Additionally, employers are often unfamiliar with Aboriginal culture and protocols and may have concerns about the potential for misunderstandings that may affect working relationships among staff or with supervisors (Aboriginal Human Resource Council, 2009a). Brown (2003) and Brigham and Taylor (2006) point out that employer perceptions often stem from prejudices and assumptions that reflect historical stereotypes. These may result in lower expectations by employers of their Aboriginal interns and employees (Brigham & Taylor, 2006) and perhaps in discrimination against Aboriginal candidates.

Australian studies have also documented negative perceptions held by employers regarding Indigenous workers. These include commonly held perceptions that Indigenous workers have lower levels of skills, less commitment, lower performance levels, and higher rates of absenteeism than non-Indigenous workers, as well as being more difficult to retain (Sammartino, O'Flynn, & Nicholas, 2003). Negative perceptions of Indigenous workers may explain some of the gap in employment outcomes

such as income and participation rates (Sammartino, O'Flynn, & Nicholas, 2003). Indeed, 62 per cent of Indigenous students in an Australian study (Craven et al., 2005) reported that they feel employer attitudes limit their future career aspirations compared to 42.9 per cent of non-Indigenous students.

8. BARRIERS TO SUCCESSFUL TRANSITIONS

The literature is exceedingly strong concerning the barriers that hinder the success of Aboriginal youth as they navigate the transitions between secondary school, postsecondary programs, and the workforce. These barriers include educational disadvantage as well as historic, social, cultural, financial, and geographic challenges.

8.1   EDUCATIONAL DISADVANTAGE

Educational disadvantage is a major factor in the employment and income gap that prevents many Aboriginal people from participating fully in the Canadian economy. Successful careers are built on the foundations of academic achievement, high school completion, and the attainment of postsecondary qualifications. On these and other participation measures, Aboriginal students as a cohort continue to be disadvantaged in comparison with the population at large.

According to the most recent national census, only 40 per cent of Inuit, 50 per cent of First Nations, and 75 per cent of Métis youth aged 20–24 have graduated from high school. For those living on reserves, the average high school completion rate is 36 per cent for males and 42 per cent for females (Richards, 2008, 2011). In the Innu school system, the dropout pattern that begins in primary school means that only 30 per cent of Innu youth enter high school, where they attend for less than 20 per cent of the time (Philpott, 2006).

Many Aboriginal children enter school with developmental delays, learning problems, and language barriers that, without intervention and support systems, will prevent them from keeping up with their peers. Poverty, health, and attendance issues may further impede their educational progress. Data from provinces that administer standardized assessments in math and literacy reveal a significant performance gap for the Aboriginal cohort, placing them at a further disadvantage in their academic learning. Adolescent Aboriginal students feel marginalized and conflicted by a learning environment that does not reflect their cultural values or respond to their learning strengths. They report poor relationships with teachers and peers, a lack of care and concern, a perceived expectation of failure, and school policies and pedagogical practices designed to guarantee their failure (Gunn et al., 2008; Long, Frigo, & Batten, 1998; Malatest & Associates, 2004; Wotherspoon & Schissel, 1998; Brown et al., 2009; Alford & James, 2007). As well as encountering teachers with low expectations and little knowledge of culturally effective pedagogy, Aboriginal students are frequently directed to low-level courses that limit their future career opportunities and further consolidate the effects of systemic educational disadvantage (McCrae et al., 2000; Faircloth and Tippeconnic, 2010).

8.2   Historical Barriers

Residential schools in Canada date back to the 1870s. Over 130 residential schools existed at one time or another across the country, peaking at 80 schools in the early 1930s, and the last one closing in 1996 (Truth and Reconciliation Commission of Canada, 2012). Residential schools took First Nations children away from their families, enforced religion, and prevented the use of Aboriginal languages and culture. Many of these schools practised forced labour and had high mortality rates among students (Claes and Clifton, 1998).

It is estimated that over 150,000 children attended government-funded and church-run residential schools, and that over 80,000 residential school survivors are alive today (Legacy of Hope Foundation, 2011). Those who survived the residential school system and wanted to pursue postsecondary studies rarely did because it meant losing their Indian status through mandatory enfranchisement. Before the 1960s, the Canadian government used postsecondary education to assimilate Aboriginal people into mainstream society, forcing those with postsecondary education to give up their Indian status (Marlin et al., 2009). Today, many Aboriginal students still perceive postsecondary education as an instrument of assimilation. The historical impacts of colonization, racism, and residential education linger in today's Aboriginal societies (NAHO, 2008) in the forms of distrust (ACCC, 2005), strong feelings of forced assimilation (Orr, Roberts, & Ross, 2008), and negative parental attitudes passed on through generations (Assembly of First Nations, 2007). This legacy has created many risk factors among Aboriginal youth (Crooks et al., 2010; MacKinnon, 2011) and is often linked to current-day barriers they face in achieving a postsecondary education and subsequently moving on to successful employment (Battiste, 2005; Battiste, Bell, & Findlay, 2002; Kirkness, 1999; Malatest & Associates, 2004; Marlin et al., 2009; Kunz et al., 2000).

Nor is this phenomenon unique to Aboriginal people in Canada, as similar pervasive and long-term effects of historic treatments are well documented in other Indigenous societies (Rehyner, 1992; Howard, 2002; Bishop et al., 2009). In his analysis of the problematic and strikingly parallel histories of Indigenous peoples in Canada, the United States, Australia, and New Zealand, Cottrell (2010) asserts that "overcoming that deep-seated historical suspicion is widely regarded as both a formidable challenge and as key to improving educational outcomes for Indigenous students locally and globally." (2)

8.3   Social Barriers

Many of the social barriers Aboriginal people face flow from personal circumstances that are heavily influenced by demographic and socioeconomic patterns. Studies examining social barriers experienced by Aboriginal people include those by the Ajunnginiq Centre (2004); Alford and James (2007); Centre for Education Information (2002); Craven et al. (2005); Long, Frigo, and Batten (1998); Malatest and Associates (2004); Mendelson (2006); Orr, Roberts, and Ross (2008); Taylor and Steinhauer (2008); MacNeil (2008); and Brown (2009).

Writing from a psychological perspective, Crooks (2009) points out that the historic treatment of Aboriginal people and the resulting intergenerational trauma from losses of land, language, and

culture has created many risk factors while neutralizing the protective factors found in their traditional ways. This has contributed to the alarmingly high rates of depression, alcoholism, family dysfunction, and suicide that afflict Aboriginal youth. The Ajunnginiq Centre (2004) identifies numerous social issues that interfere with education completion for the Inuit population, such as low self-esteem, dependence, depression, confusion, frustration, problems outside of school, social difficulties, the desire to be "cool" when success in school is seen as "uncool," pregnancy, substance abuse, and marital problems.

Employment and income levels are directly related to a population's socioeconomic status and an individual's well-being. Low socioeconomic status and a lack of personal well-being can lead to problems with substance abuse, health, poverty, incarceration, domestic violence, involvement with gangs, teen pregnancy, and suicide — all of which present in Aboriginal youth at significantly higher rates than the general population (Craven et al., 2005; Long, Frigo, & Batten, 1998; Malatest & Associates, 2004; Rojas & Gretton, 2007; Devries et al., 2009; Health Canada, 2011). In addition, many Aboriginal youth struggle with low self-concept, which leads to feelings of shame, powerlessness, apathy, poor mental and physical health, anger, and frustration (Craven et al., 2005; Malatest & Associates, 2004; 2010; MacNeil, 2008). Each of these social problems represents a further barrier to education and future employment (Assembly of First Nations, 2007).

8.4   FAMILY AND COMMUNITY ISSUES

Parental and community supports and their relationship to education and employment outcomes are cited frequently in the literature as especially relevant for Aboriginal youth. Education completion rates have been found to be positively related to family support (Hull, 2009; Jackson & Smith, 2001; Maxim & White, 2006). On the other hand, dysfunctional communities, lack of role models, language differences, peer pressure, and lack of family and community support are perceived by Aboriginal people as larger barriers to successful education and employment outcomes than they are by their non-Aboriginal counterparts (Alford & James, 2007; Centre for Education Information, 2002; Craven et al., 2005; Howard, 2002; Long, Frigo, & Batten, 1998; Malatest & Associates, 2004; Orr, Roberts, & Ross, 2008; Taylor & Steinhauer, 2008; MacKinnon, 2011).

In discussing family influences in Australia and the importance of role models , Biddle (2010) notes the large body of literature on the intergenerational transfer of low expectations and outcomes, with the education level of parents, especially the mother, being one of the main determinants of a child's education progress (UNICEF, 2006). He finds it unsurprising that national statistics show relatively low levels of postsecondary participation for Indigenous youth in households lacking family members with high school or other qualifications. McKinnon (2011) likewise confirms that the absence of role models at home, combined with low family expectations or capacity to support higher academic endeavours, has a negative impact on the educational goals of Aboriginal youth in Winnipeg, some of whom reported indifference or even overt discouragement on the part of families.

Jackson and Smith's study (2001) of the transition experiences of 22 Navajo Americans suggests that family influences can be positive and negative. These youth expressed a sense of pressure from their families to perform well academically and/or to stay close to home. Students who received mixed

messages from their families were less optimistic that they would complete their studies and find related employment. Those who received positive family feedback saw their futures more positively. Participants with an immediate relative who had graduated from college or was successful in his or her career had more self-confidence and more assurance about career selection and were less ambiguous about schooling.

Malatest (2004, 2010) argues that family obligations and personal issues are key factors in the lower postsecondary persistence and completion rates for Aboriginal students. As mature students, they are significantly more likely than their peers to have children and carry multiple responsibilities while attending postsecondary programs (Education Policy Institute, 2008; Malatest, 2010) and to cite family responsibilities as the most common reason for non-completion of PSE (Statistics Canada, 2001). In Australia, family illness and funerals were found to severely interrupt the attendance patterns of many Indigenous students, with students missing substantial amounts of schooling or work to care for sick parents, grandparents, and younger siblings (Helme, Polesel & Nicholas, 2005). American researchers reported that family conflicts, as well as cultural and ceremonial events, frequently drew Native American students back to their home communities for extended periods, even if this might result in failing a class (Jackson & Smith, 2001). In discussing such issues, Long (1999), points out that counsellors need to be aware of the strong Native American family bonds that often result in students taking lesser jobs closer to home or dropping out of their studies to help provide for their family.

8.5   FINANCIAL BARRIERS

Finances are a commonly cited barrier preventing Aboriginal learners from accessing and completing postsecondary education (ACCC, 2005; Holmes, 2005; Jackson & Smith, 2001; Malatest & Associates, 2004, 2010; Marlin, Bruce & Doucette, 2009; Taylor & Steinhauer, 2008; Millennium Scholarship Foundation, 2005, 2007; Report of the Standing Committee on Aboriginal Affairs, 2011). While Aboriginal students access federal-provincial assistance programs, including student loans, untargeted grants, and grants specifically for Aboriginal students, in nearly equal proportion to non-Aboriginal students, they often incur greater costs owing to child care needs and travel to and from the northern or remote communities in which they live (Holmes, 2005), and they also tend to have higher aversion to student debt than non-Aboriginal students (Malatest & Associates, 2008). In a study that focused upon the willingness of students to pay for postsecondary education (Palameta & Voyer, 2010) and investigated the openness of under-represented groups to accepting financial aid, Aboriginal students were found to be more price-sensitive (when weighing the benefits of postsecondary education against its cost results in being less willing to pay) and loan-averse (reluctant to borrow in order to finance their education). Importantly, the study found that the gap in demand for financial assistance among Aboriginals remains high even after accounting for other variables such as grades or perceptions of postsecondary education.

A related issue is the family history of postsecondary attendance. Research suggests that youth from families without postsecondary attendance have a lower likelihood of attending postsecondary institutions themselves. Finnie, Childs, and Wismer (2011) found that when the participation of Aboriginal youth is examined in relation to other factors that affect their participation, both income and lack of family history of postsecondary education are stronger factors than Aboriginal ancestry,

pointing to the importance of examining the complexities of socioeconomic status and Aboriginal identity.

Aboriginal Affairs and Northern Development Canada (AANDC [formerly INAC]) offers three financial assistance programs for Aboriginal students within its Postsecondary Education (PSE) Program. The Indian Studies Support Program (ISSP) provides funding to postsecondary institutions at any level or program for program development and delivery for Status Indians. The Postsecondary Student Support Program (PSSSP) provides funds to assist with tuition, books, travel, and specific living expenses. The University College Entrance Preparation Program (nested within PSSSP) aids in covering tuition, books, travel, and specific living allowances for Status Indian and Inuit students in university and college entrance programs (INAC, 2004; Malatest & Associates, 2004). In 2008-09, the PSE funding allocation was $334 million.

The mixed success of the PSE Support Program has been reported in numerous reviews: Malatest and Associates, 2004; Assembly of First Nations, 2005, 2009; Taylor and Steinhauer, 2008; Education Policy Institute, 2009; Usher, 2009; the Standing Senate Committee on Aboriginal Peoples, 2011; Audit and Assurances Branch, 2010. These analyses reached a similar conclusion that the level of funding for the program and the amount of funding available to eligible students is inadequate for the growing demand and does not reflect the rising costs associated with postsecondary education and training.

Various other criticisms of the program were found in these and other reports. Administration and oversight of funding was found to be inconsistent on the part of some regional government offices and band offices (Audit and Assurance Branch, 2010; Usher, 2009). Access to PSE support is restricted to Registered Indians and Inuit only, whose eligibility can be further limited by age, institution, and minimum number of courses or hours, disadvantaging mature students and those living off-reserve. Funding is available for only four years, and can also stop if a student fails or must take a leave of absence (Holmes, 2005). As bands control local PSE funding decisions, many First Nations youth who migrate from reserves to urban centres for better opportunities are unable to access support owing to band preferences to support youth living in the community (Helin & Snow, 2010).

Additionally, the high rate of growth and younger demographic in Aboriginal populations has increased demand for PSE, resulting in thousands of eligible students being denied funding each year owing to shortfalls (AFN, 2009; Malatest & Associates, 2004). As the number of applicants increases, the amount of resources that can be allocated to each student decreases (Taylor & Steinhauer, 2008). The assistance that is provided does not reflect the actual costs of tuition, travel, living expenses, day care, and other special needs, thus deterring many eligible First Nations and Inuit learners from entering postsecondary education and training (Standing Committee, 2007, 2011; Marlin et al., 2009; Malatest & Associates, 2008). Academic Group Inc. (2010) reports that Aboriginal students who declined to enter PSE after being accepted to Ontario institutions, cited financial issues as the primary factor in this decision. Financial pressures often lead Aboriginal students to abandon their educational ambitions and become employed full-time in low-skilled labour jobs (Jackson & Smith, 2001; Malatest & Associates, 2004). Marlin et al.'s 2009 study of the Atlantic Aboriginal postsecondary labour force found that funding is often insufficient to cover all expenses related to going to school, so that many students have to work part-time to the detriment of their studies, with those who could not strike a good balance dropping out of school to work full-time. Jackson and Smith (2001) also concluded that

Aboriginal student employment outcomes will be less favourable if these students cannot secure the funding to cover their postsecondary studies.

8.6   CULTURAL BARRIERS

The cultural differences that Aboriginal people encounter in school and work environments are one of the most common barriers discussed in the literature.

Culturally insensitive curricula, teaching methods, and assessments are cited as factors contributing to Aboriginal students' low achievement rates (Antone, 2003; Marlin et al., 2009; Nunavut Tunngavik, 2006).The mainstream system often does not cater to the learning styles and worldview of Aboriginal people (Battiste, 2005; Canadian Council on Learning, 2007a; Malatest & Associates, 2004; Marlin et al., 2009; McCue, 2006; NAHO, 2008). The absence of Aboriginal programming in many mainstream institutions also presents barriers for those who wish to undertake traditional Aboriginal studies and careers (Firman, 2007). The scarcity of Aboriginal or Indigenous staff at most educational institutions in Canada, Australia, New Zealand, and the United States also negatively affects these students' persistence in secondary and tertiary education (Alford & James, 2007; Malatest & Associates, 2004; Marlin et al., 2009; Hook, 2010; Gorinski & Abernathy, 2007; Rehyner, 1992; Craven et al., 2005).

Racism is a persistent obstacle to the success of Aboriginal people (Alford & James, 2007; Centre for Education Information, 2002; Marlin et al., 2009; Taylor, Friedel, & Edge, 2009) in their school and work environments, and has been shown in many studies to have a major impact on their education and employment outcomes (Helme, Polesel & Nicholas, 2005; Helme, 2007). In Australia, stereotypes and presumptions by teachers about Indigenous culture and Indigenous students' level of motivation to succeed are often cited as barriers to their educational success (Craven et al., 2005; Helme, 2010b). Indigenous students perceive racism in the broader community as the biggest barrier to employment for their people and are acutely aware of the difficulties in finding employment in mainstream organizations (Helme, Polesel & Nicholas, 2005). Similar attitudes were found among Indigenous secondary students who identified more social barriers (including racism) affecting attainment of their career goals than did non-Indigenous students (Craven et al., 2005).

Dwyer (2001, p. 94) states that Aboriginal individuals working in mainstream organizations are often required to do things that are incompatible with their own views and values. Stereotypes, presumptions, and different values and attitudes, including some that may be embedded in rules and structures, may lead to misunderstandings between Aboriginal people and their employers or co-workers (Canadian Tourism Human Resource Council, 2007).

Much of the literature calls for changes that acknowledge and incorporate First Nations, Métis, and Inuit culture in the classroom and the workplace. For example, the Nunavut Adult Learning Strategy (Nunavut Tunngavik, 2006) stresses the importance of ensuring that programs and services are developed and offered in a culturally appropriate way, which clearly reflects the needs of Inuit people. The Nunavut Adult Learning Strategy specifically cites the lack of adult programming in Inuit languages and of programming that reflects community needs and values. The Premier's Economic Advisory Council (2005) calls for a variety of supports to help address the cultural challenges faced by

Aboriginal people. Recruiting and retaining Aboriginal workers and improving cross-cultural awareness are seen as priority areas for action. Recommendations for supports include childcare and local training programs to allow more Aboriginal people to gain an education and enter the labour market. Training policies that foster family and community wellness and incorporate the traditional role of Elders will help to break down cultural barriers for Aboriginal people (Premier's Economic Advisory Council, 2005).

Shafer and Rangasamy (1995) explain that cultural differences between Native Americans and mainstream society may make school-to-work transitions more difficult for Native Americans. According to mainstream values, successful transition is based on gaining employment and leaving the family home to live on one's own. A traditional tribal lifestyle of cooperation, interdependence, and communal responsibility conflicts with the culture of independence and competition, which Shafer and Rangasamy claim is often implied by transition services.

Wilder, Jackson, and Smith (2001), in their report on school-to-work transitions of Navajo students in the United States, argue that culturally sensitive transition services can foster successful postsecondary transitions because culture influences postsecondary outcomes. The authors call for specialized transition programming for Native American students that includes appropriate cultural awareness and sensitivity. In addition, the use of Aboriginal role models and mentors is an essential part of successful transition programs because it improves employment outcomes for students (Wilder, Jackson, & Smith, 2001).

8.7   GEOGRAPHIC BARRIERS

There is a large body of evidence that geographic location is a barrier to success for Aboriginal students and workers.

Many Aboriginal people have a strong desire to find employment in their home communities, reflecting not only living preferences, but also their culture, identity, and tradition (Mendelson, 2004). Australian researchers have found that Indigenous youth are often keen to return to their home communities for altruistic reasons — in order to "give back" and to help their own people (Craven et al., 2005). Given these findings, Craven et al. conclude that the geographic location of many Indigenous communities presents a barrier to employment success for Indigenous people. In Australia, as in Canada and the United States, many such communities are geographically isolated or far from centres that have vibrant economies. Relatively fewer opportunities exist for employment on-reserve or in nearby small communities and rural areas (Craven et al., 2005; Gelade & Stehlik, 2004; Taylor & Steinhauer, 2008; Walters, White, & Maxim, 2004; Waslander, 2009; Mendelson, 2004); Assembly of First Nations, 2007; Kuhn & Sweet, 2002; Biddle, 2010; Schwab, 2006). To compound matters, the existence of few employment opportunities creates a "wage competition" in smaller places, as a larger number of employment seekers relative to the number of available jobs tends to drive down wages for everyone (Gelade & Stehlik, 2004; Taylor & Steinhauer, 2008).

9. COMPARATIVE THEMES IN THE INTERNATIONAL LITERATURE

This section provides a brief international look at the development and state of transitions programming for Indigenous young people in Canada, Australia, New Zealand, and the United States. By drawing on the literature from four very different contexts, it is possible to gain additional perspectives on practices, programs, and policy directions in this field. It also becomes evident that there are many common themes in the literature from these countries.

9.1 CANADIAN PERSPECTIVES

Many Canadian studies and reports have identified factors that contribute to successful policies, programs, and strategies targeting Aboriginal youth's school-to-work transitions.

One of the most comprehensive overviews and analyses of the current state of school-to-work programs in Canada is provided by Bell and O'Reilly (2008). While the programs examined by these authors were not Aboriginal-specific, their review of the practices and policies of some 60 initiatives across Canada provides valuable insights on transition services for youth who are experiencing difficulties in their high school studies, entering the labour market after high school, entering postsecondary education, making postsecondary program changes, and leaving postsecondary programs. Bell and O'Reilly identified the presence of many innovative, effective, and promising programs in Canada, but they also concluded that these independent and often site-specific initiatives are implemented outside of a formal delivery system, and there is relatively little centralized strategy to consolidate, manage, evaluate, and promote these ad hoc efforts. Thus, such innovative initiatives may not be accessible to those who need them most.

In the process of their review, Bell and O'Reilly (2008) distilled the essential elements of success for school-to-work programs at the community level: having a strategic vision; involvement of key stakeholders; methods of addressing the public attitudes toward non-university postsecondary education; commitment and leadership from all levels of government; career development integrated into postsecondary curriculums; a connection between occupational learning and academic learning; professional development of educators (including awareness of career and employment options for students); and, finally, improved linkages between vocational training/apprenticeships and postsecondary education.

In addition to these program elements, Bell and O'Reilly also found that many success stories demonstrated further positive qualities, including the following:

- transferability (locally, provincially, nationally, and internationally)

- policies that had associated supporting programs

- regular evaluation of outcomes on significant measures of success

- sustainability or longevity

- increased career outcomes (for example, higher incomes)

- development of transferable, employable, and essential skills

- built-in hope for the future

Programs for Aboriginal students must also be particularly culturally sensitive and inclusive, and they must take into account personal and geographic needs such as child care, transportation, and housing (Ciceri & Scott, 2006; Wotherspoon & Schissel, 1998; Fulford, 2006; Malatest, 2004, 2010). Wotherspoon and Schissel offer insights that are still valid today, commenting that sensitive and tolerant teachers who understand their students' culture and language; display flexibility with respect to attendance and assignments; and are respectful, caring, and trustworthy can serve as role models, fostering a learning atmosphere where students feel the safest, most comfortable, and enthusiastic.

While no single program can cover all of these components, Bell and O'Reilly found that programs with a combination of these characteristics represent the most innovative, effective, and promising policies, curricula, and practices. Many Aboriginal communities now partner with institutions to offer community-based programming to address the issue of the long distances between the homes of many Aboriginal students and postsecondary schools (Holmes, 2005; Hull, 2009). Other Aboriginal communities administer their own programs and have their own educational institutions (Canadian Council on Learning, 2007b). Community owned and operated programs are more targeted initiatives that reflect the community's own goals and culture in their design, content, and delivery.

Silta and Associates (2007) examined critical indicators of success in postsecondary programs for Inuit students and graduates making the transition to work. The authors found that program design and delivery, innovative governance and partnerships, enhanced culturally unique student support, funding, unique school-to-work transition, and accountability were key factors of successful programs for Inuit students. Programs must be holistic in nature, providing personal, academic, cultural, and financial support for the students as well as their families. In addition, successful programs should work with the students before they begin their postsecondary studies, during them, and while they transition to work. The authors underline the benefits of community-based programs because of their increased accessibility for Inuit students, as well as internships and summer employment opportunities that would introduce them to government employment opportunities (Silta and Associates, 2007).

Mentoring programs and role models for Aboriginal youth are emerging as another important strand in the Canadian literature (i.e., Gunn et al., 2004; Satchwell, 2006; McCluskey & Torrence, 2003; McCallum & Vella, 2006; Crooks, et al., 2010; Young, 2011). The Martin Aboriginal Education Initiative has put some of these principles into action in establishing three streams of long-term mentoring programs for Aboriginal youth spanning high school, university, and employment in banking, accounting, and business careers. Mentoring is also a key pillar of other Canadian programs such as Wayfinders, Pathways to Education, and Aboriginal TruStart.

9.2 AUSTRALIAN PERSPECTIVES

Aspirational programming for Indigenous youth emerged as a prominent theme in the Australian literature in the early 2000s, based on the premise that aspirations are an effective vehicle for lifting educational and employment outcomes for Indigenous young people. Career awareness programs for Indigenous youth were widely introduced in secondary schools to make schooling more relevant and interesting, foster positive self-image and identity, and facilitate their knowledge of potential careers and study pathways (Lowe & Tassone, 2003). These objectives were drawn from emerging research indicating that low self-esteem, racism, and feelings of isolation were pervasive barriers to their progress and perseverance in school and that didactic teaching styles and the paucity of relevant curriculum, cross-cultural understandings, and Indigenous educators in the system contributed greatly to these effects (Lester, 2000; Craven et al., 2005; Howard, 2002; Parente et al., 2003; Schwab, 1999). These findings suggesting a link between Indigenous students' aspirations and their perseverance in school added a new dimension to strategies and approaches being developed to combat the problem, and gave impetus to a vast investment in aspirational programming initiatives across Australia as part of an integrated strategy to improve their school-to-work transitions.

According to Australian authors Arthur and David-Petero (2000) and Giddy, Lopez, and Redman (2009), successful programs are those that facilitate positive school-to-work transitions that lead to full-time positions, are culturally relevant for Aboriginal students, and have personal and community benefits outside of employment "success." Personal and community benefits include the following: giving students the opportunity to acquire personal knowledge and skills, providing them with challenging tasks, increasing their sense of independence, building their confidence and self-esteem, creating networking opportunities for them, changing local employers' attitudes toward Aboriginal students as employees, and creating community role models (Gelade & Stehlik, 2004).

Giddy, Lopez, and Redman (2009) comment that a targeted approach (involving integrated knowledge of the client group and its context, special strategies for specific audiences, and responses tailored to particular market opportunities) was also an important element in creating successful programs. As reported in Canada, programs for Indigenous students must be culturally sensitive and inclusive, incorporating the realities of the students' lives, including child care, transportation, and housing needs (Alford & James, 2007).

Miller (2005, p. 24) suggests that "the single most important factor in assisting in the achievement of the full range of positive outcomes for Indigenous students is Indigenous community ownership and involvement." This imperative for Indigenous education and training to be linked with community aspirations and development is echoed by Fogerty and Schwab, 2012; Schwab, 2001; MacRae et al., 2000; Balati et al., 2004; Gelade and Stehlik, 2004; and others. Much of this literature is also unequivocal that Indigenous knowledge must form a central component of program content and pedagogical design. By way of example, an increasing number of local land management training programs and other small enterprise programs are being developed with and for remote Australian Indigenous communities to provide sustainable employment opportunities that are compatible with Indigenous values (Fogarty & Schwab, 2009; Fordham et al. 2010; Schwab, 2006).

Another strong theme in the contemporary Australian literature is the need for more intensive career planning instruction and services for all students as the 'core work' of schools and institutions. A subset of this body of literature discusses the skill set that Indigenous youth must acquire to be able manage their education and career transitions over a longer period of time. This discourse addresses culturally appropriate content and delivery mechanisms for this training, good practice for school guidance counsellors and external service providers, data collection and follow-up, intensive interventions, role models and mentorship component, family involvement, and governance across sectors. Sweet et al. (2010) offer a comprehensive overview of career development initiatives, while related research — literature reviews that provide an evidence base and curricula — is seen in works such as those by Helme 2003, 2007, 2010a, 2010b; Helme, Polesel and Nicholas, 2005; Crump, 2001; Dusseldorp Skills Forum, 2009; and Curriculum Corporation, 2003.

9.3 American Perspectives

While there appears to be relatively less literature concerning school-to-work transitions and related programs for Native American youth in the United States, statistics reveal an historic failure to close the education and employment gap for this vulnerable population. Native American youth have the lowest high school graduation rate (69 per cent) of all ethnic groups in the United States (Faircloth & Tippeconnic, 2010), and fewer than half (44 per cent) of Native Americans over 24 have attended college or completed an undergraduate or graduate degree (DeVoe, 2008). In 2008, 36 per cent of Native American youth aged 18 to 24 were unemployed dropouts (Workforce Training and Education Coordinating Board, 2008). Such educational challenges recently prompted an Executive Order from President Obama outlining immediate federal government actions toward "*Improving American Indian and Alaska Native Educational Opportunities and Strengthening Tribal Colleges and Universities*" (White House, 2011).

Some of the literature on Native American youth transitions in the mid- to late 1990s addresses issues raised by the Individuals with Disabilities Education Act (IDEA) introduced in 1990. Shafer and Rangasamy (1995) examine the cultural and socioeconomic challenges of Native American youth with disabilities in transitioning from school to employment and independent living. While the prevalence of cognitive disabilities, speech impairment, and psychosocial problems such as depression and the exceptionally high rates of suicide and substance abuse among Native American youth place them at greater risk for failure, the authors found many IDEA programs and services were not being fully implemented in Native communities. Wilder et al. (2001) examine the over-representation of minority ethnic groups, including Native Americans, in special education programs. Reyhner (1991), Brandt (1992), and Rumberger (2004) call for a shift away from deficit models to examine the role of schools and educators in pushing Native Americans out of school. Long (1999) identifies a need for transition programs to help Native American students wishing to enter the labour market directly from school.

Concerns that federal employment and training programs were poorly adapted to the needs of disconnected youth including Native Americans led to the introduction of the Workforce Investment Act (WIA) in 1998. This act created numerous federally funded programs for unemployed and dropout youth aged 14 to 21.

These programs were required to provide the following components:

- alternative school services, tutoring, study skills training, and instruction;

- summer employment opportunities linked to academic and occupational learning;

- paid and unpaid work experiences, including internships and job shadowing;

- occupational skill training;

- leadership development opportunities and community service;

- support services for at least a year after program completion;

- adult mentoring for the period of participation and the following year;

- comprehensive guidance and counselling, including for substance abuse (WTEC, 2008).

Unfortunately, the literature contains little systematic documentation of the impact of these programs on Native American youth, although several initiatives served substantial numbers of Native American youth. The Youth Opportunity Program (2000–05) was one of America's largest and most successful investments in community-based programming for disconnected youth. Fifteen per cent of participants (8,867) were Native Americans. Evaluations show that Youth Opportunity sites dramatically increased youth participation in academic learning often in untraditional ways, achieving a high percentage of school completions and postsecondary matriculation and/or successful placements in job training, internships, and full- and part-time employment (Jackson, Russell et al., 2007; Harris, 2006; Martin & Halperin, 2006).

Other literature addresses strategies to better prepare Native American students to succeed in academic streams at colleges and universities. Student engagement and retention (MacIvor & MacIvor, 2009; Freeman & Fox, 2005); culturally appropriate pedagogy (Trujillo & Alston, 2005); teacher expectations/program rigour (Faircloth & Tippeconnic, 2010); and family and community (Wilder, Jackson, & Smith, 2001; Trujillo & Alston, 2005) are common themes. The literature offers numerous reports evaluating specific program models designed to nurture and support college-bound expectations in at-risk high school youth including Native Americans. Jehl (2007) examines the strategies of various school districts to prepare disadvantaged youth to succeed in college. Watt and Lewis (2010) analyze the effectiveness of AVID in preparing Native American high school students for postsecondary eligibility and success through orientation, counselling, effective study strategies, and supportive relationships. An evaluation of the Early College High School Initiative, which provides traditionally under-represented students in postsecondary education with the opportunity to earn dual credits at college and high school (Berger & Cole, 2009), notes the challenges are greatest for students who are the first in their families to attend college. Approximately 5 per cent of the students enrolled in this four-year, tuition-free program are Native Americans.

The expanding engagement of the not-for-profit sector in such endeavours, along with a growing number of external program evaluations and constructive input from policy analysts, form another strand of the American literature (see, for example, Martin & Halperin, 2006; Brinson et al., 2008). One common theme in this material is the recognition that schools and institutions cannot solve the problem alone and that all sectors of the community must be involved in the solutions.

9.4   New Zealand Perspectives

Māori peoples constitute 15 per cent of the population and 10 per cent of the workforce in New Zealand (New Zealand Business Roundtable, 2009) and have historically experienced persistent disparities in educational outcomes. In 2010, 55 per cent of Māori students achieved NCEA level 2 (minimum graduation certification) compared to 78 per cent of the non-Māori student population. Only 24 per cent of Māori students leaving school were qualified to enter university, in comparison with 52 per cent of the non- Māori student population (Education Counts, 2012). The majority of those Māori who go on to postsecondary education do so as mature students. Māori learners make up 58 per cent of students who enter the postsecondary system over the age of 25. They also represent 15 per cent of students enrolled in preparatory or "bridging courses" designed to provide the foundational skills necessary for success in the postsecondary environment. Although data show that Māori women are less likely to enrol in professional training than their European peers (Akpovire & Bhola, 2006), and generally earn lower salaries than their peers with equivalent education, the wage gap for Māori women disappears at the postgraduate level.

Many researchers have examined the influence of culture on Māori student achievement, finding strong evidence that the absence of culturally appropriate curriculum and pedagogy negatively impacts their attendance, engagement, retention, and achievement in both primary and secondary schooling (Bishop & Berryman, 2006; Hood, 2007; Whitinui, 2008). Systematic reviews of instruction for Māori learners in mainstream classrooms (Alton-Lee, 2003; Biddulph & Biddulph, 2003; Harker, 2007) have concluded that Māori youth experience fewer teacher-student interactions, less positive feedback, under-assessment of capacity, minimal inclusion of Māori culture in the curriculum, and counterproductive teaching strategies. In contrast, Māori students attending Māori immersion and bilingual schools that promote teaching and learning practices that are inherent to Māori culture achieved completion rates similar to the non-Māori population and were three times less likely to be suspended than their Māori peers in mainstream schools (Murray, 2005; Ministry of Education, 2007). Further research into this phenomenon by Berry et al. (2007) found that Māori students in secondary school classrooms whose teachers had received intensive professional development in culturally responsive pedagogy had significantly higher academic gains and stronger teacher-student relations than students in classrooms whose teachers had not received this training.

These findings gave rise to a coordinated national professional development initiative in all secondary schools with high Māori populations and teacher preparation programs. *Te Kotahitanga* was intended to improve educational outcomes for Māori students in Years 9 and 10 by challenging teachers' low expectations for Māori learners and helping them develop more effective classroom relationships and become proficient in a broad range of culturally competent teaching strategies (NZ Ministry of Education, 2010*)*. The *Te Kotahitanga* model relies heavily on structured classroom observations to

provide feedback that allows teachers to identify their own attitudes and practices that act as barriers for their Māori students. Early evaluations found that 75 per cent of teachers in the program were able to demonstrate moderate or high mastery of the Effective Teaching Profile; effects on student attendance, engagement, and retention were moderately positive; and teacher responses to their professional learning and growth in expertise were strongly positive (Meyer et al.,2010; Bishop et al., 2009). Overall gains for Māori learners between 2008 and 2011 with respect to retention to age 17 (up 5.5 per cent) and attainment of NCEA level 2 graduation qualifications (up 8.3 per cent) reported by the Ministry of Education may reflect the positive impacts of this program in the critical Grade 9 and 10 years, when most dropouts occur (NZ Ministry of Education, *Managing for Success*). A review of school responsiveness to the needs of Māori students and families, however, found approximately one quarter of secondary schools fail to measure up to standards of practice in this area (Education Review Office, 2010).

The power of relationships and pedagogy to improve outcomes for Māori students is also addressed in the postsecondary literature. Gorinksi and Abernathy (2007) examine Māori student participation and retention in tertiary institutions and conclude that reforms to curricula, classroom pedagogy, and relationships are critical to their success. Hook (2010, p. 1) goes further, arguing for a National Māori University on the premise that mainstream institutions are seen by many Māori as "unfriendly, unsupportive, and often insincere in their cultural inclusiveness." An important and timely work by Christensen et al. (2012) supports the national focus on increasing Māori student engagement. *The Handbook of Research on Student Engagement* explores the indicators of student engagement, the link to motivation, and the impact of family, peers, and teachers on engagement at different levels of schooling, as well as findings on the effectiveness of classroom interventions.

Case study research to address an information gap about programs to support successful transitions for Māori students to work or postsecondary (Boyd, et al, 2006) offers a wealth of insights on key aspects of effective career education programs. *Innovative pathways from school* tracked a sample of senior secondary students in seven low decile schools for four years to identify features of programming that prepared youth for success after graduation. The seven key features identified in these programs were: offering a relevant curriculum to create positive attitudes toward school; the use of student-centred pedagogies to build relationships; access to careers and transition support; learning by doing; bridges to the tertiary environment; opportunities to gain qualifications; and opportunities to develop life skills. Other researchers, however, concluded that many NZ secondary students were not participating in or receiving instruction in careers activities (Vaughan & Gardiner, 2007; Education Review Office, 2006). Vaughan (2011) and Vaughan and O'Neil (2010) discuss the implications of these findings for the role of the careers practitioner. Recent initiatives to promote Māori retention and success through broader choices of pathways to graduation have added financial incentives and trades, service, and sports academies to the dialogue. Secondary students enrolled in New Zealand's 21 new trades academies remain with their school and pay no fees while earning credits toward graduation. *Youth Guarantee* offers youth who have left school and wish to take free trades or technology training additional supports such as orientation sessions, career planning advice, counselling, cultural support, and extra-curricular activities. New Zealand's 16 service academies offer a 12-month, military-focused program to youth in Years 11 to 13 who are at risk of school failure, engaging them in a range of motivating and challenging learning experiences in outdoor education,

physical fitness, goal-setting and life skills, and basic and advanced leadership courses, along with core English and mathematics. Māori students account for 80 per cent of enrolment in service academies, which in a recent evaluation were found to transform students' motivational levels, attendance, academic achievement, behaviour, and physical fitness (Education Review Office, 2011).

10. SUMMARY OF THE FINDINGS

This literature review was guided by seven research questions as outlined in the beginning of the report. The following is a summary of key findings related to the first six questions, along with indications of significant gaps that exist in the research. The seventh and final question, concerning the implications of these findings for policy and research, is addressed separately in the final section of this report.

1. What are the educational and employment outcomes for Aboriginal youth in Canada in comparison with non-Aboriginal young people?

A review of the evidence confirms that Aboriginal youth experience lower educational and employment outcomes than their peers at virtually all stages of the continuum.

In terms of educational disadvantage, Aboriginal youth are twice as likely as their peers to become disengaged and drop out of high school. Their graduation rate as a cohort is less than half the national average. A smaller proportion of Aboriginal youth enter postsecondary education programs in comparison with the non-Aboriginal cohort, and those who do so are more likely to be over 25, and to drop out at higher rates than their peers. About 5 per cent of Aboriginal people have completed a postsecondary degree in comparison with 18.5 per cent of the non-Aboriginal population. There is parity, however, in the percentages of Aboriginal and non-Aboriginal people holding certificates in the trades. The educational gap between Aboriginal and non-Aboriginal people based on the proportion of the population 15 years of age and over who do not complete high school is highest in Quebec, where 52 per cent of the Aboriginal population, compared to 32 per cent of the general population, has less than a high school education.

Employment figures for 2010 show that 45 per cent of Aboriginal youth aged 15–24 were employed in comparison with 55.3 per cent of non-Aboriginal young people in this age group. The employment rate for First Nations youth living off reserve was considerably lower, at 36.6 per cent. Disparities in employment rates for Aboriginal people hold constant in both urban and remote settings. While the employment rate of Aboriginal people with a university degree was higher than that of non-Aboriginal people with a university degree in 2006, the gap between Aboriginal and non-Aboriginal youth aged 20 to 24 years who obtain a university degree is widening. In general, young Aboriginal people in the labour force are over-represented in low-skill occupations. As a whole, Aboriginal people are under-represented in high-skill jobs in the private sector and in scientific occupations, and over-represented in public sector positions. Their employment earnings are, on average, 23 per cent less than those of non-Aboriginal Canadians.

2. What are the career aspirations of Aboriginal youth, and how do these compare with those of non-Aboriginal youth?

Canadian youth generally have high aspirations for their future careers and recognize the relevance of advanced education to achieving those goals. There is little systematic research on the aspirations of Aboriginal youth.

According to one study, 70 per cent of Aboriginal high school students aspire to postsecondary education compared to 90 per cent of their non-Aboriginal peers, but the educational goals of those in both groups who wish to pursue some type of postsecondary education are quite similar. The limited data available from several other studies suggest that Aboriginal teens are optimistic about their futures and have high career ambitions that are unsupported by knowledge of the career path required, current education goals, or market demand. One survey reported that "business owner" was the number-one career choice, followed by medical doctor, lawyer, teacher, and engineer, in order of frequency. There was often little correspondence between the career aspirations of these youth and their expected educational attainment, which was frequently much lower than that required for the desired career.

Other Canadian literature notes the desire of Aboriginal youth to adopt careers that will enable them to serve their home communities or to express and strengthen their culture. These career ambitions tended toward three broad areas: public service (health, education, policing, etc.), traditional occupations such as trapping, and artisanship. Data from college enrolment figures for 2010 indicated that 28 per cent of Aboriginal students were in career/technical programs and 11 per cent in trades and apprenticeship programs.

The literature points out that Aboriginal youth frequently lack role models in the family for professional occupations and have less exposure to career opportunities than their non-Aboriginal peers. Access to information on a broad range of careers, effective counselling, work experience programs, and role models from a range of professions are essential to developing coherent education and career pathways.

3. What barriers do Aboriginal young people face in completing their education and transitioning to the labour market?

The literature is robust concerning the systemic barriers that impede the progress of Aboriginal people. As educational disadvantage is a major factor in the employment and income gap that prevents many Aboriginal people from full participation in the Canadian economy, much of the literature focuses on this area.

There is common agreement in the literature that systemic poverty and other socioeconomic barriers negatively affect the educational attainment of many Aboriginal learners. The legacy of the residential schools system, differing cultural norms and family expectations, and geography also influence their success and perseverance in school. A lack of role models at home combined with low family expectations or capacity to support their academic endeavours in the upper grades has a negative impact on students' educational goals. Low socioeconomic status and a lack of personal well-being

can lead to problems with substance abuse, poor health, poverty, incarceration, domestic violence, involvement with gangs, teen pregnancy, and suicide — all of which present in Aboriginal youth at significantly higher rates than in the general population. In rural, northern and remote areas, long distances to the nearest school contribute to poor school attendance and completion, as do high transiency rates for mobile families in the city. Youth who move from remote reserves to the city to attend high school face isolation and culture shock.

Other influential barriers are associated with school-based conditions. The most important of these are a lack of supportive relationships, irrelevant curriculum, poor instructional and support services, attendance issues, and the widening gap between their aspirations and teacher expectations. Like many minority and Indigenous populations throughout the world, Aboriginal students often feel marginalized within the school setting and conflicted by an environment that does not represent their cultural values. They report poor relationships with teachers and peers, a lack of care and concern, a perceived expectation of failure, and school policies and pedagogical practices designed to guarantee failure. As well as encountering teachers with low expectations and little knowledge of culturally effective pedagogy, Aboriginal students are frequently directed to low-level courses that limit their future career opportunities.

Risk factors correlated with low persistence in postsecondary endeavours include poor academic performance, disinterest, financial strain, Aboriginal ancestry, male gender, age, and dependants. Finances are a commonly cited barrier preventing Aboriginal learners from accessing and completing postsecondary education. As they often incur greater costs than other students owing to child care needs and travel to and from the northern or remote communities in which they live, the funding available to them is inadequate for the actual costs involved. Those who are required to migrate to urban centres for better educational opportunities often experience challenges in adjusting to the postsecondary institution. Family and personal issues have been identified as key factors in the lower persistence and completion rates of Aboriginal postsecondary students. Many are mature students and are more likely than their peers to have children and carry multiple responsibilities while attending postsecondary programs. Aboriginal students often struggle academically and make up a large component of those enrolled in upgrading classes. They are more likely to drop out than their non-Aboriginal classmates, and/or to take longer to complete their program.

While the barriers associated with completing secondary and/or postsecondary education are well represented in the literature, there is relatively little literature on barriers specifically associated with transitioning to the labour market**.**

4. *What is known about their education-to-employment pathways and the supports that can enhance their success?*

Youth leave high school as either "completers" or "leavers." Leavers may enter the workforce directly from school, remain unemployed, or enter the workforce temporarily before undertaking postsecondary education or training and re-enter the workforce after completion. Completers may go into the workforce directly or take one or more types of postsecondary education before entering the workforce. For both groups, any of these paths could be direct or indirect. The length of the school-to-work transition period varies according to numerous factors but has generally been increasing.

The desire for employment appears to be a strong factor for Aboriginal students who choose not to continue their studies, and for many it is an economic imperative. Employed Aboriginal youth are more likely than employed non-Aboriginal youth to have entered the labour market as high school dropouts, as "second chancers" who dropped out and then returned to school, and as holders of only a high school diploma.

Although Aboriginal youth encounter many barriers to high school graduation, schools can remove or reduce many of these barriers through targeted interventions and more comprehensive measures to change the culture of the school. Practices that promote connectedness to school, address attendance and motivation issues, prioritize quality and culturally relevant instruction, enhance flexibility, and offer extended support services have all been shown to have positive effects on their retention and success. Elements that support their sense of belonging include a visible Aboriginal presence in the school, culturally relevant curricula, opportunities to express and maintain their cultural identity, positive interactions, and leadership opportunities. Mentoring and Elder programs can also play a beneficial role in strengthening their self-esteem, sense of belonging, and ability to focus on academic and career goals.

Struggling secondary students, high school dropouts, unemployed adults, mature students, and those from remote and isolated communities are most vulnerable in terms of successful transitions. These groups in particular will benefit from holistic interventions tailored for their needs, offering multiple learning pathways, relevance to career goals, high expectations with customized supports, and flexible schedules and settings. Mentoring, academic coaching, and financial supports, as well as career counselling and college preparation, are proven intervention strategies that have the greatest impact when implemented collectively.

The literature on postsecondary programming indicates that culturally relevant and sensitive programs that include key support services (childcare, housing and financial assistance, etc.) and those that are locally delivered have higher success rates in terms of program completion and employment. Campus programming designed to support Aboriginal students includes an Aboriginal Student Centre, Elder services, mentoring and tutoring programs, cultural content in coursework, and counselling and employment services. The literature also confirms that training and employment programs in which the Aboriginal community has a strong partnership presence are more successful, and that distance learning models that reduce time on campus for students in rural and northern communities can increase their access to and successful participation in postsecondary education.

There is very little literature on the influence that Aboriginal students' program levels and fields of study may have on their postsecondary program completion rates, although Aboriginal-specific programs appear to have higher completion rates.

5. *How successful are Aboriginal youth in attaching to the labour market, and what are their employment experiences?*

There is strength in the Canadian literature concerning employment outcomes for Aboriginal people and on the variables such as age and location that influence employment outcomes. However, apart from the many studies that link increased employment rates of Aboriginal people with their increased

education levels, there is little literature that explicitly identifies the factors that determine their successful attachment to the workforce. Likewise, there is a paucity of research on their employment experiences.

With the exception of early school leavers, Aboriginal youth are generally older than their non-Aboriginal peers when they enter the labour force, taking longer in the transition phase.

Only 42 per cent of Aboriginal people have jobs that match their skills and training. Mismatches between the choice of postsecondary program and the desired career and the availability of employment in the chosen career field are evident challenges, compounded by the cultural tendency of Aboriginal people to return to their home communities to work. Successful attachment to the labour force in these home communities is often compromised because, on average, fewer jobs are available in those areas.

In general, compared to non-Aboriginal people in the same age category, Aboriginal young people are over-represented in low-skill occupations and under-represented in high-skill jobs and scientific occupations. They are actively recruited by employers in the primary resources, heavy construction, and various skilled trades industries. Employment opportunities are strong in education and the financial services sectors, which are seeking to increase their Aboriginal workforce. An increasing number of Aboriginal youth enter employment through work experience, apprenticeship, internship, and summer employment programs. Such recruitment strategies by employers are designed to provide "low pressure" orientation/training in the responsibilities of the position, expectations, and culture of the workplace, and offer both parties an opportunity to assess the fit. Such programs often have stipends and scholarships attached during the training period and can lead to full-time employment.

Racism was identified as a barrier to finding employment and workplace satisfaction. Aboriginal workers frequently face discriminatory employment practices, wage disparities, and a perceived lack of respect for Aboriginal people and culture. Few role models and mentors exist to support them in their careers. While some employers (particularly large companies and organizations) have developed strategies and policies to recruit and develop Aboriginal talent and ensure a culturally sensitive workplace culture, these are in the minority. Little quantitative data were found, however, on the impacts of racism on transitioning into the labour market and in the workplace.

6. What can be learned from the international literature on these themes?

Despite differing contexts, the transitions literature from Canada, Australia, New Zealand, and the United States contains many common threads. Collectively, the literature is most robust at the secondary school level and moderately robust at the postsecondary level but provides little insight on the employment experiences of Indigenous youth.

Many of the elements captured by Bell and O'Reilly in their synthesis of successful transition programming in Canada are echoed in the international literature: the involvement of key stakeholders, integrating career development into the core curriculum, connecting occupational and academic learning, professional development of educators, improved linkages between vocational

training and the school, community-based programming, and commitment and leadership from all levels of government. The need to provide alternative and flexible pathways to success was emphasized across the literature, which collectively furnishes many examples of innovative and effective programming, including numerous examples from Canada.

Likewise, the literature confirms the importance of cultural fit to the success of transition programming for Indigenous youth through reinforcing the sense of belonging that has been found critical to their engagement and retention. There is also strong agreement that cultural relevance goes beyond curriculum content that reflects Indigenous knowledge and culture. There is universal acknowledgement of the need to strengthen teacher expertise in culturally responsive pedagogy, quantified most definitively in New Zealand and Australian research and addressed most substantively as a national professional development initiative in New Zealand.

The Canadian and Australian literature is particularly robust in addressing barriers of place. The Australian literature highlights the potential for community partnerships to create economically viable, sustainable, and culturally relevant local employment initiatives for Indigenous youth in remote regions. It emphasizes the imperative for Indigenous education and training to be linked with community aspirations and development and to Indigenous knowledge, which must form a central component of program content and pedagogical design.

Raising the educational and career aspirations of Indigenous youth is also a common theme. The importance of mentorship programs and positive role models in this process, as well as financial support for PS participation are commonly discussed, but implementation varies widely. The American literature highlights programs to develop aspirations among Native American youth to attend college and prepare them to succeed in postsecondary academic streams, and shows strength in program evaluation. The Australian literature emphasizes need for more intensive career planning instruction and services for all students as the "core work" of schools and PSE institutions. A subset of this body of literature defines the skill set that youth must acquire to be able manage their education and career transitions over a longer period of time, and addresses culturally appropriate content and delivery mechanisms, good practice for school guidance counsellors and external service providers, and the need for data collection.

11. Conclusion

In the final section of this report, we address the remaining question: *What are the implications of these findings for Canadian policy and research*?

11.1 Policy Implications

The evidence gathered in this literature review raises a number of important considerations for Canadian policymakers. At the most basic level, the findings confirm that:

- not enough Aboriginal young people in Canada are reaching their full potential;

- the problem is not new, but it is persistent and increasingly urgent because of demographic patterns;

- there is no simple solution owing to the complexity of the problem, vast regional differences, and the number of government levels involved; and

- innovative strategies and constructive policies do exist that we should borrow/adapt/bring to scale.

Improving supports for Aboriginal youth as they transition from school to work, and creating viable alternative pathways for those who are not succeeding, is both an economic and a social imperative. The solutions will involve all sectors of Canadian society, including Aboriginal people.

Taking action in the following strategic areas will provide important new avenues for leveraging improvements in education and employment outcomes for Canada's Aboriginal youth:

1. Systematic Provision of Quality Career Education Programs

Many Aboriginal youth are unaware of the education requirements of jobs they aspire to; are inadequately prepared for postsecondary pathways in terms of course selection, credits earned, and study skills; and are disadvantaged by the lack role models to help them prepare for the PSE environment. Counselling and career advice play a critical role in keeping youth in school, informing them about career options, and providing the advice they need re course selection and the pathways to their career objectives. A quality curriculum will provide job shadowing and work experiences, mentors, tutors, study skills, postsecondary orientation, training in on-line searches, employment skills, and strategies for life and work. Quality careers services address the information deficits that act as barriers to higher education.

The increasing length of the school-to-work transition and the complexity of pathways available strengthen the policy argument for universally provided quality career education programs and services from Grade 7 through postsecondary. This has cost implications for staffing levels,

professional development, curriculum resources, and administration. Secondary schools in New South Wales, for example, are staffed with career advisors, a transitions advisor, and an employment advisor (seconded from the business community) to offer comprehensive career guidance services and experiences. Programs offered by external providers such as AVID or JAG, who specialize in career development services and guarantee their results, should also be considered.

2. Orientation and Preparation for PSE

Many disadvantaged youth lack family role models to encourage them to consider a university education. Opening their eyes to the possibilities of higher learning can change the trajectory of their lives. This can be accomplished through a number of low-cost, high impact mechanisms:

- innovative partnerships between universities and school districts to bring younger students on campus to expose them to science, environmental, or other experiences and learn about fields of study that interest them and potential careers (University of Winnipeg Eco-Kids Program; CareerTrek);

- multi-year mentoring programs pairing high school students with postsecondary mentors and tutors who encourage them to stay in school and continue their education and take them on campus for enrichment courses during spring break (AIME; The Aspiration Initiative);

- strategies to establish college-bound expectations through formal and informal tutorials to teach study strategies, writing skills, leadership, and teamwork; campus orientation, role models, motivational sessions, application processes; mentors (AVID; Wayfinders);

- delivery of Grade 12 courses on university and college campuses in dual credit arrangements (Aboriginal TRUStart; Early College High School Initiative);

- scholarship incentive programs (for younger students who meet grades, attendance, and activity criteria) to help generate postsecondary expectations. These funds can be held in a trust account to be used for university tuition (Winnipeg Opportunity Fund; Wayfinders; Pathways to Education).

3. Establishment and Support of Mentoring and Role-Model Programs

Mentors and success coaches have been found to foster youth resiliency by improving motivation, attendance, self-confidence, life skills, healthy decision making, and coping skills. They can play an important role in encouraging Aboriginal youth to enrol in advanced education and in easing the transition of young people who move from home to attend PSE. Aboriginal role models are particularly important for Aboriginal youth to affirm positive cultural identity, promote more ambitious life goals, and help reduce racism. Governments can serve as a catalyst for mentoring programs by establishing policy guidelines and funding for training and hiring mentors to work with Aboriginal youth. An Aboriginal ambassadors program could be marketed through sports, business, and civic organizations.

4. Increased Financial and Infrastructure Support for PSE Aboriginal Students

Removing financial barriers to postsecondary education for Aboriginal students will increase their participation in higher education. A system could be established similar to New Zealand's Youth Guarantee program, which in 2012–13 provided 7,500 free tertiary education places for prioritized students (Māori and Pasifika). As well as tuition costs, all forms of associated expenses including tuition, housing, travel, living expenses, childcare, tutoring, and mentoring support should be subsidized. In addition to direct financial aid to students, investments will be needed in campus infrastructure to ensure the presence of childcare facilities, Aboriginal student centres, and other critical support services.

5. Improved Links between Secondary and Postsecondary

PSE institutions should be encouraged to develop innovative partnerships with local high schools to improve opportunities for Aboriginal youth. Initiatives such as split campus delivery, dual credit arrangements, trades/apprenticeship programs, bridging programs, mentoring programs, tutoring, summer learning camps that provide jobs for university students and enrichment for younger students, career and cultural fairs, leadership training, and Aboriginal language and culture classes provide Aboriginal learners with the opportunity to become oriented to postsecondary possibilities while still in their home school.

6. Job Creation in Aboriginal Communities

Employment opportunities in smaller Aboriginal communities and reserves are limited, yet Aboriginal people who obtain an education have strong tendencies to return there to work. Young people from those communities have to travel far from home to attend postsecondary education. Borrowing from initiatives in Australia, efforts could be made in partnership with Aboriginal leaders in these communities to establish cultural and land-based programs that provide accredited place-based learning for students and sustainable economic development and employment for the community while preserving its Aboriginal heritage.

7. Increased Role for the Private Sector

Policies must be designed to incent employers and business leaders to increase efforts to create pathways for Aboriginal youth to connect with high skill jobs. Employers need to provide work experience, internship, co-op, and other employment and training opportunities for Aboriginal youth to bring them into the labour market. They must develop policies for inclusive workplaces, develop expertise in training the Aboriginal workforce, and establish an Aboriginal mentors in the workplace program. Additionally, the private sector can partner with schools and colleges in developing local trades training programs and work placements for Aboriginal youth that would count toward graduation credits. The private sector also has a role to play in working with Aboriginal organizations, universities, and schools to sponsor travel exchanges, sports and cultural activities, leadership and service opportunities, and other broadening experiences for Aboriginal youth to enhance their development and capacity to become leaders in their workplaces and communities.

8. Improved Data Collection

There is an urgent need for Canadian policy-makers to address Aboriginal data collection issues. In the absence of systematic data collection it is not possible to accurately measure educational and employment outcomes for the Aboriginal cohort. Determining the effectiveness of particular programs and interventions requires more refined tracking capacity on an expanded set of common indicators that can be utilized across jurisdictions, communities, and education and employment sectors. Such data collection is predicated on a high-functioning identification system for Aboriginal learners, which has yet to be established.

Once robust data systems are established, it will be imperative to allocate resources to building capacity for ongoing data collection, analysis, and sharing at all levels of the system. The development of this expertise will enable all stakeholders to create accurate profiles of progress, identify persistent patterns and barriers to successful transitions, and develop specific programs to address them.

11.2 SUGGESTIONS FOR FURTHER RESEARCH

Based on a review of the literature and the summary of the main findings of this paper, five potential further research topics have been identified.

1. Perspectives beyond the Literature

Given that the project methodology was restricted to a review of the literature, the findings of this report are somewhat limited by the lack of primary research. Conducting systematic surveys and interviews with employers, policy and program officers, instructors, and Aboriginal youth would inform and enhance the analysis of the literature significantly.

Research Topic # 1: Conduct a qualitative analysis of transition issues to address the following:

a. What are the perspectives of Aboriginal people (specifically, community leaders, education officers, economic development officers, and recent graduates) on the barriers to, and the elements of success for, transitions from education to the labour market?

b. What are the perspectives of employers on the barriers to, and the elements of success for, transitions of Aboriginal people from education to the labour market?

c. What are the perspectives of policy and program staff in government departments and agencies and in third-party program delivery agencies on the barriers to, and the elements of success for, Aboriginal people's school-to-work transitions?

2. Longitudinal Studies of Graduates

" [T]he lack of a more frequent survey tracking education trends of the Aboriginal population at a detailed level make[s] it difficult to conduct timely analysis of the situation" (Sharpe et al., 2009). The 1997 National Graduates Survey provided rich information concerning the experiences of recent graduates and compared the experiences of Aboriginal and non-Aboriginal people. In addition, similar studies have been conducted in some provinces, such as British Columbia, while most provinces also conduct annual surveys of graduates of their community college systems. There is an opportunity to develop an integrated, comprehensive pan-Canadian research program that would make use of the data collected by individual provinces and the ongoing National Graduates Survey, with a specific emphasis on providing detailed reporting about the progress of Aboriginal graduates and comparing their progress with that of non-Aboriginal graduates. Coupled with the survey of graduates should be a survey of "leavers" from postsecondary education systems to determine why they leave and whether there are important differences over time between the outcomes for the two groups. The surveys should also probe the adequacy of financial assistance programs. Furthermore, research should examine why Aboriginal female students appear to be more successful at the university level than their male counterparts.

Research Topic # 2: Develop an integrated, long-term study of periodic surveys of graduates to monitor and report changes in the outcomes for graduates and the differences between the outcomes for Aboriginal and non-Aboriginal people.

3. Program Review and Evaluation

It has been noted that there are many different programs and services designed to assist individuals to make the transition from education to the labour force. Some of these are delivered by institutions, some by government, some by communities, and some by sector organizations. However, there appears to be no comprehensive analysis revealing which programs and services work best and why. The literature does identify the elements of successful approaches to supporting the transitions. However, a detailed review of promising programs and a summary of best practices would furnish an important knowledge base.

Research Topic #3: Conduct a comprehensive review of the programs and services designed to support Aboriginal people in their transition from education to the labour force and report on the best practices and models that may be replicated or adapted for use elsewhere.

4. Career Aspirations and Planning Supports

Relatively little reliable and large-scale information exists in the literature concerning the career aspirations and potential of Aboriginal youth. There is a need to understand the career aspirations of different subgroups and age categories of Aboriginal youth as well. Research on the career aspirations of Aboriginal youth — including what they desire, where they draw their inspiration from, their awareness of possibilities, and their awareness of the range of planning and information supports available to them — would go a long way toward helping educators, counsellors, and employers provide appropriate information, guidance, and services to these youth. Additionally,

there is a pressing need to provide more systematic and culturally sensitive career development and planning programs for all Aboriginal youth, and to provide those services over a longer continuum (including postsecondary). A review of the components of high-quality programs, their scope and sequence, associated supports, and best practices could establish useful guidance and standards for strengthening programs in Canada.

Research Topic #4: Undertake a review of models of high-quality career planning programs and services for Aboriginal youth to determine their essential components, scope and sequence, associated supports, and best practices in the delivery of career guidance services. The review should draw in part from recent Australian and New Zealand literature and programming in this field. It should engage relevant stakeholders in the process, with a view to developing recommendations that can be widely supported in the field.

5. Recruitment and Retention of Aboriginal Employees

Some discussion has taken place in the literature about the strategies used by some employers to attract and retain Aboriginal employees, but questions remain about effective approaches. There is also some discussion in the literature about lower retention rates for Aboriginal people but little in the way of concrete evidence. Understanding more about these issues, from the perspectives of both employers and employees, would be useful in designing human resource strategies to improve employment success for Aboriginal workers.

Research Topic #5: Explore strategies for attracting and retaining Aboriginal employees:

a. What recruitment strategies work best? Are there specific sectors that appear to have more success or that are in need of support to recruit Aboriginal employees?

b. What are the specific needs of Aboriginal employees that would, if met, enhance their attachment to an employer or to the labour market more generally?

c. What do employers need to know about the issues related to retention of Aboriginal employees and what resources do they need to retain them?

d. What are employers' perceptions and beliefs about potential Aboriginal employees? To what extent do these perceptions and beliefs reflect biases and prejudice?

APPENDIX

SAMPLE PROGRAMS TO SUPPORT YOUTH IN TRANSITION

This appendix provides a brief profile of the transition programs listed in Figure 5.2 (page 29). It is not intended to be a comprehensive list of available programs but rather to illustrate the variety of models that exist and the breadth of services that may be set in place to support Aboriginal youth in transition.

Collegiate Model School: Winnipeg, MB

The Collegiate Model School is a pilot project at the University of Winnipeg designed to serve at-risk youth who show potential but who have dropped or been pushed out of mainstream education. Through referrals from inner-city schools and community organizations, the Model School enrols 30 students in Grades 9–12. The majority are Aboriginal youth no longer living at home who require a safe place to learn while dealing with such issues as poverty, pregnancy, substance abuse, chronic truancy, emotional disturbances, and low self-esteem. Each is assessed and placed on an individualized learning plan where personal goals, barriers, and solutions are identified. The Model School is housed in the top floor of the Collegiate, a private school with a rigorous academic focus and an enriched arts and sports program. Model School students take their Grade 10–12 classes at the Collegiate and participate fully in intramural activities, while the Grade 9s receive core instruction from the three Model School staff. Students also earn credits toward graduation through driver education, first aid, CPR, and babysitting courses and community service activities, and receive training and summer employment through the University of Winnipeg as senior camp leaders. Students receive assistance with such matters as applying for a SIN card, driver's licence, Aboriginal status card, and birth certificate; living expenses; pre-natal classes; nutritious food; building a résumé; and locating job opportunities. Model School students earn 'tuition credits' toward the cost of their postsecondary education from the *University of Winnipeg's Opportunity Fund*, which rewards students for each school year successfully completed and for participating in extracurricular activities in their communities. Since the school opened in 2008, 15 students have earned their high school diplomas.

For more information: http://www.uwinnipeg.ca/index/news-quick-facts-model-school

Individual Learning Centre: Whitehorse, YK

The Individual Learning Centre (ILC) provides a safe, flexible, and supportive environment where youth aged 15–21 years who have dropped out of school can re-engage in their studies to complete their secondary education. Since the Centre opened in 2005, its enrolment has grown to 201 students, of whom 106 are First Nations. The Centre is designed to serve 'disenfranchised youth' in Whitehorse: school dropouts, consistent underachievers, chronic non-attenders, and those with social, emotional, and economic problems that interfere with learning. For each enrolling student, the first priority of ILC staff is to establish a relationship that demonstrates acceptance, understanding, and support. The ILC delivers a wide variety of programs leading to a General Education Diploma or a High School Diploma through self-paced curriculum modules, distance learning, and flexible and extended hours. The curriculum incorporates active learning experiences, Aboriginal culture and language, and exposure to career opportunities through such activities as art, physical education, community service, textiles, music, guitar carving, and woodworking. Work experience placements, pre-employment programs, and career placement programs are incorporated into students' education plans. The

curriculum is augmented by the inclusion of First Nation Elder support, Southern Tutchone language, and First Nations cultural content in English and Communications courses. The ILC staff includes a team leader, two full-time teachers, and 1.5 full-time equivalent remedial tutors, as well as a First Nations curriculum consultant who provides students the opportunity to explore First Nation curriculum content as part of their core academics. Since the Individual Learning Centre opened in 2005, 132 students have completed their graduation program requirements at the ILC; 69 of these were First Nations students.

Source: Whitehorse School Div. #1 (2011). *Individual Learning Centre School Growth Plan* 2011-2012.

Youth Opportunity Grants Program: United States

The Youth Opportunity Grants Program (2000–2005) was one of America's largest investments in community-based projects to address school-to-work barriers for youth in low-income neighbourhoods. During the span of the program, Youth Opportunities projects in 36 high-poverty communities collectively enrolled over 90,000 at-risk youth aged 14–21, 48% of whom were school dropouts. Fifteen per cent of program participants (8,867) were Native American.

While delivery models varied widely based on community needs and capacity, YO projects had a number of common features: (a) multiple *Youth Opportunity Centres* that served as points of access offering a safe, youth-friendly environment for information, assessment, and referral and recreational and development activities; (b) *intensive case management* utilizing a core staff of 40–60 youth specialists to assess each youth and develop a personal growth plan; connect them to appropriate educational and other support services; provide assistance with career planning, access to apprenticeships, other postsecondary programs or employment opportunities; and monitor progress to program completion and two years beyond; (c) *dropout prevention and intervention strategies* through formal partnerships with the local school district to provide academic support, monitor attendance, and strengthen engagement; and (d) *partnerships with a network of employers* to provide work experience and training opportunities leading to employment for youth in the program. As well, all YO sites were required to develop connections with alternative education providers for enrolling youth unable to succeed in mainstream settings, and to provide all youth with mentors and leadership development, work experience, and community service opportunities as part of their regular programming. Evaluations show that overall, YO had a significant positive effect on reducing the number of disconnected youth who were both out of school and out of work. The YO sites dramatically increased youth participation in academic learning, achieving a high percentage of school completions and postsecondary matriculation. In terms of employment, the YO programs placed 23,652 youth in internships, 28,302 in short-term jobs, 18,456 youth in long-term positions, and 23,478 in job training. Perhaps its greatest legacy was coalescing fragmented community services for youth into a more holistic and coordinated intervention system.

For more information:

Martin, N., & Halperin, S. (2006). *Whatever it takes: How twelve communities are reconnecting out-of-school youth*. American Youth Policy Forum. Washington, DC. http://www.aypf.org/publications/WhateverItTakes/WITfull.pdf

Jackson, Russell, et al. (2007) *Youth opportunity grant initiative: Impact and synthesis report*. http://wdr.doleta.gov/research/FullText_Documents/YO%20Impact%20and%20Synthesis%20Report.pdf

Advancement via Individual Determination (AVID): USA and Canada

AVID is a school-based college-preparatory program targeting low-income, minority, and underserved high school students whose families may have no college background. Originating in the United States in 1980, AVID currently delivers programming in over 4,500 schools worldwide. AVID is designed to improve student access to postsecondary education by raising their expectations, increasing the rigour of their coursework, and supporting their learning through an elective course delivered within the school timetable. This AVID class has three main components: AVID curriculum focused on learning strategies, reading and writing proficiency, and study skills (40 per cent); small group tutorials involving postsecondary mentors (40 per cent); and motivational activities such as speakers, field trips, and campus orientation (20 per cent). The non-profit AVID Center trains educators to deliver the program and certifies sites on their delivery of AVID. By establishing college-bound expectations, effective study strategies, and supportive relationships, AVID has been shown to be effective in preparing Native Americans in US high schools for postsecondary eligibility and success. An AVID project in British Columbia (2005–2010) involved 1,522 students (10 per cent Aboriginal) in 21 high schools from their Grade 8 year to Grade 12. It was designed as a comparative study, with 50 per cent of eligible students randomly assigned to a control group that did not receive the AVID intervention. While the results will not be published until 2012, the AVID program elements of modelling success, personalized academic support, and strong teacher-student connections have been shown in the literature to promote success for Aboriginal students.

For more information:

Watt, Karen, & Lewis, Karen (2010). *AVID: Supporting Native Americans in rigorous courses.* http://www.utpa.edu/avid/Documents/Presentation/Native%20American%20Powerpoint%20final%20version.pdf

Social Research and Demonstration Corporation (2012**).** *BC AVID Pilot Project: Final impacts report*.

Ford, Rueben (2011). *AVID: A potentially promising program for Aboriginal high school students.* PowerPoint presentation to the CMEC Educators' Forum on Aboriginal Education, December 2, 2011.

The Aspiration Initiative: Australia

The Aspiration Initiative (TAI) is an academic enrichment program for Aboriginal and Torres Strait Islander high school students in New South Wales, Victoria, and Western Australia. Launched in 2011, this program provides participants with intensive and ongoing educational support through residential workshops held on university campuses during holiday periods and other supports during the school year. Students remain in the program from the middle of Year 8 to the end of their first year out of high school, receiving at least 200 hours of support annually. The academic enrichment program was developed with wide consultation to ensure an innovative, rigorous and effective program, which integrates Indigenous and non-Indigenous perspectives. TAI works to strengthen participants' academic skills, build their resilience and aspirations, and challenge them to think critically and venture outside their comfort zone. The ultimate aim of the Aspiration Initiative is for all students to be eligible for university upon completion of Year 12. It is co-funded by the Aurora Project and the Charlie Perkins Trust for Children and Students.

For more information: TIA Web site: http://www.auroraproject.com.au/node/465

Early College High School Initiative: United States

The Early College High School Initiative is designed to open doors to postsecondary education for disadvantaged, minority, and first generation college-bound high school youth. The program is based on the principle that academic rigor, combined with the opportunity to save time and money, is a powerful motivator for students to work hard and meet serious intellectual challenges. Early college high schools blend high school and college in a rigorous yet supportive program, compressing the time it takes to complete a high school diploma and the first two years of college. Since 2002, the partner organizations of the Early College High School Initiative have started or redesigned 240+ schools serving more than 75,000 students in 28 states, of whom about 5 per cent are Native Americans. The schools are designed so that low-income youth, first-generation college goers, English language learners, students of colour, and other young people under-represented in higher education can simultaneously earn a high school diploma and an associate's degree or up to two years of credit toward a bachelor's degree — tuition free. Curriculum and program delivery at participating sites are guided by the 'new three Rs' — Rigour, Relationships, and Relevance. External cross- site evaluations of the program show positive effects on student attendance, attitudes, engagement, academic achievement, credit accrual, and college participation.

For more information: http://www.earlycolleges.org/

American Institutes for Research. (2009). *Six years and counting: the ECHSI matures: Fifth annual ECHSI evaluation synthesis report.*

http://www.earlycolleges.org/Downloads/Fifth%20Annual%20Early%20College%20High%20School%20 Initiative%20Evaluation%20Synthesis%20Report.pdf

Martin Aboriginal Education Initiative: Canada

The Martin Aboriginal Education Initiative has established three mentoring streams for Aboriginal high school students. These programs are designed to encourage them to stay in school and to support the development of attitudes, knowledge, and skills necessary to pursue careers in entrepreneurship, banking, or accounting. The *Aboriginal Youth Entrepreneurship Program* offers Grade 11 and 12 students entrepreneurial experience and the opportunity for business ownership. The curriculum is based on the Ontario Senior Business Studies curriculum, supplemented by material developed by the Network for Teaching Entrepreneurship (NFTE) and Aboriginal content, including case studies, teaching strategies, and examples of successful Canadian Aboriginal business leaders. Through hands-on activities, guest speakers, field trips, and business mentors, students learn how to create a product or service-based business. Start-up funding is provided for each micro-business, giving students practical experience in managing and accounting for venture capital. Students are mentored by business people, many of whom are Aboriginal. The program, now in its fourth year, operates in 10 schools in western Canada. Nine schools are involved in MAEI's *Accounting Mentoring Program,* delivered in partnership with the Canadian Institute of Chartered Accountants and participating school boards to mentor Aboriginal youth with aptitude or interest in an accounting career. Students are identified in Grade 9 by their teachers for mentoring by local accounting firms who take an active role in guiding their career development for up to 15 years through various activities including job shadowing, cooperative education placements, summer employment, scholarships/bursaries, and opportunities to article. A parallel *Banking Mentoring Program* was started in Edmonton and Winnipeg in 2010–11 in partnership with Scotiabank. MAEI is tracking the outcomes of these programs and their influence on student success over the long term.

For more information: http://www.maei-ieam.ca/

Australian Indigenous Mentoring Experience (AIME): New South Wales, AU

A mentoring program in New South Wales offered by AIME, an Indigenous not-for-profit charity, is proving to be effective in improving Year 10 to 12 completion and university admission rates for Indigenous students. AIME provides a six-year mentoring program for Indigenous high school students in Years 7 to 12, pairing them with university student volunteers in a one-on-one mentoring relationship for one hour a week over a 17-week program. In 2009, the Year 11 to Year 12 progression rate for AIME participants was 92 per cent, compared with 63 per cent for all NSW Indigenous students. The Year 12 completion rate for AIME participants was 73 per cent compared with 60 per cent for NSW Indigenous students. University admission rates for AIME participants were 11 times the national average.

For more information:

AIME Web site: http://aimementoring.com/public/

Helme, S., & Lamb S. (2011). *Closing the school completion gap for Indigenous students*. http://www.aihw.gov.au/closingthegap/documents/resource_sheets/ctgc-rs06.pdf

Jobs for America's Graduates (JAG): United States

JAG is a comprehensive in-school career education program delivered to over 750,000 American youth at-risk since 1980. JAG's multi-year High School Dropout Prevention Program has a 93 per cent success rate in graduation completion and is widely regarded as one of the most cost-effective solutions for tackling high dropout rates, low academic performance, youth unemployment, and social issues experienced by young people with significant barriers to success. Students enrolled in the program attend JAG classes during the 9th, 10th, 11th, and/or 12th grade and receive support services for one year after graduation. The intervention lasts up to 60 months, with contact time of one hour a day, 5 days a week for 36 weeks, plus summer. The key to JAG's apparent success is the job specialist, who is trained to administer the highly structured JAG curriculum and establishes close bonds with students by acting as teacher, coach, mentor, job placement counsellor, and role model. Classroom learning (individual and group) is based on the JAG National Curriculum, which consists of 84 competency-based modules. Eight major modules cover career development, job attainment, job survival, basic academics, leadership and self-development, personal skills, life survival, and workplace competencies. The specialists deliver an array of counselling, employability skills development, career association, job development, and job placement services to students. Other program elements include mentors, tutors, field trips, service-learning, community-based projects, guest speakers, and job shadowing. The cost for the in-school program ranges from $1,200 to $1,800 per participant. JAG also delivers a Senior Year Program and a Middle School Program. JAG's Dropout Recovery Program provides out-of-school youth ages 15–21 with preparation for a GED or high school diploma, employability skills, and occupational-specific training through a community college, placement in a quality job leading to career advancement opportunities, and 12 months of post-completion follow-up services. The United States Bureau of Indian Education is currently in discussions with JAG to implement programming in its schools.

For more information: Jobs for America's Graduates Web site: http://www.jag.org/jag-model/out-of-school

Jobs for America's Graduates. PowerPoint briefing prepared for Bureau of Indian Education leaders, January 2012.

Pathways to Education Canada: Canada

Pathways to Education Canada delivers a comprehensive community-based program designed to assist students in low-income communities overcome a variety of barriers to educational success. Participants enrolled in the program receive integrated multi-year supports that have proven instrumental to improving graduation rates and transition to postsecondary education for disadvantaged youth. The Pathways to Education Program was developed by the Regent Park Community Health Centre and first implemented in Toronto in 2001. Currently, the program enrols 3,380 students in 11 communities in Ontario, Quebec, Nova Scotia, and Manitoba and is anticipated to expand to 19–20 communities across Canada by 2015. Students who enrol in the program for Grades 9–12 receive comprehensive support through mentoring and career counselling, academic tutoring, an individually assigned case worker, and up to $4,000 in scholarship funding and assistance with transportation, meals, school supplies, and other costs. In exchange for this support, students and parents must sign a contract in which they agree to comply with the program requirements related to school attendance and program participation. Each Pathways location has a program director, student-parent support workers, and program coordinators who work closely with the school system. Evaluations of the Pathways program in 2006 and 2011 show it has improved academic achievement and attendance, reduced dropout rates by more than 70 per cent, and increased the number of youth going on to college or university by over 300 per cent.

Pathways to Education – Winnipeg, established in 2010, has a particular focus on meeting the needs of Aboriginal students who constitute over 75 per cent of those enrolled in the program. As a result, several modifications were made to the Pathways model at this site. Student-staff ratios are lower, and the programming reflects the more holistic approach of the Medicine Wheel, including hot dinners five days a week; mentorships that focus on health, wellness, and culture; outreach to extended families; and stronger cultural focus in activities including the involvement of Elders. The central elements of the Pathways programming — counselling and mentoring, academic tutoring, adult support worker, and financial assistance — remain unchanged. In its second year of operation, the program serves 240 Grade 9 and 10 students and a small cohort of senior students.

For more information:

Pathways to Education Canada Web site: http://www.pathwaystoeducation.ca/about.html

Boston Consulting Group (2011). *Assessment of Pathways to Education: Executive Summary.*

Pathways to Education Backgrounder http://www.pathwaystoeducation.ca/PDF/Pathways%20to%20 Education%20Backgrounder%20-%20FEB%202011.pdf

Wayfinders: Winnipeg, MB

Wayfinders is a community-based outreach program for at-risk students from Winnipeg's Elwick and Watson Street neighbourhoods, offering comprehensive supports designed to enable them to graduate from high school and transition successfully to postsecondary education or training. Currently in its fourth year of operation, Wayfinders enrols 200 students in Grade 9–12, of whom more than 20 per cent are Aboriginal. The Wayfinders Program Centre is open year-round, six days a week in late afternoons and evenings, where a hot meal is served and volunteer tutors help students with their studies and volunteer mentors share their interests and hobbies and expose students to various areas of study or career paths with a commitment of 2–10 hours a month. In addition to supporting their daily homework challenges and helping students earn credits toward graduation, Wayfinders' staff spend two hours each day in the local high schools to provide a more integrated

support network for program participants. Wayfinders' programming also includes leadership activities and community service, summer enrichment programs, and financial incentives. Each student is assigned to a Student Parent Support Worker (SPSW), who works with student and family throughout the year to help with short-term incentives, personal and academic goals, and becoming connected in the community. Students who enrol in the program are required to engage in three hours of compulsory tutoring each week, maintain high attendance and a 70 per cent average in their courses, participate in mentorship activities with their SPSW and community mentors (4 hours/month), and undertake community service or volunteer work. Students who fulfill these commitments and earn the required number of course credits per grade level receive a scholarship award of $1,000 per year, to be held in trust and used for postsecondary education. Short-term incentives such as tickets, lesson fees, and equipment encourage participants to explore their interests and develop their talents in arts, sports, and cultural activities. The most recent annual report for Wayfinders (formerly called Bright Futures) notes that 80 per cent of participants are on track for successful graduation and that there is a strong correlation between year-long participation in mentorship experiences and success in school. Wayfinders is supported through a funding partnership between the Province of Manitoba, The Winnipeg Foundation, and the Seven Oaks School Division.

For more information:

Bright Futures (Wayfinders) 2010-2011 Year-end Report. Seven Oaks School Division, Winnipeg.

http://www.wayfindersmanitoba.com/sites/default/files/Bright%20Futures%20Program%20Year%20End%20July%202011.pdf

Follow the Dream: Western Australia

Follow the Dream was launched in 2004 to help secondary Aboriginal students reach their career and employment potential by graduating from high school and achieving university entrance. The program is a comprehensive model of support, currently being delivered to some 700 students at 24 host schools in Western Australia. Each site has a full-time coordinator to manage the program, which provides Aboriginal students with tutoring assistance with homework, study habits, and goal setting; an individual education plan; a mentor to review their school progress and general well-being; regular updates on academic performance; educational excursions to develop confidence and skills; a Learning Centre for after school study and career guidance; and regular contact with parents and teachers regarding academic progress. Each student agrees to attend the Learning Centre after school at least two afternoons each week to receive assistance with their school work from ITAS (Indigenous Tutorial Assistance Scheme). Follow the Dream is built on partnerships between the Western Australian Department of Education and Training, the Graham Farmer Foundation, and industry, which provides funding, leadership development, post-school training, and employment opportunities for graduates. In 2010, Follow the Dream participants accounted for 50 per cent of Aboriginal students in WA public schools achieving university entrance. Longitudinal studies have found that program attendance rates consistently exceeded state averages. When data from these studies were compared to national data on Aboriginal outcomes, it was found that program graduates were more than twice as likely to have completed Year 12, to have undertaken postsecondary study, or to be employed full-time, earning above median incomes.

For more information:

Follow the Dream Web site: http://www.whatworks.edu.au/dbAction.do?cmd=displaySitePage1&subcmd=select&id=140#2

Galloway, A., Gower, G., & Partington, G. (2009). *A longitudinal research study of the Follow the Dream/ Partnerships for Success Project*. Edith Cowen University. Western Australia. http://www.cdesign.com.au/ proceedings_niec2009/Approved%20for%20web/Galloway_Ann_Alongitudinalresearchstudy.pdf

Aboriginal TRU Start: Kamloops, BC

This new program combines a dual credit arrangement with mentoring to encourage Aboriginal youth to participate in postsecondary education and provide the sense of belonging and support that has been found important to their success in making this transition. Aboriginal TRU Start is a collaboration between Thompson Rivers University (TRU) and the Kamloops School District. In its inaugural year (2012), it pairs a cohort of 13 Grade 12 First Nations students with trained peer mentors who are senior Aboriginal students at TRU. During the winter semester, the Grade 12 students are enrolled tuition-free in three first-year university courses with significant Aboriginal content: math, English, and biology. On completion, course credits are recognized for high school graduation requirements and as partial completion of first-year university. At the outset of the semester, TRU hosts a three-day orientation to promote bonding between students and their mentors, who provide academic and peer support throughout the February to April term. Regularly scheduled cohort study blocks and mentoring activities will taper off as the students make a successful transition.

For more information:

Thompson Rivers University and School District #73. TRU Start Aboriginal Cohort brochure, January 2012.

Punnichy High School Career Transition Program: Horizon School Division, SK

This locally designed vocational program has realized continuous growth and success for First Nations students since its inception in 2009. The Career Transition program offers accredited hands-on training in employment skills as an alternative to the standard Grade 9–12 curriculum for Punnichy Secondary School's 180 students, 100 per cent of whom are First Nations. High-school students and unemployed youth can earn credits toward their high school diploma or industry standard certification and gain experience and skills that will help them to succeed in the next stage of their careers. The Punnichy program currently provides courses and work experience modules in travel and tourism, carpentry, and human services. The initiative began as a partnership between the New Horizons School Division, three local First Nations, and the Saskatchewan Ministry of Education. The number of partners involved has expanded with the scope of the project to include local and regional industries, colleges, and several federal government departments. The program has resulted in significantly improved retention and graduation rates at Punnichy Secondary School and increased employment opportunities for graduates.

For more information:

Punnichy Community High School Career Transition Program. http://hzsd.ca/Programs/careertransition/

Bedel, L., & Nurse, D. (2011) *Punnichy Community High School Career Transition Program*.
PowerPoint slide presentation to CMEC Forum on Aboriginal Education, Winnipeg, December 2, 2011.

Registered Apprenticeship Program (RAP): Alberta

RAP is a modified apprenticeship program that permits high school students to start a career in the trades while attending school as a full-time student. Over 50 trades participate in the program, offering students access to a wide variety of trades and vocational training. RAP apprentices are hired by an employer and paid an apprentice

wage while accumulating hours of on-the-job training as credit toward their high school diploma. Their hours of work are flexible, as determined by the employer, school, and student, and may involve school time (half days, alternating days, or rotating semesters), as well as after hours and vacations. RAP students who have completed a minimum of 250 hours of on-the-job training and work experience in their chosen trade are eligible for $1,000 RAP scholarships to encourage them to continue their apprenticeship training after graduation. In September 2011, there were 74 Aboriginal students enrolled in one of 23 trades training opportunities offered through RAP. Since the program's inception, 45 Aboriginal students have attained high school graduation through this option and are now employed full-time in a trade. Youth in Transition to Apprenticeship (YITTA) is a related program to assist out-of-school youth over 18 years of age in finding employment as an apprentice in a chosen trade and to provide support up until the completion of their apprenticeship.

For more information:

Registered Apprenticeship Program: http://www.tradesecrets.alberta.ca/forms_publications/brochures_flyers/pdf/rap_brochure.pdf

RAP apprenticeship statistics provided by Alberta Enterprise and Advanced Education, January 20, 2012

Indigenous Youth Mobility Program: Australia

Life chances for many Indigenous youth are severely limited by the availability of local training and employment opportunities. The national Indigenous Youth Mobility Program (IYMP), established in 2006, addresses this opportunity gap by financially supporting young people aged 16–24 who move away from home to gain the qualifications they need to obtain sustainable employment in their home community or elsewhere. IYMP participants are encouraged to undertake practical pathways to qualifications including apprenticeships and vocational education and training (VET) modules. IYMP providers at host locations provide the support necessary to smooth participants' transition and retain them in the program. Financial assistance may include accommodation and travel costs, course fees, access to professional services, licences, clothing, incidentals, and assistance in applying for allowances and scholarships. The IYMP program also provides mentoring, career guidance, and other practical supports including literacy, numeracy, and life skills to help these youth complete their qualifications. When comparing the outcomes of IYMP to similar programs such as VET, IYMP has approximately three times as many successful course outcomes per 100 participants in any year.

For more information:

Commonwealth of Australia. (2009). *Indigenous Education Targeted Assistance Act 2000: Program Guidelines 2009-2012*. Department of Education, Employment and Workplace Relations. http://www.deewr.gov.au/Indigenous/Schooling/Programs/SportingChance/Documents/IETAGuidelines.pdf

Stoney Adventure Group Experience (SAGE) Program: Canmore, Alberta

The Stoney Adventure Group Experience (SAGE) program at Canmore Collegiate High School (CCHS) is designed to help Aboriginal youth transitioning to high school from the Stoney and other nearby reserves develop the resiliency, confidence, and skills they need to overcome the challenges they face. The difficulty of this transition is indicated in statistics showing that only 10 of 25 Aboriginal students who entered Grade 9 made it to Grade 12. In 2008, SAGE received Outward Bound Canada funding to pilot a youth development program that included expeditionary and service learning experiences over the school year. Led by the school's Aboriginal liaison teacher who was an experienced Outward Bound instructor, the SAGE pilot had a positive impact on student achievement, attendance, and engagement and received additional funding. The 2010/11

SAGE program had cohorts in Grade 9 and Grade 10. The school year began with mountain expeditions and personal and group goal-setting activities. Relationship building is central to the program, and each student was responsible for holding themselves and others accountable through daily check-ins, regular group meetings, and family nights. They also undertook monthly "learning adventures" such as self-expression through theatre improvisation, an avalanche course, and a snowboarding adventure. Throughout the year they worked on their goals and dreams while rock-climbing, hiking, snowshoeing, and skiing and finished the school year with a sea-kayaking adventure. Preliminary program results are encouraging. Based on 2011 data, the Grade 9 SAGE cohort experienced 100 per cent retention to Grade 10, compared with a 50 per cent retention rate for the non-SAGE cohort. Provincial exam results indicate that 17 of 32 Stoney youth enrolled at CCHS passed all of their core courses, and seven achieved graduation, the highest numbers in the history of the school.

For more information:

Outward Bound Canada. *Successful Approach to Educating Aboriginal Youth in Canmore*.

http://www.outwardbound.ca/freshtracks0311.asp

Hamish MacLean. 'Stoney Adventure rolls on at Canmore High.' Canmore Leader archived article. (ND)

http://www.canmoreleader.com/ArticleDisplay.aspx?e=2991324&archive=true

Horvath, Jeff. *The SAGE Program: Using wilderness to improve First Nation school completion rates*. PowerPoint presentation to the CMEC Forum on Aboriginal Education in Winnipeg, December 3, 2011.

Sporting Chance Academies: Australia

Established in 2007, this Australian program uses sports and recreation as a vehicle to engage at-risk Indigenous youth in schooling. Sporting Chance is designed to increase student attendance, engagement, and achievement; retention to Year 12 or its vocational equivalent; and family/community involvement with students' educational progress. A major component of the program is the establishment of school-based sports academies for at-risk secondary youth. Operating in partnership with a registered school, each academy focuses on sports and recreation-related subjects to provide flexible programming for approximately 50–100 participating students while requiring them to meet specified attendance and educational goals. In 2011, 22 providers delivered 64 projects under the Sporting Chance Program, reaching some 11,000 students at risk of not completing their schooling. An external evaluation in 2011 indicates the Sporting Chance Program is meeting its objectives, demonstrating "a moderate positive impact on students in relation to attendance, engagement, achievement, retention and parental/community involvement." (4)

For more information:
Sporting Chance Program: http://www.deewr.gov.au/Indigenous/Schooling/Programs/SportingChance/Pages/default.aspx

Australian Council for Educational Research. (2011). *Evaluation of the Sporting Chance Program*. http://research.acer.edu.au/policy_analysis_misc/14/

References

Aboriginal Human Resource Council. (2007). *Why Aboriginal people leave their jobs*. http://www.aboriginalhr.ca/en/resources/getstarted/leavejobs

Aboriginal Human Resource Council. (2009a). *Aboriginal labour market strategies: Increasing return and productivity.* Discussion paper presented at the 8th Annual Champions' Meeting. Saskatoon: Author.

Aboriginal Human Resource Council. (2009b). *Tips for hiring Aboriginal employees*. Racism Free Workplace Strategy. http://www.aboriginalhr.ca/en/programs/RFWS/nl1/5

Aboriginal Human Resource Council. (2011). *The inclusion continuum: Creating workplaces of choice for Aboriginal talent*. Ottawa: Author. http://www.aboriginalhr.ca/en/programs/MAI/explore

Ajunnginiq Centre. (2004). *What sculpture is to soapstone, education is to the soul: Building capacity of Inuit in the health field*. Ajunnginiq Centre.

Akpovire, O., & Bhola, H.S. (Eds.). (2006). *Widening access to education as social justice*. Springer. UNESCO. Netherlands.

Alberta Education. (2007). *The First Nations, Métis and Inuit School–Community Learning Environment Project — Promising practices report*. Edmonton, AB: Author, First Nations, Métis and Inuit Services Branch. http://education.alberta.ca/media/164304/sclep%20promising%20practices%20report.pdf

Alberta Advanced Education. (2006). *Setting the direction: Partners in action: First Nations, Métis and Inuit learning access and success*. Edmonton: Author.

Alford, K., & James, R. (2007). *Pathways and barriers: Indigenous schooling and vocational education and training participation in the Goulburn Valley region*. Adelaide: National Centre for Vocational Education and Research.

Alton-Lee, A. (2003). Quality teaching for diverse students in schooling: Best evidence synthesis. Wellington: Ministry of Education. http://www.educationcounts.govt.nz/publications/series/2515/5959

American Youth Policy Forum (2011). *Key considerations for serving disconnected youth: Policy brief: July 2011.* Washington, DC. http://www.aypf.org/publications/documents/DY%20Paper%207.19.11.pdf

Antone, E. (2003). Culturally framing Aboriginal literacy and learning. *Canadian Journal of Native Education, 27*(1).

Arthur, W.S., & David-Petero, J. (2000). *Career aspirations and orientation to work: Young Torres Strait Islanders, 1999.* Canberra: Centre for Aboriginal Economic Policy Research.

Assembly of First Nations. (2005). *First Nations education action plan*. Ottawa: Author.

Assembly of First Nations. (2007). *First Nations regional longitudinal health survey 2002–2003: Results for adults, youth and children living in First Nations communities* (2nd ed.). Ottawa: Author/First Nations Information Governance Committee.

Assembly of First Nations (2009a). *It's our time: Strategic investments to support First Nations. Pre-budget submission to the House of Commons Standing Committee on Finance, August 13, 2009.*

Association of Canadian Community Colleges. (2011). *Driving Canada's long-term prosperity*. Submission to the House of Commons Standing Committee on Finance 2012-2013. http://www.accc.ca/xp/index.php/en/comm/briefs-papers/389-finance2012-2013pre-budget

Association of Canadian Community Colleges. (2010). *Colleges serving Aboriginal learners and communities 2010 environmental scan: Trends, programs, services, partnerships, challenges and lessons learned.* Ottawa: Author. http://www.accc.ca/xp/index.php/en/advocacy/aboriginal

Association of Canadian Community Colleges. (2005). *Meeting the needs of Aboriginal learners: An overview of current programs and services, challenges, opportunities and lessons learned.* Ottawa: Author.

Association of Universities and Colleges of Canada. (2010). *Answering the call: The 2010 directory of Canadian university programs and services for Aboriginal students.* Ottawa: Author.

http://www.aucc.ca/wp-content/uploads/2010/06/aboriginal-directory-repertoire-autochtone-2010.pdf

Association of Universities and Colleges of Canada (2011). *Submission to the National Panel on First Nations Elementary and Secondary Education.* Ottawa: Author. http://www.aucc.ca/wp-content/uploads/2012/02/partners-for-a-brighter-future-k-12-aboriginal-panel-aucc-submission-dec-2011.pdf

Audit and Assurances Branch (2010). *Formative evaluation of the Postsecondary Education Program: Final report, February 2010.* Ottawa: Indian and Northern Affairs Canada. http://www.aadnc-aandc.gc.ca/aiarch/arp/aev/pubs/ev/psep/pse-eng.asp#exe

Australian Government. Department of Education, Employment and Workplace Relations. National Partnership on Youth Attainment and Transitions. (2011). *Youth attainment and transitions annual report 2011.* http://www.deewr.gov.au/Youth/YouthAttainmentandTransitions/Documents/NSW_AnnualReport.pdf

Barsh, L.R. (1994). Canada's Aboriginal peoples: Social integration or disintegration. *Canadian Journal of Native Studies, 14*(1), 1–46.

Balatti, J., Gargano, L., Goldman, M., Wood, G., & Woodlock, J. 2004. *Improving Indigenous completion rates in mainstream TAFE*. NCVER/ ANTA, Canberra.

Battiste, M. (2005). *State of Aboriginal learning: Background paper for the National Dialogue on Aboriginal Learning*, November 13–14, 2005. Ottawa: Canadian Council on Learning.

Battiste, M., Bell, L., & Findlay, L.M. (2002).Decolonizing education in Canadian universities: An interdisciplinary, international, Indigenous research project. *Canadian Journal of Native Education*, *26*(2), 82–201.

BC Ministry of Advanced Education. (2002). *2001 BC college and institute Aboriginal former student outcomes.* Victoria, BC. http://outcomes.bcstats.gov.bc.ca/Libraries/DACSO_Special_Reports/2001_Aboriginal_pdf.pdf

Bell, D., & O'Reilly, E. (2008). *Making bridges visible: An inventory of innovative, effective or promising Canadian school-to-work transition practices, programs and policies*. Ottawa: Canadian Council on Learning's Work and Learning Knowledge Centre.

Berger, J., Motte, A., & Parkin, A. (2007). *The price of knowledge: Access and student finance in Canada* (2nd ed.). Montreal: Canada Millennium Scholarship Foundation.

Berger, A. & Cole, S. (2009). *Six years and counting: The ECHSI matures. Fifth annual Early College High School Initiative evaluation synthesis report.* Washington, DC: Prepared by the American Institutes for Research for the Bill and Melinda Gates Foundation. http://www.air.org/files/ECHSI_Eval_Report_2009_081309.pdf

Bezanson, L. (2008). *Career development. From under-represented to inclusive: Opening doors to postsecondary participation*. Montreal: Canadian Millennium Scholarship Foundation.

Bibby, R. (2009). *The emerging millennials*. Lethbridge, Alberta : Project Canada Books.

Biddle, N. (2010). *A human capital approach to the educational marginalisation of Indigenous Australians*. Working paper No. 67/2010. Canberra, ACT: Centre for Aboriginal Policy Research, Australian National University.

Retrieved from http://caepr.anu.edu.au/Publications/WP/2010WP67.php

Biddulph, F., Biddulph, J., & Biddulph, C. (2003). *The complexity of community and family influences on children's achievement in New Zealand: Best evidence synthesis*. Wellington: Ministry of Education. http://www.educationcounts.govt.nz/__data/assets/pdf_file/0006/7692/bes-community-family-influences.pdf

Bishop, R., & Berryman, M. (2006). Culture speaks: Cultural relationships and classroom learning. Wellington: Huia Press.

Bishop, R., Berryman, M., Cavanagh, T., & Teddy, L. (2007**)**. *Te Kotahitanga Phase 3 Whanaungatanga: Establishing a culturally responsive pedagogy of relations in mainstream secondary school classrooms.* Wellington: Ministry of Education. http://www.educationcounts.govt.nz/publications/Māori_education/english-medium-education/9977/9454

Bishop, R., et al. (2009). Te Kotahitanga: Addressing educational disparities facing Māori students in New Zealand. *Teaching and Teacher Education.* November 2009, 1–9*.*

Boswell, E. (1997). Following their dreams: Native American students pursuing medical school. *Winds of Change,* Winter, 46–48.

Boyd, S., & McDowall, S., & Ferral, H. (2006*). Innovative pathways from school: Taking the first step*. Wellington, NZ: New Zealand Council for Educational Research. http://www.nzcer.org.nz/system/files/15017.pdf

Brandt, P. (2011). *Attracting diversity and advancing inclusion furthers enterprise growth*. Ottawa: Aboriginal Human Resources Council. http://www.hr.uottawa.ca/hrinfo/2011/01/first_nations.php

Brandt, E.A. (1992, January). The Navajo area student dropout study: Findings and implications. *Journal of American Indian Education, 31*(2), 48–63.

Brigham, S., & Taylor, A. (2006). Youth apprenticeship programs for Aboriginal youth in Canada: Smoothing the path from school to work? *Canadian Journal of Native Education, 29*(2), 165–181.

Brinson, D., Hassel, B., and Rosch, J. (2008). *Connecting youth through multiple pathways*. A preliminary field scan prepared for The Annie E. Casey Foundation (a PowerPoint report). http://www.ytfg.org/documents/Disconnected20Youth20Field0Scan2009.pdf

Brown, D. (2003, December 15). Overcoming sense of exclusion is key to making inroads in mainstream jobs. *Canadian HR Reporter*, 9–12.

Brown, J., Rodger., S., & Fraehlich, C. (2009). *School experiences of Aboriginal youth in the inner city.* Canadian Council on Learning.

http://www.ccl-cca.ca/pdfs/FundedResearch/Brown-SchoolExperiencesFullReport.pdf

Brunnen, B. (2003). *Achieving potential: Towards improved labour market outcomes for Aboriginal people* (Building the New West Project Report No. 19). Calgary: Canada West Foundation.

Burlton, D. & Drummond, D. (2009, June 11). *Aboriginal people in Canada*: *Growing mutual economic interests offer significant promise.* TD Bank Group, Economic Report.

http://www.td.com/document/PDF/economics/special/td-economics-special-db0609-aboriginal.pdf

Business Development Bank of Canada (2012). *Aboriginal Summer Student Internship Program*.

http://www.bdc.ca/en/i_am/aboriginal_entrepreneur/bdc_initiatives/Pages/aboriginal_summer_student.aspx

Canadian Apprenticeship Forum. (2011). *Promoting essential skills and apprenticeship training in Aboriginal communities across Canada*. http://www.caf-fca.org/pdf/report/Promoting_Essential_Skills_And_Apprenticeship_Training_In_Aboriginal_Communities_Across_Canada.pdf

CAUT (Canadian Association of University Teachers). (2010). Fate of First Nations University rests in the federal government's hands.

Retrieved from http://www.caut.ca/pages.asp?page+873

Canadian Council for Aboriginal Business. (2011). Progressive Aboriginal Relations Program. http://www.ccab.com/progressive_aboriginal_relations_par

Canadian Council on Learning. (2007a). The cultural divide in science education for Aboriginal learners. *Lessons in Learning.*

Retrieved from http://www.ccl-cca.ca/pdfs/LessonsInLearning/Feb-01-07-The-cultural-divide-in-science.pdf

Canadian Council on Learning. (2007b). *Redefining how success is measured in First Nations, Inuit and Métis learning*. Ottawa: Author.

Canadian Council on Learning. (2008). *Students on the move: Ways to address the impact of mobility among Aboriginal students*. Ottawa, ON: Author. http://www.ccl-cca.ca/pdfs/LessonsInLearning/May-15-08-Students-on-the-m.pdf

Canadian Council on Learning (2009). *Retention of Aboriginal students in post-secondary institutions in Atlantic Canada: An analysis of the supports available to Aboriginal students.* Retrieved from http://www.ccl-cca.ca/pdfs/FundedResearch/Timmons-FinalReport.pdf

Canadian Labour Force Development Board (1999). *Aboriginal participation in apprenticeship: Making it work!* Ottawa: Author. http://www.education.gov.yk.ca/pdf/aboriginal_apprenticeship.pdf

Canadian Tourism Human Resource Council. (2007, May 2). *Successful integration of Aboriginal employees* [PowerPoint slides]. Presented at the Tourism Human Resource Forum, Vancouver.

Centre for Education Information. (2002). *2001 BC college and institute Aboriginal former student outcomes: Special report on Aboriginal former students from the 1995, 1997, 1999, and 2001 BC College and Institute Student Outcomes Survey*. Victoria: Author.

Chapple, S. (2000, December). Māori socio-economic disparity. *Political Science, 52*(2), 101–115.

Christensen, S., Reschley, A., & Wylie, C. (2012). *Handbook of research on student engagement*. Springer.

Ciceri, C., & Scott, K. (2006). The determinants of employment among Aboriginal peoples. In J.P. White, Wingert, S., & Maxim, P. (Eds). *Aboriginal policy research: Moving forward, making a difference, Volume 3* (pp. 3–34). Toronto: Thompson Educational Publishing.

Claes, R., & Clifton, D. (1998). *Needs and Expectations for Redress of Victims of Abuse at Native Residential Schools.* Retrieved September 11, 2012, from http://epe.lac-bac.gc.ca/100/200/301/lcc-cdc/needs_expectations_redres-e/pdf/sage-e.pdf

Commonwealth of Australia. (2011.) *Overcoming Indigenous disadvantage: Key indicators 2011, overview*. Steering Committee for Review of Government Service Provisions, Canberra, AU. http://www.pc.gov.au/__data/assets/pdf_file/0010/111610/key-indicators-2011-overview-booklet.pkdf

Construction Sector Council. (2005). Study of Aboriginal participation in the construction industry. Ottawa. http://www.aboriginaltrades.ca/en/files/Aboriginal_summary_e.pdf

Consulbec. (2002). *Connecting the dots: A study of perceptions, expectations and career choices of Aboriginal youth*. Saskatoon: Aboriginal Human Resource Council.

Corporate Knights. (2009, Spring). *The 2009 Aboriginal relations ranking*: Extractive Industries. *Corporate Knights, 27.* http://static.corporateknights.com/Aboriginal_Relations_Ranking.pdf

Cottrell, M. (2010, December). Indigenous education in comparative perspective: Global opportunities for reimagining schools. *International Journal for Cross-Disciplinary Subjects in Education, 1*(4).

Craven, R.G. (2006). Turning Indigenous secondary students' educational disadvantage around: How psychologists can begin to make a real difference. *Australian Community Psychologist, 18*(1), 14–22.

Craven, R.G., Tucker, A., Munns, G., Hinkley, J., Marsh, H., & Simpson, K. (2005). *Indigenous students' aspirations: Dreams, perceptions and realities*. Canberra: Department of Education, Science and Training, Commonwealth of Australia.

Craven, R. (ND). *Turning points in Indigenous education: New findings that can really make a difference and implications for the next generation of Indigenous education research*. Paper CRA05318. SELF Research Centre, University of Western Sydney, AU.

Retrieved from http://www.aare.edu.au/05pap/cra05318.pdf

Crooks, C., Chido, D., & Thomas, D. (2010). *Engaging and empowering Aboriginal youth: A toolkit for service providers*. (2nd ed.) Produced for the Public Health Agency Canada. http://youthrelationships.org/documents/!Toolkit%20Text%20-%20English.pdf

Crump, D. (2001). Issues in Indigenous educational and vocational counselling. *Australian Journal of Career Development, 10*(3), 20–21.

DeVoe, J.F., & Darling-Churchill, K.E. (2008). *Status and trends in the education of American Indians and Alaska Natives: 2008* (NCES 2008-084).Washington, DC: National Center for Education Statistics, Institute of Education Sciences, U.S. Department of Education. http://nces.ed.gov/pubs2008/2008084_1.pdf

Devries, K. M., Free, C. J., Morison, L., & Saewyc, E. (2009). Factors associated with the sexual behavior of Canadian Aboriginal young people and their implications for health promotion. *American Journal of Public Health, 99*(5), 855–862.

Dibbs, R., & Leesti, T. (1995). *The survey of labour and income dynamics: Visible minorities and Aboriginal peoples* (Catalogue no. 95-08). Ottawa: Statistics Canada.

Dollard, J., Stewart, T., Fuller, J., & Blue, I. (2001). Aboriginal health worker status in South Australia. *Aboriginal and Islander Health Worker Journal*, *25*(1), 28–30.

Dusseldorp Skills Forum (2009). *Keeping Up: Strengthening transitions from education into work for Indigenous young people.* Melbourne: Dusseldorp Skills Forum.

Dwyer, R. J. (2001). *Career development and advancement patterns of Aboriginal executives in the Canada federal public service.* Athabasca, AB: Athabasca University.

Edmonton Economic Development Corporation. (2006). *Best practice toolkit: Strategies and tools for employing Aboriginal people*. Edmonton: Author. http://www.centralalberta.ab.ca/imagesedit/Edmonton%20Workforce%20Connection%20BP%20Toolkit.pdf

Education Review Office. (2010). *Promoting success for Māori students.* New Zealand. http://www.ero.govt.nz/National-Reports/Promoting-Success-for-Māori-Students-Schools-Progress-June-2010

The Educational Policy Institute. (2008). *Access, persistence, and barriers in postsecondary education: A literature review and outline of future research.* Toronto: Higher Education Quality Council of Ontario. http://www.higheducation.idsc.gov.eg/backend/upload/Canada-1(in%20English).pdf

Faircloth, S.C., & Tippeconnic, J.W. III (2010). *The dropout/graduation rate crisis among American Indian and Alaska Native students: Failure to respond places the future of Native Peoples at risk*. Los Angeles, CA: The Civil Rights Project at UCLA. http://civilrightsproject.ucla.edu/research/k-12-education/school-dropouts/the-dropout-graduation-crisis-among-american-indian-and-alaska-native-students-failure-to-respond-places-the-future-of-native-peoples-at-risk/faircloth-tippeconnic-native-american-dropouts.pdf

Finnie, R., Childs, S. & Wismer, A. (2011). *Access to Post-secondary Education among Under-represented and Minority Groups: Measuring the Gaps, Assessing the Causes.* Education Policy Research Initiative. Working Paper No. 2011-01.

Finnie, R., & Meng, R. (2006). *The importance of functional literacy: Reading and math skills and labour market outcomes of high school drop-outs*. (Catalogue no. 11F0019MIE2006275) Ottawa: Analytical Studies Branch, Statistics Canada.

Firman, B. (2007). *Traditional Aboriginal careers*. Retrieved from http://www.curriculum.org/tcf/teachers/projects/repository/tradcareers.pdf

First Nations Statistical Institute. (2011). *First Nations Statistical Institute environmental scan*. Garden Village, ON: Author. http://www.fnsiispn.com/upload_files/e_scan_eng_final_aug30.pdf

Fleury, D. (2002). *Economic performance of off-reserve Aboriginal Canadians: A study of groups at risk of social exclusion,* No. W-02-1E). Hull, QC: Applied Research Branch, Human Resources Development Canada.

Fogarty, B., & Schwab, J. (2009) *Land as third space: Towards an educational and social reengagement of Indigenous youth in remote Australia*. Seminar podcast April 15, 2009. Canberra: Australian National University. http://caepr.anu.edu.au/Seminars/09/Seminar-Topics%E2%80%94Series-1/15_4_Seminar.php

Fordham, A., Fogarty, W., Corey B., and Fordham, D. (2010). *Knowledge foundations for the development of sustainable wildlife enterprises in remote Indigenous communities of Australia: A case study*. CAEPR Working Paper No. 62/2010. Canberra: Australian National University, CAEPR.

Freeman, C., & Fox, M. (2005). *Status and trends in the education of American Indians and Alaska Natives* (NCES 2005-108). Washington, DC: U.S. Department of Education, National Center for Education Statistics.

Friedel, T. (2010). The more things change, the more they stay the same: The challenge of identity for Native students in Canada. *Cultural and Pedagogical Inquiry, 1*(2), 22–45.

Fulford, G. (2006). *Sharing our success: More case studies in Aboriginal schooling*. Kelowna: Society for the Advancement of Excellence in Education.

Gelade, S., & Stehlik, T. (2004). *Exploring locality: The impact of context on Indigenous vocational education and training aspirations and outcomes*. Adelaide: National Centre for Vocational Education and Research.

Giddy, K., Lopez, J., & Redman, A. (2009). *Brokering successful Aboriginal and Torres Strait Islander employment outcomes: Common themes in good-practice models*. Adelaide: National Centre for Vocational Education and Research.

Gionet, L. (2009). *First Nations people: Selected findings of the 2006 census*.

Retrieved from http://www.statcan.gc.ca/pub/11-008-x/2009001/article/10864-eng.htm#a5

Gorinski, R., & Abernethy, G. (2007). Māori student retention and success: Curriculum, pedagogy and relationships. In T. Townsend & R. Bates (Eds.), *Handbook of teacher education* (pp. 229–240). The Netherlands: Springer.

Guimond, É., & Robitaille, N. (2008). When teenage girls have children: Trends and consequences. *Horizons: Policy Research Initiative, 10*(1), 49–51.

Gunn, T., Chorney, D., & Poulson, J. (2008). *High school completion: AISI Provincial Research Review.* Edmonton, AB: Alberta Education. http://www.assembly.ab.ca/lao/library/egovdocs/2008/ aled/168786.pdfGunn, T., Heffernan, P., Beaudin, L., & Tailfeathers, J. (2004). Aboriginal mentorship and high school completion: Can one person really make a difference? *Notos: Journal of the ATA Intercultural & Second Language Council*, *6* (2), 33–41.

Health Canada, cited in Synergy Research Group (2011).*Environmental scan of programs for Aboriginal children and youth in Calgary.* United Way of Calgary and Area. (p. 14). http://www. calgaryunitedway.org/sites/default/files/aboriginal_youth_environmental_scan_report_to_ community.pdf

Hango, D., & de Broucker, P. (2007). *Education-to-labour market pathways of Canadian youth: Findings from the Youth in Transition Survey* (Catalogue No. 81-595-MIE-No. 054). Ottawa: Statistics Canada.

Harker, R. (2007). *Ethnicity and school achievement in New Zealand: Some data to supplement the Biddulph et al*. (2003). *Best evidence synthesis: Secondary analysis of the Progress at School and Smithfield datasets for the iterative Best Evidence Synthesis Programme*. Wellington: Ministry of Education.

Harris, L. (2006). *Learning from the Youth Opportunity Experience.* Centre for Law and Social Policy. http://www.clasp.org/admin/site/publications_archive/files/0193.pdf

Health Canada, cited in Synergy Research Group (2011).Environmental scan of programs for Aboriginal children and youth in Calgary. United Way of Calgary and Area. (p. 14). http://www. calgaryunitedway.org/sites/default/files/aboriginal_youth_environmental_scan_report_to_ community.pdf

Helin, C., & Snow, D. (2010). *Free to Learn: Giving Aboriginal youth control over their post-secondary education.* Ottawa: MacDonald Laurier Institute. http://www.macdonaldlaurier.ca/files/pdf/ FreeToLearn.pdf

Helme, S., Hill, A., Balatti, J., Mackay, G., Walstab, A., Nicholas, T., and Polesel, J. (2003). *Hands on the future: Project for improving access for Indigenous students in VET in schools programs*. Melbourne: Australian National Training Authority. http://www.voced.edu.au/docs/landmarks/ TD_ERD_87_105.pdf

Helme, S., Polesel, J., and Nicholas, T. (2005). *Koorie experiences of qualifications pathways in VET: Obstacles or opportunities?* Melbourne: Victorian Qualifications Authority.

Helme, S. (2007). From the sidelines to the centre: Indigenous support units in vocational education and training. *Journal of Vocational Education and Training 59* (4), 451–466.

Helme, S. (2010a). *Improving career development services for indigenous young people aged 19 and unde*r: *Literature review.* In Sweet et al. (2010). *Making career development core business*. Melbourne: Office for Policy, Research and Innovation, Department of Education and Early Childhood Development and Department of Business and Innovation.

Helme, S. (2010b, Spring). Career decision-making: What matters to Indigenous Australians? *Australian Journal of Career Development, 19(3).* http://www.freepatentsonline.com/article/Australian-Journal-Career-Development/243043215.html

Holmes, D. (2005). *Embracing differences: Postsecondary education among Aboriginal students, students with children and students with disabilities.* Montreal: Canada Millennium Scholarship Foundation.

Hood, D. (2007). Retention and achievement of Māori students in secondary schooling. Report to Te Kotahitanga.

Hook, R. (2010). A national Māori university. *MAI Review, 2010(2).*

Howard, D. (2002). Family, friends and teachers: Why Indigenous students stay at or leave school. *The Australian Journal of Indigenous Education, 30*(2), 8–12.

Howard, A., Edge, J., & Watt, D. (2012). *Understanding the Value, Challenges, and Opportunities of Engaging Métis, Inuit, and First Nations Workers.* The Conference Board of Canada, Ottawa: Canada.

Hull, J. (2005). *Postsecondary education and labour market outcomes Canada, 2001*. (Catalogue No. R2-399/2001E-PDF). Ottawa: Indian and Northern Affairs Canada.

Hull, J. (2009, Winter). Postsecondary completion rates among on-reserve students: Results of a follow-up survey. *Canadian Issues,* 59–64.

Human Resources and Skills Development Canada. http://www.hrsdc.gc.ca/eng/employment/almp/index.shtml

INAC (Indian and Northern Affairs Canada). (2004). *Postsecondary education programs.* Retrieved from http://www.ainc-inac.gc.ca/ps/edu/ense_e.html

INAC (Indian and Northern Affairs Canada). (2005). *Evaluation of the postsecondary education program*. Ottawa: Departmental Audit and Evaluation Branch, Indian and Northern Affairs Canada Corporate Services.

INAC (Indian and Northern Affairs Canada). (2008). *Evaluation of the postsecondary education program: Follow-up report status update as of March 31, 2008.* Ottawa: Audit and Assurance Services Branch, Indian and Northern Affairs Canada.

INAC (Indian and Northern Affairs Canada). (2009). *Audit of the postsecondary education program*. Ottawa: Audit and Assurance Services Branch, Indian and Northern Affairs Canada.

Inclusion Network. (2004, Fall). *Informal Aboriginal Retention Survey: Analysis of results*, cited in *The National Report on Aboriginal Inclusion: News and Solutions*. Issue 6, 3–4). http://www.aboriginalhr.ca/en/resources/newsletter

Inuit Tapiriit Kanatami. (2005). *State of Inuit learning in Canada.* Ottawa: Canadian Council on Learning.

Jackson, A.P., & Smith, S.A. (2001). Postsecondary transitions among Navajo Indians. *Journal of American Indian Education, 40*(2), 28–47.

Jackson, R., et al. (2007) *Youth Opportunity Grant Initiative: Impact and synthesis report*. Decision Information Resources Inc. http://wdr.doleta.gov/research/FullText_Documents/YO%20 Impact%20and%20Synthesis%20Report.pdf

Jehl, J. (2007). The connection strategy: Preparing young people to succeed in college and beyond. Baltimore, Maryland: The Annie E. Casey Foundation. http://www.aecf.org/~/media/ PublicationFiles/Connection_Strategy.pdf

Jetté, C. (1994). *The dynamics of exclusion: Discrimination and other barriers facing Aboriginal peoples in the labour market*. Ottawa: Royal Commission on Aboriginal Peoples.

Kapsalis, C. (2006). *Occupational and skills parity of Aboriginal Canadians*. Hull: Aboriginal Affairs Directorate, Human Resources and Skills Development Canada.

Kirkness, V.J. (1999). Aboriginal education in Canada: A retrospective and a prospective. *Journal of American Indian Education, 39*(1), 14–30.

Krahn, H., and Hudson, J. (2006, November). *Pathways of Alberta youth through the postsecondary system into the labour market, 1996-2003*. Pathways to the Labour Market Series, No. 2. Canadian Policy Research Networks.

Kuhn, P., & Sweet, A. (2002). Aboriginals as unwilling immigrants: Contact, assimilation and labour market outcomes. *Population Economics*, *15,* 331–355.

Kunz, J., Milan, A., & Schetagne. (2000). *Unequal access: A Canadian profile of racial differences in education, employment and income*. Toronto: Canadian Race Relations Foundation. http://atwork. settlement.org/downloads/Unequal_Access.pdf

Legacy of Hope Foundation (2011). Hope and Healing. Retrieved from http://www.legacyofhope.ca/ downloads/hope-and-healing-en.pdf

Lester, J. (2000). *Evaluative research into the Office of the Board of Studies' Aboriginal Careers Aspiration Program for Aboriginal students in NSW High Schools*. Ryde, Sydney: Board of Studies (NSW).

Long, J. (1999). School-to-work transitions with Native American Indians: Implications for counselors. Conway, AR: University of Central Arkansas.

Long, M., Frigo, T., & Batten, M. (1998). *The school to work transition of Indigenous Australians: A review of the literature and statistical analysis*. Canberra: Australian Department of Employment, Education, Training and Youth Affairs.

Looker, D., & Thiessen, V. (2004). *Aspirations of Canadian youth for higher education*. Ottawa: HRSDC. http://www.pisa.gc.ca/eng/pdf/SP-600-05-04E.pdf

Looker, D., & Thiessen, V. (2008). The second chance system. Results from the three cycles of the Youth in Transition Survey. Ottawa: HRSDC. http://www.hrsdc.gc.ca/eng/publications_resources/learning_policy/sp-836-04-08e/sp_836_04_08e.pdf

Lowe, K., & Tassone, J. (2003). The Aboriginal Career Aspirations Program. *Curriculum Leadership Journal*. January 2003. http://www.curriculum.edu.au/leader/the_aboriginal_career_aspirations_program,4680.html?issueID=9691

MacCallum, J., Beltman, S., & Palmer, D. (2005). *Mentoring as a context for developing motivation*. Paper presented at the Australian Association for Research in Education conference, Sydney, Australia. http://www.aare.edu.au/05pap/mac05613.pdf

MacCallum, J., & Vella, K. (2006) *Mentoring: What works?* http://www.dsf.org.au/learningchoices/lcexpo2006/presentations/Judy_MacCallum.Pdf

MacKinnon, S. (2011). Understanding the obstacles: Indicators and how best to predict and improve outcomes for Aboriginal youth. Winnipeg: Canadian Centre for Policy Alternatives Manitoba.

MacNeil, M.S. (2008). An epidemiologic study of Aboriginal adolescent risk in Canada:

The meaning of suicide. *Journal of Child and Adolescent Psychiatric Nursing*, *21*(1), 3–12.

Malatest, R.A., & Associates Ltd. (2004). *Aboriginal peoples and post-secondary education: What educators have learned.* Montreal: Canada Millennium Scholarship Foundation.

Malatest, R.A., & Associates Ltd. (2008). *Factors affecting the use of student financial assistance programs by Aboriginal youth: A literature review*. Malatest Program Evaluation and Market Research. http://www.cmec.ca/Publications/Lists/Publications/Attachments/197/factors-affecting-aboriginal-youth.pdf

Malatest, R.A., & Associates Ltd. (2010). *Promising practices: Increasing and supporting participation for Aboriginal students in Ontario.* Toronto: Higher Education Quality Council of Ontario. http://heqco.ca/SiteCollectionDocuments/Promising%20Practices.pdf

Marlin, A., Bruce, D., & Doucette, M.B. (2009) *A study of the Atlantic Aboriginal postsecondary labour force*. Halifax: The Atlantic Aboriginal Economic Development Integrated Research Program of the Atlantic Policy Congress of First Nations Chiefs.

Martin, N., & Halperin, S. (2006). *Whatever it takes: How twelve communities are reconnecting out-of-school youth*. Washington, DC: American Youth Policy Forum. http://www.aypf.org/publications/WhateverItTakes/WITfull.pdf

Mau, W.C., & Bikos, L.M. (2000). Educational and vocational aspirations of minority and female students: A longitudinal study. *Journal of Counseling & Development, 78,* 186–194.

Maxim, P., & White, J. (2006). School completion and workforce transitions among urban Aboriginal youth. In J.P. White, S. Wingert, & P. Maxim (Eds.), *Aboriginal policy research: Moving forward, making a difference, Volume 3* (pp. 35–51). Toronto: Thompson Educational Publishing.

McCluskey, K., & Torrance, E.P. (ND). Mentoring, one pathway to Aboriginal talent development. In *Making a Difference with Made-in-Manitoba Programs*. http://www.uwinnipeg.ca/faculty/ius/iusweb_backup/pdf/mentoring_aboriginal_devel_interim.pdf

McCue, H. (2006). *Aboriginal postsecondary education: A think piece from the Centre for Native Policy and Research.* Ottawa: Centre for Native Policy and Research.

MCEECDYA. (2012). *2010 annual report: Aboriginal and Torres Strait Islander Education Action Plan 2010-2014.* Victoria, AU: Ministerial Council for Education, Early Childhood Development and Youth Affairs. http://www.mceecdya.edu.au/verve/_resources/FINAL_2010_Annual_Report-ATSIEAP.pdf

McLeod, R. (2009). *Māori in the New Zealand economy*. New Zealand Business Round Table. Wellington, NZ. Presentation to the Te Papa Treaty Debates.

McNinch, J. (2010). The recruitment and retention of Aboriginal teachers in Saskatchewan schools. SSTA Research Centre Report #94-10. http://www.saskschoolboards.ca/old/ResearchAndDevelopment/ResearchReports/EducationEquity/94-10.htm

McRae, D., Ainsworth, G., Cumming, J., Hughes, P., Mackay, T., Price, K., Rowland, M., Warhurst, J., Woods, D., & Zbar, V. (2000). *What works? Explorations in improving outcomes for Indigenous students*. Canberra, Australia: Commonwealth Department of Education, Training and Youth Affairs. http://www.dest.gov.au/archive/iae/analysis/learning/1/works.htm

Miller, C. (2005). *Aspects of training that meet Indigenous Australians' aspirations: A systematic review of research*. Adelaide: National Centre for Vocational Education and Research.

Mendelson, M. (2004). *Aboriginal people in Canada's labour market: Work and unemployment, today and tomorrow*. Ottawa: Caledon Institute of Social Policy.

Mendelson, M. (2006). *Aboriginal Peoples and postsecondary education in Canada.* Ottawa: Caledon Institute of Social Policy.

Meyer, L., et al. (2010). *Evaluation of Te Kotahitananga: 2004-2008*. New Zealand Ministry of Education. http://www.educationcounts.govt.nz/__data/assets/pdf_file/0005/80771/955a_Te-Kotahitanga-Summary_webversion.pdf

Murray, S. (2005). *Māori achievement and achievement at Māori immersion and bilingual schools*. 5–6. New Zealand Ministry of Education. http://www.educationcounts.govt.nz/publications/schooling/11240/maori_immersion_2003

Nadirova, A. (2009). *High school completion longitudinal study*. Edmonton: Alberta Education. http://education.alberta.ca/media/1079006/hscdataanalysis_report_%20final.pdf

NAHO (National Aboriginal Health Organization). (2008). [SDA: This year appeared as 2007 in the main text.] *First Nations, Inuit and Métis education history from a health and human resources perspective.* Ottawa: National Aboriginal Health Organization.

Native Women's Association of Canada. (2004a). *Background paper: Canada–Aboriginal Peoples' roundtable economic opportunities sectoral session*. Ohsweken, ON: Native Women's Association of Canada.

Native Women's Association of Canada. (2004b). *Background paper: Life long learning.* Ohsweken, ON: Native Women's Association of Canada.

Native Women's Association of Canada. (2009). *Strengthening Aboriginal girls' and women's Success.* Saskatoon: Council of Ministers of Education, Canada.

New Zealand Education Review Office. (2011). *An evaluation of service academies.* http://www.ero.govt.nz/National-Reports/An-Evaluation-of-Service-Academies-October-2011

New Zealand Ministry of Education. (2007). *Annual report on Māori education 2006/07*. Wellington, NZ: Author. Publications series/5851/16867.

New Zealand Ministry of Education. (2010). *Tataiako: Cultural competencies for teachers of Māori learners.* http://www.minedu.govt.nz/theMinistry/EducationInitiatives/Tataiako.aspx

New Zealand Ministry of Education. (2012). *Education counts*. http://www.educationcounts.govt.nz/statistics/Māori_education/36805#table2

New Zealand Ministry of Education. (2012). *Managing for success: The Māori education strategy 2008-2012*. Mid-term review. http://www.minedu.govt.nz/theMinistry/PolicyAndStrategy/KaHikitia/MidTermReview.aspx

New Zealand Ministry of Education Web site: *Te Kotahitanga.* http://www.minedu.govt.nz/NZEducation/EducationPolicies/MāoriEducation/Initiatives/TeTereAurakiMāoriInMainstreamTeKauhua.aspx

Nunavut Tunngavik. (2006). *Nunavut adult learning strategy.* Government of Nunavut.

Orr, J., Roberts, C., & Ross, M. (2008). *First Nations postsecondary education and training literature review and best practices.* Antigonish, NS: School of Education, St. Francis Xavier University.

Palameta, B., & Voyer, J.P. (2010). *Willingness to pay for Post-secondary Education Among Under-represented Groups – Report.* Toronto: Higher Education Quality Council of Ontario.

Parkin, A. (2009). *Improving the success of students at risk of dropping out*. Montreal: Millennium Scholarship Foundation Canada.

Parente, A., Craven, R.G., & Munns, G. (2003). What do Indigenous students say about their aspirations? *Journal of Aboriginal Studies Association, 12*, 11–22.

Paul, R. (2011). *Yukon youth secondary school transitions 2009-2010 – What happens during and after secondary schooling experiences?* http://www.education.gov.yk.ca/pdf/yyssts_final_report_ed_approved9May2011.pdf

Peterson, K., & Stroh, H. (2004).*Thinking about college*: *Results of the College Awareness Survey among achievers in Washington high schools*. Washington School Research Center.

Pewewardy, C. (2002). Learning styles of American Indian/Alaska Native students: A review of the literature and implications for practice. *Journal of American Indian Education, 41*(3). Tempe, AZ. http://jaie.asu.edu/v41/V41I3A2.pdf

Phillips, S. (2008). *Forging partnerships, opening doors: Community school case studies from Manitoba and Saskatchewan*. Kelowna, BC: SAEE. http://www.education.gov.sk.ca/forging-partnerships

Philpott, D. (2006). Identifying the learning needs of Innu students: Creating a model of culturally appropriate assessment. *Canadian Journal of Native Studies, 26(*2), 361–381.

Premier's Economic Advisory Council. (2005). *Implementation framework for bridging opportunities: A summit on Aboriginal business development and increasing the Aboriginal workforce.* Winnipeg: Premier's Economic Advisory Council.

Raham, H. (2012). *Aspirational programming for Aboriginal youth*. Prepared for AANDC.

Relland, M. (2007). *Aboriginal teacher education in Saskatchewan*. Presentation to OECD Seminar on Indigenous Peoples in Cairns, AU, May 2007. http://www.dest.gov.au/NR/rdonlyres/500AFEA7-6C27-4F5F-A133-586F67AD448B/17789/Relland_CanadianTeacherEducation.pdf

Reyhner, J. (1992). American Indians out of school: A review of school-based causes and solutions. *Journal of American Indian Education, 31*(3), 37–56*. http://jaie.asu.edu/v31/V31S3ind.htm*

Richards, J. (2008). Closing the Aboriginal/non-Aboriginal education gaps. (No. 116). C.D. Howe Institute backgrounder. Toronto: C.D. Howe Institute.

Richards, J. (2011). *Aboriginal education in Quebec: A benchmarking exercise*. (No. 382). C.D. Howe Institute commentary. Toronto: CD Howe Institute.

Rojas, E.Y., & Gretton, H.M. (2007). Background, offence characteristics, and criminal outcomes of Aboriginal youth who sexually offend: A closer look at Aboriginal youth intervention needs. *Sexual Abuse, 19*(3), 257–283.

Royal Bank of Canada. (2009). RBC® Diversity Blueprint: Priorities and objectives 2009-2011 http://www.rbc.com/diversity/pdf/rbc-diversity-blueprint.pdf

Rumberger, R.W. (2004). Why students drop out of school. In G. Orfield (Ed.), *Dropouts in America: Confronting the graduation rate crisis* (pp. 131-156). Cambridge, MA: Harvard Education Publishing Group.

Sammartino, A., O'Flynn, J., & Nicholas, S. (2003). The employer perspective of Indigenous (un) employment. *Economic Papers, 22(*4), 45–60.

Saskatchewan Ministry of Advanced Education, Employment and Immigration (2012). *2011-12* Survey *of 2009-10 post-secondary graduates.* Retrieved September 10, 2012 from http://www.aeei.gov.sk.ca/2011-12-survey-of-2009-10-post-secondary-graduates-final-report

Satchwell, K. (2006). *Mentoring Literature Review*. Edmonton, AB: Alberta Children's Services. http://www.child.gov.ab.ca/home/documents/youthprograms/Mentoring_Lit_Review_Final.pdf

Sattler, P., Academica Group Inc. (2010). From postsecondary application to the labour market: The pathways of under-represented groups. Toronto: Higher Education Quality Council of Ontario. http://www.heqco.ca/sitecollectiondocuments/pse_eng.pdf

Schwab, R.G. (1999). *Why only one in three? The complex reasons for low Indigenous school retention*, Research Monograph 16, Centre for Aboriginal Economic Policy Research, Australian National University, Canberra.

Schwab, R.G. (2001). "VET-in-school for Indigenous students: Success through 'cultural fit'. Research to reality: Putting VET to work." Proceedings of the Australian Vocational Education and Training Research Association Conference, 4th, Adelaide: March 28-30, 2001.

Schwab, J. (2006). *Final report to the Warlpiri Education and Training Trust Advisory Committee: Options for education and training*. Canberra: Centre for Aboriginal Policy Research, Australia National University. http://caepr.anu.edu.au/sites/default/files/Publications/topical/Schwab_WETT.pdf

Senécal, S. (2007). *Employment, industry and occupations of Inuit in Canada, 1981–2001*. Ottawa: Inuit Tapiriit Kanatami and Research and Analysis Directorate, Indian and Northern Affairs Canada.

Shafer, M.S., & Rangasamy, R. (1995).*Transition and Native American youth: A follow up study of school leavers on the Fort Apache Indian Reservation*.

Retrieved from http://findarticles.com/p/articles/mi_m0825/is_nl_v61/ai_16955923/

Sharpe, A., & Arsenault, J.-F. (2010). *Investing in Aboriginal education in Canada: An economic perspective* (Research Report No. 2010-03). Ottawa: Centre for the Study of Living Standard.

Sharpe, A., Arsenault, J-F., & Lapointe, S. (2007). *The potential contribution of Aboriginal Canadians to labour force, employment, productivity, and output growth in Canada, 2001–2017* (Research Report no. 2007-04). Ottawa: Centre for the Study of Living Standards.

Sharpe, A., Arsenault, J-F., Lapointe, S., & Cowan, F. (2009). *The effect of increasing Aboriginal educational attainment on the labour force, output and the fiscal balance* (Research Report No. 2009-3). Ottawa: Centre for the Study of Living Standards.

Silta and Associates. (2007). *Postsecondary case studies in Inuit education* (Discussion Paper No. 2 for the National Inuit Education Summit). Ottawa: Inuit Tapiriit Kanatami.

Standing Committee on Aboriginal Affairs and Northern Development. (2007). *No higher priority: Aboriginal post-secondary education in Canada.* http://www2.parl.gc.ca/HousePublications/ Publication.aspx?DocId=2683969&Language=E&Mode=1&Parl=39&Ses=1

Standing Senate Committee on Aboriginal Peoples. (2011). *Reforming First Nations education: From crisis to hope. http://www.parl.gc.ca/Content/SEN/Committee/411/appa/rep/rep03dec11-e.pdf*

Statistics Canada. (2003a). *2001 Census of Canada: 20% Sample Data* (Catalogue No. 97F0011XCB2001044). Ottawa: Author.

Statistics Canada. (2003b). *2001 Census of Canada: 20% Sample Data* (Catalogue No. 97F0011XCB2001043).

Statistics Canada. (2006a). *2006 Census of Canada.* (Catalogue No. 97-563-XCB2006061).

Statistics Canada. (2006b). *2006 Census of Canada.* (Catalogue No. 97-564-XCB2006002).

Statistics Canada. (2006). *The Canadian labour market at a glance: Canadian population is aging*. Retrieved from http://www.statcan.gc.ca/pub/71-222-x/2006001/4153930-eng.htm

Statistics Canada. (2008a). *Aboriginal identity (8), highest certificate, diploma or degree (13), major field of study – classification of instructional programs, 2000 (14), attendance at school (3), area of residence (6), age groups (10A) and sex (3) for the population 15 years and over of Canada, provinces and territories, 2006 Census: 20% Sample Data*. (Catalogue No. 97-560-XCB2006036).

Statistics Canada (2008b). *Incompletely enumerated Indian reserves and Indian settlements.* Retrieved from http://www12.statcan.ca/census-recensement/2006/ref/notes/aboriginal-autochtones-eng. cfm#app3

Statistics Canada. (2008c). *Labour force activity (8), Aboriginal identity (8), highest certificate, diploma or degree (14), area of residence (6), age groups (12A) and sex (3) for the population 15 years and over of Canada, provinces and territories, 2006 Census: 20% Sample Data*. (Catalogue No. 97-560-XCB2006031).

Statistics Canada. (2009a). *Aboriginal population profile*.

Retrieved from http://www12.statcan.ca/census-recensement/2006/dp-pd/prof/92-594/details/

Statistics Canada. (2009b). Aboriginal peoples technical report, 2006 Census of Canada. Retrieved from http://www12.statcan.ca/census-recensement/2006/ref/rp-guides/rp/ap-pa/pdf/92-569-X2006001-eng.pdf

Statistics Canada. (2011a). Aboriginal labour market stats 2008-2010. Article and index. http://www. statcan.gc.ca/pub/71-588-x/2011003/part-partie1-eng.htm

Statistics Canada. (2011b). Labour Force Survey. Table D.6.3. Educational attainment in the population aged 15-64, off-reserve Aboriginal, non-Aboriginal and total population, Canada, provinces and territories, 2008, 2009, 2010.

Retrieved from http://www.statcan.gc.ca/pub/81-582-x/2011001/tbl/tbld6.3-eng.htm

Sweet, R., Volkof, V., Watts, A.G., Helme, S., Rice, S., & Pannel, S. (2010). Making career development core business. Melbourne: Office for Policy, Research and Innovation, Department of Education and Early Childhood Development and Department of Business. http://www.eduweb.vic.gov.au/edulibrary/public/postcomp/CareersreportFINAL.pdf

Taylor, A., Friedel, T.L., & Edge, L. (2009). Pathways for First Nation and Métis youth in the oil sands. Ottawa: Canadian Policy Research Networks Inc.

Taylor, A., & Steinhauer, E. (2008). Factoring that affects the education and work transitions of First Nations youth. Horizons: Policy Research Initiative, 10(1), 45–48.

TD Bank Financial Group. (2009). Aboriginal people in Canada: Growing mutual economic interest offer significant promise for improving the well-being of the Aboriginal population. TD Economics Special Report.

Thiessen, V. (2001). Policy research issues for Canadian youth: School-work transitions (Catalogue No. R-01-4-1E). Hull: Applied Research Branch, Strategic Policy, Human Resources and Skills Development Canada.

Trujillo, O.V., & Alston, D.A. (2005). A report on the status of American Indians and Alaska Natives in education: Historical legacy to cultural empowerment. Washington, DC: National Education Association, Human and Civil Rights.

Truth and Reconciliation Commission of Canada (2012). Residential Schools. Retrieved from http://www.trc.ca/websites/trcinstitution/index.php?p=4

United Nations Children's Fund (UNICEF) 2006. The state of the world's children 2007: Women and children — The double dividend of gender equality. UNICEF, New York.

Usalcas, J. (2011). Aboriginal people and the labour market: Estimates from the Labour Force Survey, 2008-2010. Statistics Canada Cat. No. 71-558-X, no. 3. http://www.statcan.gc.ca/pub/71-588-x/71-588-x2011003-eng.pdf

Usher, A. (2009). The postsecondary student support program: Examination of alternative delivery mechanisms — A report to Indian and Northern Affairs Canada. Toronto: Education Policy Institute.

Vaughan, K., & O'Neil, P. (2010). Career education networks and communities of practice. NZCER.

Vaughan, K. (2011). The potential of career management competencies for renewed focus and direction in career education. New Zealand Annual Review of Education. 2011, 20:2010, 24–51. http://www.digitalpathways.org.nz/assets/media/CMC%20Potential%20NZAoRE%20Vaughan.pdf

Walters, D., White, J., & Maxim, P. (2004). Does postsecondary education benefit Aboriginal Canadians? An examination of earnings and employment outcomes for recent Aboriginal graduates. Canadian Public Policy, 30(3), 283–301.

Waslander B. (2009, Winter). First Nation communities and urban economies. Canadian Issues, 99–106.

Watt, K., & Lewis, K. (2010). AVID: Supporting Native Americans in rigorous courses. College Board's Native American Student Advocacy Institute. University of New Mexico. http://www.utpa.edu/avid/Documents/Presentation/Native%20American%20Powerpoint%20final%20version.pdf

White, J., Maxim, P., & Gyimah, S. (2003). Labour force activity of women in Canada: A comparative study of Aboriginal and non-Aboriginal women. Canadian Review of Sociology and Anthropology, 40(4), 391–415.

White House Executive Order (December, 2011). Improving American Indian and Alaskana Native educational opportunities and strengthening tribal colleges and universities. Washington, DC. http://medicinezine.com/information/improving-american-indian-alaska-native-educational-opportunities-strengthening-tribal-colleges-universities/

Whitinui, P. (2008). Kapa Haka counts: Improving participation levels of Māori students in mainstream secondary schools. MAI Review, 2008, 3 Article 8.

Wilder, L.K., Jackson, A.P., & Smith, T.B. (2001). Secondary transition of multicultural learners: Lessons from the Navajo Native American experience. Preventing School Failure, 45(3), 119–124.

Workforce Training and Education Coordinating Board (2008). Reconnecting young adults, 18 24: A report to the Washington Legislature. Olympia, WA. http://www.wtb.wa.gov/Documents/ReconnectingYoungAdults.pdf

Wotherspoon, T., & Schissel, B. (1998). Marginalization, decolonization and voice: Prospects for Aboriginal education in Canada. Toronto: Council of Ministers of Education, Canada.

Young, S. (2011). Pathways to education: A community-based, evidenced-based solution to improving educational outcomes for marginalized youth. Toronto: Pathways to Education Canada.

Literature Review on Factors Affecting the Transition of Aboriginal Youth from School to Work

While Aboriginal peoples represent Canada's fastest-growing population, their education and employment outcomes lag significantly behind the rest of the population. This literature review examines the challenges faced by Aboriginal youth in completing their education and the factors that impede or foster their successful transition from school to work.

The purpose of this review is to identify existing evidence in the literature relevant to the success of Aboriginal youth in completing their education and transitioning to the labour market.