Transitions between Postsecondary Education and the Labour Market for Aboriginal Youth in Canada

Considerations for Successful

Written by

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Executive Summary

Introduction

The Council of Ministers of Education, Canada (CMEC), is interested in learning more about the challenges facing Aboriginal people across Canada as they complete postsecondary education and transition into the labour market. This literature review identifies the important elements and practices that impede and foster successful school to work transitions for Aboriginal people in Canada. This report does not provide analysis of primary data nor does it review programs and policies; however, it does review literature that discusses these items.

Research Objectives and Methods

The purpose of this literature review is to identify existing secondary information relevant to the successful or unsuccessful enrolment in and completion of postsecondary education and the transition to the labour market of Aboriginal youth. The following questions guided our research:

- 1. What are the key barriers that Aboriginal postsecondary graduates face in transitioning to the labour market?
- 2. What are the career aspirations of Aboriginal youth?
- 3. How successful are Aboriginal youth in attaching to the labour market?
- 4. What are the main reasons Aboriginal postsecondary graduates are able to succeed in attaching to the workforce?
- 5. How do the barriers to, aspirations of, and successes of Aboriginal youth compare to those of non-Aboriginal youth?

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. Once the literature was assembled, a meta-analysis of the findings and recommendations was conducted against a variety themes and sub-themes.

For the purposes of this paper, the word *Aboriginal* includes the sub groups of First Nations (also referred to as registered Indians or North American Indians), Métis, and Inuit peoples. Furthermore, the term *Aboriginal people* refers to Aboriginal people in Canada. The term *Indigenous people* refers to the descendents of the original inhabitants of Australia. The term *Native Americans* refers to the descendents of the original inhabitants of the United States.

The State of Education and Employment in Canada

There is strength in the Canadian literature on the education and employment outcomes for Aboriginal people. For example, the literature clearly states that fewer Aboriginal than non-Aboriginal people pursue postsecondary education; therefore, there are relatively fewer people in the total Aboriginal population with a complete postsecondary education. Among those who do pursue postsecondary education, the completion rate for Aboriginal people is very similar to that for non-Aboriginal people. However, the attainment of a minimum of a bachelor's degree or higher among those who complete postsecondary education is lower among Aboriginal than among non-Aboriginal people. The attainment of an apprenticeship or trades certificate is about the same or slightly higher among Aboriginal people who complete postsecondary education than among non-Aboriginal people. There is very little literature concerning what influence Aboriginal students' program level and field of study may have on their postsecondary program 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 and non-Aboriginal people, measured as a percentage of the population 15 years of age and over with less than high school completion, is highest in Quebec, where a higher proportion of Aboriginal than non-Aboriginal people have less than a high school education. A higher percentage of Aboriginal people living in large urban centres have a university degree as their highest level of educational attainment, compared to Aboriginal people living in small communities. Also, their labour force participation rates are higher and their unemployment rates are lower, compared to Aboriginal people living in small communities. Among on-reserve Aboriginal students, college completion rates are significantly higher (63%) than university completion rates (38%).

Career Aspirations and Realities

There is relatively little literature on the career aspirations of Aboriginal people and their demonstrated ability to achieve those aspirations. A study of Aboriginal youth in high school found that only 70% of Aboriginal people aspire to pursue postsecondary education, compared to 90% of their non-Aboriginal peers. However, the education goals of both Aboriginal and non-Aboriginal youth who wish to pursue some type of postsecondary education are quite similar. For example, 36% of Aboriginal youth who wish to pursue any postsecondary education want to complete a bachelor's degree, while 37% of non-Aboriginal youth with the same goal want to complete a bachelor's degree.

There is little literature about Aboriginal representation across occupational sectors. Aboriginal youth (aged 12–18) in a national study demonstrated a wide interest in professional careers and a low interest in trades. The number-one "dream job" among the respondents was "business owner." Other popular dream jobs cited by Aboriginal youth were doctor, lawyer, teacher, and engineer, in order of the frequency with which they were selected. 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 doctor, lawyer, and artisan. Young men tended to identify occupations such as athlete, officer, and engineer.

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 level of education they will require to qualify for those careers. Several of the desired careers appear to be either idealistic or unattainable for many Aboriginal youth, unless serious interventions are implemented to assist students to complete the education and training necessary to qualify for those occupations. Thus the roles of academic and career counsellors are vital for Aboriginal youth, as they are for students in the general population.

There appears to be a lack of advice and readily available information that is both reliable and practical to guide students and other youth in their career choices. A lack of clear education and career goals may stem from a lack of access to appropriate information about a broad range of careers, career development opportunities, and role models.

Modes of Transition

When Aboriginal postsecondary students have a particular career aspiration and they complete the necessary education to meet their aspirations, they must then begin on the path of transitioning to the work force. Many studies and reports have identified ideas and recommendations about the factors that contribute to successful policies, programs, and strategies targeting Aboriginal youths' school to work transitions.

Employed Aboriginal youth are more likely than non-Aboriginal youth to have entered the labour market from one of three common paths: as a high school dropout; as a "second chancer" (having dropped out and then returned to school); and as a holder of only a high school diploma.

The literature explains that initiatives which support education-to-employment transitions for Aboriginal youth are more successful if the community has a strong degree of ownership and participation in the initiative, including formal partnerships with institutions and employers. Further key elements of success at the community level include having a strategic vision, involvement of key stakeholders, methods of addressing the public's attitudes toward nonuniversity postsecondary education, commitment and leadership from all levels of government, career development integrated into postsecondary curriculums (as well as at the primary and secondary levels), a connection between occupational learning and academic learning, professional development of educators that include awareness of career and employment options for students, and finally improved linkages between vocational training/apprenticeships and postsecondary education. These elements are also important for the success of all students in the general population. Furthermore, many authors claim that programs for Aboriginal students must also be particularly culturally sensitive and inclusive, and take into account students' lives, including their families and communities. There appears to be little information in the literature on the impacts of racism for Aboriginal people trying to transition from school to work.

Success and Satisfaction in the Labour Market

Once the transition process has taken place and Aboriginal postsecondary graduates are in the workforce, how successful and satisfied are they? Aboriginal people aged 24–64, without regard for their current labour force status, are 50% less likely to be employed full-time (defined as 30 or more hours per week of paid work or self-employment) than non-Aboriginal people. Aboriginal people in general are under-represented in high-skill jobs in the private sector and overrepresented in public sector management positions and scientific occupations. The incomes of Aboriginal people increase as their level of educational attainment increases. Aboriginal females with a university degree earn more than non-Aboriginal females with the same education. Some (36%) of the wage gap between Aboriginal and non-Aboriginal people in the workforce (full-time paid workers aged 18–64) can be correlated with education. The higher the skill level of the occupation, the larger the wage gap.

There is little or no explicit evidence in the literature to explain why Aboriginal postsecondary graduates successfully attach themselves to the workforce. It is implied that successful programs and initiatives in which the Aboriginal community (broadly defined, including specific reserve communities and Aboriginal-sector organizations) has a strong partnership presence are important. It is also implied that Aboriginal postsecondary graduates who demand to be treated like others in the workforce (in terms of competitive wages, opportunities for growth, and development, and opportunities for career advancement) are more successful.

There is little in the literature about racism experienced by Aboriginal people in their places of work. However, we know that some Aboriginal people face challenges in the workplace once they are employed. These challenges include discrimination and wage disparities compared to others who have similar education and qualifications, as well as an opinion that Aboriginal culture (in the broadest sense) is not respected in the workplace and that Aboriginal approaches to thinking, problem solving, and engaging with others are not viewed in the same light as those of "others." Accordingly, there is also a lack of role models or mentors (because they simply cannot be found) for recently hired Aboriginal youth to follow or connect with, in many workplace situations.

Employers' Characteristics, Perceptions, and Recruitment Practices

There is a lack of available information on the types of businesses or organizations that are likely to recruit or employ Aboriginal people, their attributes, or what they look for in workers. There is also little evidence in the published literature about special efforts being made by employers to recruit Aboriginal people. Nonetheless, employers who seek out and hire Aboriginal workers benefit in a variety of ways, including (but not limited to) acquiring new market opportunities, increased workplace diversity, and access to many training programs and funds aimed at increasing Aboriginal participation in the workforce. The mining, oil and gas, and trades sectors appear to be the most active in recruiting Aboriginal people into the labour force.

It is not clear from the literature if employers, besides taking advantage of the presence of a potential labour force, seek specific characteristics in Aboriginal candidates that are different from those they seek in general in potential employees. However, some studies have ascertained that perceptions of Aboriginal workers held by current and potential employers 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

The literature is exceedingly strong in the area of barriers to postsecondary enrolment and completion. There are also many studies that discuss barriers to making successful transitions from secondary school to postsecondary education programs and the workforce including dissatisfaction with postsecondary experiences, as well as historical, personal and social, cultural, and geographic barriers, and the mismatch between education attainment and actual requirements of desired jobs.

Summary and Suggestions for Future Research

A summary of the strengths and gaps in the literature reveals the following. There is some literature on the barriers specifically associated with transitioning to the labour market. However, there is vast literature on the barriers associated with completing secondary and/or postsecondary education. Barriers that are discussed most frequently in the literature are family issues, finances, culture, and geographic location or remoteness. There is relatively little literature on the career aspirations of Aboriginal people and their demonstrated ability to achieve those aspirations, as well as on the impacts of racism on Aboriginal people's ability to transition to the labour market.

There is strength in the Canadian literature on employment outcomes for Aboriginal people. Furthermore, there is much literature on the variables than can contribute to positive education and employment outcomes such as age and geographic location. However, there is very little literature about the possible influence of Aboriginal students' program level and field of study on their postsecondary program completion rates. Apart from the many studies that link increased employment rates of Aboriginal people with their increased education levels, there was little in the available secondary literature that explicitly identifies the reasons Aboriginal postsecondary graduates successfully attach themselves to the workforce. There is much literature that compares the general Canadian population with the Aboriginal population. There are fewer studies that compare the Aboriginal sub groups (First Nation, Métis and Inuit) to the entire Canadian population though.

This review has identified a number of gaps in the current literature that, if filled, would inform and enhance our understanding of Aboriginal youths' transitions from postsecondary 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 between the outcomes for 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.

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1. Introduction

The Council of Ministers of Education, Canada (CMEC), is interested in learning more about the challenges facing Aboriginal people across Canada as they complete postsecondary education and transition into the labour market. This literature review identifies the important elements and practices that impede and foster successful school to work transitions for Aboriginal people in Canada. This report does not provide analysis of primary data nor does it review programs and policies; however, it does review literature that discusses these items.

It has been forecast that over 400,000 Aboriginal youth will enter the labour market by the year 2016 (Brigham & Taylor, 2006). This forecast is supported by the fact that almost 20% of Aboriginal people are in the 15–24 age range (Statistics Canada, 2009a). Evidence from a variety of studies (as 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 in general and Aboriginal youth in particular are at risk of social exclusion (Fleury, 2002), and 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 Aboriginal youth face translate into a challenging situation for Canadian society. Existing policies and programs need to be strengthened to better support Aboriginal youth in their transition from education to employment. The Canadian economy today 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. An increase in the numbers of Aboriginal people with postsecondary education would not only benefit these individuals, their families, and their communities, but it would also address Canada's labour force challenges and improve the economy.

This literature review begins with an explanation of the methodology followed to collect and analyse the various reports, articles and papers collected. It continues with an overview of the current education and employment outcomes for Aboriginal people. Career aspirations of Aboriginal people are explored followed by an exploration of literature on the options and modes of transitioning from school to work. The paper then reviews reports on Aboriginal labour market participation and satisfaction with labour force attachment. Information and opinions from the literature regarding transition programs, strategies and polices are then reviewed. The review continues with an analysis of employers' characteristics, perceptions and recruitment strategies for attracting Aboriginal people, as well as barriers to successful transitions. Where possible we offer comparisons of the Canadian situation to those in Australia and the United States throughout the paper. A summary highlighting the strengths and gaps in the literature along with suggestions for further research conclude the review.

2. Research Objectives and Methods

2.1 Purpose and Objectives

The purpose of this literature review is to identify existing secondary information relevant to the successful or unsuccessful enrolment in and completion of postsecondary education and the transition to the labour market of Aboriginal youth. The following questions guided our research:

- 1. What are the key barriers that Aboriginal postsecondary graduates face in transitioning to the labour market?
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- 5. How do the barriers to, aspirations of, and successes of Aboriginal youth compare to those of non-Aboriginal youth?

2.2 Literature Review Methods

Relevant literature on the school to work transitions of Aboriginal people was found in peerreviewed journal articles, government reports, papers from relevant organizations, and international reports from Australia and the United States. Nearly 100 articles and documents were used in the preparation of this report.

Peer-reviewed articles include 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. Search terms included combinations of the following words and terms: *Aboriginal, Native, Indigenous, postsecondary education, labour market, labour force, employment, transition, barriers, challenges*, and *career aspirations*.

The work of key government departments and agencies, including Indian and Northern Affairs Canada (INAC), Human Resources and Skills Development Canada, and Statistics Canada, was reviewed for reports, documents, and policy and program reviews.

Canadian policy research and related organizations, including 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 reviewed.

In addition, the work of important Aboriginal-related postsecondary research and other organizations was reviewed, including: 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 across Canada (e.g., Trent, Saskatchewan, University of British Columbia, University of New Brunswick).

International studies from Australia and the United States were also reviewed. In Australia, literature was reviewed from the Australian Department of Employment, Education, Training and Youth Affairs, and the National Centre for Vocational Education and Research. 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 including the University of Arkansas.

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 themes and sub-themes.

2.3 Limitations of the Literature Review

Even though there is a wide range of literature concerning the education and employment of Aboriginal people in Canada, it has its limitations. First, the information is often a (re)analysis, presentation, and discussion of national surveys from Statistics Canada. While Statistics Canada 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 only available for 65% of reserve communities in Canada, because many did not participate in the 2006 census (Statistics Canada, 2009b).

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, or not, of all Aboriginal people in the collection of data. This makes it difficult to compare

¹ Mendelson's (2006) comprehensive research on Aboriginal people and postsecondary education in Canada is a key study, referred to often throughout 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 Aboriginal sub group along with other variables.

numbers. For example, Statistics Canada census data for 2006 is broken down into data for onand off-reserve Aboriginal people, which are then compared to data on the entire Canadian population, whereas Mendelson (2004), for example, does not provide the definitions of Aboriginal and non-Aboriginal in his report. Furthermore reports use differing definitions of the term Aboriginal, or provide no definition at all, which make comparisons difficult.

2.4 Definitions

For the purposes of this paper, the word *Aboriginal* includes the sub groups of First Nations (also referred to as registered Indians or North American Indians), Métis, and Inuit peoples. When the terms *First Nations, registered Indians, North American Indians, Métis, and Inuit* are used, they refer to the way the individuals in these groups have identified themselves in surveys. The terms *on-reserve* and *off-reserve* refer to registered First Nations people living on a First Nation reserve community, and off of it.

Furthermore, the term *Aboriginal people* refers to Aboriginal people in Canada. The term *Indigenous people* refers to the descendents of the original inhabitants of Australia. The term *Native Americans* refers to the descendents of the original inhabitants of the United States.

3. The State of Aboriginal Education and Employment in Canada

This section provides an overview of the current Aboriginal education and employment rates in Canada as a way of setting the context for this literature review. There is strength in the

There is strength in the Canadian literature on the education and employment outcomes for Aboriginal people. Canadian literature on the education and employment outcomes for Aboriginal people (Dibbs & Leesti, 1995; Walters, White, Maxim, & Gyimah, 2003; White, & Maxim, 2004; Mendelson, 2004, 2006; Association of Canadian Community Colleges, 2005; Holmes, 2005; Hull, 2005, 2009; Ciceri & Scott, 2006; Kapsalis, 2006; Maxim & White, 2006; Assembly of First Nations, 2007; Hango & de Broucker, 2007; Senécal, 2007; Sharpe, Arsenault, & Lapointe, 2007; Orr, Roberts, & Ross, 2008). It is difficult to compare the studies due to differences in data collection methods (i.e., national or regional), years covered (i.e.,

census data covering several years versus studies that focus on one year only), and analysis subgroups (e.g., Aboriginal identity, secondary school completers).

3.1 Educational Attainment

A smaller proportion of Aboriginal than non-Aboriginal people participate in postsecondary education programs. Maxim and White (2006) found that just over 35% of Aboriginal youth covered by the Youth in Transition Survey (aged 18–20) participated in some form of postsecondary education, compared to approximately 54% of non-Aboriginal youth. A separate study by Berger, Motte, & Parkin (2007) found that among the "class of 2003," about 65% of Aboriginal high school graduates and 80% of non-Aboriginal high school graduates had pursued some type of postsecondary education. If we consider only those students who actually pursue postsecondary education, the relative proportion of leavers, continuers, and graduates is similar for Aboriginal and non-Aboriginal students (Maxim & White, 2006; Hango & de Broucker, 2007).

While it is important to remember that 35% of First Nations reserves are not included in the Canadian census and thus the actual numbers may be higher or lower, when we compare the educational attainment of the entire Aboriginal and non-Aboriginal populations aged 15 and over in the two most recent censuses, we find that a much higher proportion of the non-Aboriginal population has obtained a postsecondary degree at the bachelor's level or higher (see Table 1). In fact, the rate is more than three times that of Aboriginal people, and the gap appears to have grown between 2001 and 2006. Educational attainment is interesting for the Métis and Inuit sub groups in particular. A higher proportion of the Métis population and a lower proportion of the Inuit population have completed a university degree, compared with 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 in the rate between Aboriginal and non-Aboriginal people who have completed some other type of postsecondary certificate or diploma (such as one from a public or private college) as their highest level of educational attainment is not as wide. However, that gap also appears to have widened somewhat in the 2001–2006 period. The rates for the Métis population approximate those of the overall Aboriginal population, while the rate for the Inuit population is slightly below that for the overall Aboriginal population.

In terms of having completed an apprenticeship or a trades certificate as the highest level of educational attainment, relatively more Aboriginal people as an entire group (11.4%) and relatively more Métis people specifically (13.1%) than non-Aboriginal people (10.8%) have done so. Among the Inuit population, the rate is slightly lower (9.6%). Overall, the rate is falling slightly for all groups, likely due to an increase in the number of people choosing to pursue, and completing, other types of postsecondary education.

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

Table 1: Highest Level of Educational Attainment among Aboriginal and Non-Aboriginal Populations 15 Years of Age and Over, Canada, 2001 and 2006

	Completed Postsecond Bachelor's	lary Degree –	Completed Postsecond Certificate c		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%
2001	4.4%	15.7%	13.0%	17.6%	12.1%	10.8%

Source: Statistics Canada, 2008b. 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; and Statistics Canada, 2003a. Selected Educational Characteristics (29), Aboriginal Identity (8), Age Groups (5A) and Sex (3) for Population 15 Years and Over, for Canada, Provinces, Territories and Census Metropolitan Areas, 2001 Census – 20% Sample Data. Catalogue number: 97F0011XCB2001043. Table 2: Highest Level of Educational Attainment among First Nations, Métis and Inuit Populations 15 Years of Age and Over, Canada, 2001 and 2006

	Completed University Post- Secondary - Bachelor's or Above			Completed Post-Secondary Certificate or Diploma			Completed Apprenticeship or Trades Certificate		
				First			First		
	First Nation	Métis	Inuit	Nation	Métis	Inuit	Nation	Métis	Inuit
2006	5.2%	7.0%	2.7%	16.1%	16.2%	13.5%	10.4%	13.1%	9.6%
2001	4.1%	5.3%	1.8%	12.1%	14.8%	10.6%	11.5%	13.6%	11.1%

Source: Statistics Canada, 2008b. 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; and Statistics Canada, 2003a. Selected Educational Characteristics (29), Aboriginal Identity (8), Age Groups (5A) and Sex (3) for Population 15 Years and Over, for Canada, Provinces, Territories and Census Metropolitan Areas, 2001 Census – 20% Sample Data. Catalogue number: 97F0011XCB2001043.

3.2 Employment Success

Tables 3 summarizes the employment and unemployment rates for the entire Aboriginal on- and off-reserve populations (including the First Nation, Métis, and Inuit sub groups), the non-Aboriginal population, while Table 4 breaks out each Aboriginal sub group. 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 or 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 actually exceeded that of the general non-Aboriginal population in 2006, and the employment rate for the Aboriginal off-reserve population improved by more than 4% between 2001 and 2006.

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	Employment Ra	ates		Unemployment					
	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%			

Table 3: Employment and Unemployment Rates among Aboriginal and Non-Aboriginal Populations 15 Years of Age and Over, Canada, 2001 and 2006

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.

Employment Rate	Unemployment Rate						
Age and Over, Canada, 2001 and 2006							
Table 4: Employment and Unemployment Rates among Métis and Inuit Populations 15 Years of							

	Employment	Rate		Unemployment Rate		
	First Nation	Métis	Inuit	First Nation	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.

Research has confirmed that lower educational attainment is a statistically significant indicator of a lower level of labour force success for Aboriginal people (Hull, 2005; Ciceri & Scott, 2006; 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 actually 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 & 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.

Walters et al. (2004) found relatively low full-time employment and high unemployment levels among Aboriginal university graduates compared to visible minority and non-Aboriginal university graduates. The authors concluded that these results are "most surprising and unexpected ... and of particular concern because they suggest that Aboriginal [people] with a university degree are having difficulty acquiring even part time employment" (p. 292). Further research should be conducted on these findings. They further note that, at least for the group of 1995 graduates in terms of their employment situations in 1997, "[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 et al., 2004, p. 296).

However, things have improved somewhat. For example, in the 2006 census it is reported that the employment rate for Aboriginal people with a university degree (bachelor's or higher) was 77.1%, compared with 74.7% for the non-Aboriginal population (Statistics Canada, 2008c). The unemployment rate for each of these groups was 7.5% and 4.8% respectively.

"While the Aboriginal population's below average labour force and educational outcomes lead to lower Canadian output and productivity today, they also highlight the fact that the Aboriginal population of Canada possesses substantial untapped potential" (Sharpe, Arsenault, Lapointe & Cowan, 2009). Sharpe et al. (2009) examine the effect of increasing Aboriginal educational attainment on the labour force in Canada. They explore the hypothetical results of having Aboriginal Canadians reach the 2001 non-Aboriginal education and larbour market outcomes in 2026. If this was to happen, Aboriginal education levels would increase as would incomes and tax revenues. In particular the authors estimate an annual increase in income levels of \$36.5 billion in 2026. Tax revenues would be \$3.5 billion higher annually, than they would be if Aboriginal education and labour market outcomes remain the same. Government expenditures would also decrease by as much as \$14.2 billion as a result of increased social well-being among Aboriginal people (Sharpe et al., 2009).

3.3 Variation in Education 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, geographical location, as well as program level and field of study.

3.3.1 Gender

Although both Aboriginal men and women have lower education and employment outcomes relative to the general population, Aboriginal women often face different and additional barriers

It is well documented that, despite additional barriers to access, Aboriginal women are consistently more successful at postsecondary completion than Aboriginal men. to those faced by Aboriginal men. These difficulties are in addition to the gender disparities between men and women in the general population (Native Women's Association, 2009). In particular, Aboriginal women often withstand 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 (Native Women's Association, 2009).

It is well documented that, despite additional barriers to access, Aboriginal women are consistently more successful at postsecondary completion than Aboriginal men (Hull, 2005, 2009; Native Women's Association, 2004a, 2009; Mendelson, 2006) and are more likely to have a university

degree (Mendelson, 2006). Kapsalis (2006) found that Aboriginal women were two times as likely to have a university degree than Aboriginal men. Hull (2009) found that Aboriginal males (living on-reserve), on the other hand, are more likely than their female counterparts to have a trade certificate. This is also true of the Canadian population as a whole; more men than women are represented in the trades. Further research should investigate why Aboriginal women have been more successful at the university level.

Despite the greater postsecondary education success achieved by Aboriginal women, Aboriginal men are more likely to be employed (Hull, 2005; Mendelson, 2006; Ciceri & Scott, 2006). Ciceri

& Scott (2006) found the employment gender gap between Aboriginal men and women to be much smaller than the same gap in the non-Aboriginal population. A study by White et al. (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% employment rate, compared to 60% and 65% for other Aboriginal and non-Aboriginal women respectively. The influence of living on-reserve (registered Indians are more likely to reside on-reserve where labour force outcomes are lower) should be taken into account when interpreting these results (Native Women's Association, 2009).

Also, Aboriginal women with higher levels of education are more likely to be employed compared to other Aboriginal women. A full 74% of Aboriginal women with a university education were employed, compared with only a quarter of those who completed grade 8 and below (White et al., 2003). On the other hand, Walters et al. (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 compared to Aboriginal men, and to both 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 et al., 2008). The Native Women's Association (2004b) comments that First Nations, Métis and Inuit women and their children require certain basic needs when attending education or skills training programs. These include: affordable housing, adequate funding for school supplies, safe and accessible childcare, 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 (2004b).

Indeed, White et al. (2003) found that the likelihood of being employed is lower when an Aboriginal woman in Canada has children who are minors. More specifically, when Ciceri & Scott (2006) compared Aboriginal groups, they found that the impact of having dependants on employment was felt much more by Métis and Inuit women than by 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, on-reserve Aboriginal students with dependents had higher postsecondary completion rates (59%) than those without dependents (50%). Furthermore, while women with dependents had higher completion rates than women without, men with dependents had lower completion rates. Men who felt that family responsibilities interfered with their education had lower completion rates than those who said they did not (38% versus 59%). Hull's findings (2009) suggest that balancing education and familial responsibilities seems to be more difficult for Aboriginal men than for Aboriginal women.

The situation is similar for young Indigenous women in Australia. Long, Frigo and Batten (1998) report that Indigenous youth in Australia cite childcare as an important barrier to furthering their education in order to get a better job. Furthermore, there are few employment opportunities for

young Indigenous women in particular because they are expected to perform a range of family and domestic responsibilities which affects their employment prospects.

3.3.2Age

Age is an important factor to consider in the education and employment outcomes of Aboriginal people because of large differences in their age distribution compared to that of the non-Aboriginal population. Age is a popular topic in the literature with many authors examining its

Age is a popular topic in the literature with many authors examining its impact on education and employment. impact on education and employment (Statistics Canada, 2003 in Association of Canadian Community Colleges, 2005; Hull, 2005; Sharpe et al., 2007; Guimond & Robitaille, 2008; Richards, 2008; Sharpe, Arsenault, Lapointe & Cowan, 2009) The Aboriginal population as a whole is much younger than the general population. In 2001, the median age of Aboriginal people was 24.7 years, compared to 37.6 for other Canadians (Sharpe et al., 2007); by 2006 the median ages had increased to 26.5 years and 39.5 years, respectively.

It is also important to consider age because there are differences in educational attainment rates between Aboriginal and non-Aboriginal people when age cohorts are compared in Canada (Hull, 2005; Richards, 2008). While younger Aboriginal people are attaining more education than their older relatives, they have not kept pace with the increase in education levels among other young Canadians (Richards, 2008). Between 2001 and 2006, the proportion of Aboriginal people with a university degree in particular increased 1.4%. The corresponding increase experienced by First Nations in Canada equalled 1.1%. Of those First Nations people living on-reserve, the proportion increased 0.7% (Sharpe et al., 2009).²

Table 5 shows the percentage of each population that achieved various levels of education by age group, based on the 2006 census, and the gaps between the educational attainments of Aboriginal and non-Aboriginal people. 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% for the total population aged 15 and over. That gap is only 9.9% for the population that is 20–24 years of age, but more than 20% for the population that is 25–34 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% gap between the attainments of Aboriginal and those of non-Aboriginal people aged 15 and over. The gap is widest for the youngest age groups, almost 11% for those 20–24 years of age, and almost 6% for those 25–34 years of age. It is almost negligible for the older age groups.

Looking at the populations that have completed an apprenticeship or trades program as their highest level of educational attainment, on a proportional basis there are slightly more Aboriginal

² Note that the authors do not provide the percentages for other Aboriginal groups such as Inuit or Métis.

than non-Aboriginal people with such a designation. 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.

	Postsecon	npleted UniversityCompletedsecondary DegreePostsecondary Certificateuchelor's or Aboveor Diploma			Completed Apprenticeship or Trades Certificate	
	Non- Aboriginal Aboriginal		Aboriginal	Non- Aboriginal	Aboriginal	Non- Aboriginal
All	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%

Table 5: Highest Level of Educational Attainment among Aboriginal and Non-Aboriginal Populations, by Age Groups, Ages 15 and Over, 2006

Source: Statistics Canada, 2008b. 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 work force 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.

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, 2006). 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 et al., 2008; Sharpe and Arsenault, 2010).

3.3.3 Geographic Location

Many authors agree that the geographic location (in terms of provinces as well as urban and rural regions) in which Aboriginal youth reside has been found to have implications for their education and employment success (Mendelson, 2004, 2006; Hull, 2005; Kapsalis, 2006; Ciceri & Scott, 2006; Senécal, 2007). However, there appears to be a gap in the literature concerning Aboriginal populations in the territories.

Comparisons of the education and employment outcomes for Aboriginal people living in different regions of Canada show that those living in the east fair much better than those living in the west (Mendelson, 2004, 2006; Hull, 2005), as will be discussed next. 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 whole Canadian population

(Mendelson, 2006). Hull (2005) also makes comparisons between Aboriginal subgroups or "identities," and found that the proportion of First Nations (registered Indians) with postsecondary education in the Atlantic region is higher than for First Nations living elsewhere

Many authors agree that the geographic location (in terms of provinces as well as urban and rural regions) in which Aboriginal youth reside has been found to have implications for their education and employment success. in Canada. The Métis in the north, the Inuit in Ontario and the western provinces also have higher percentages of postsecondary graduates than 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 province to province. It is highest in Quebec, where 52% of the Aboriginal population compared with 32% of the general population has less than a high school education. It is also higher in the four western provinces than it is in the remaining eastern provinces (Mendelson, 2006). However, Mendelson (2006) also found that the gap between Aboriginal people and non-Aboriginal people aged 15 and over who have completed a university degree is 11%. It is relatively smaller in Saskatchewan (6%)

and in Atlantic Canada, compared with the rest of the provinces. He suggests that the more readily available university programming targeted at Aboriginal students in Saskatchewan (the First Nations University of Canada) may be one of the reasons for this relatively smaller gap. The Canadian Association of University Teachers feels that places such as the First Nations University in Saskatchewan offer things that mainstream institutions cannot such as a supportive environment (CAUT, 2010).

A report by Hull (2005) compared the educational attainment levels for subgroups (registered Indians or First Nations, Métis, and non-status Indians) of Aboriginal people. He found that the proportion that has completed a postsecondary education is lower for registered Indians, Métis, and non-status Indians in Manitoba and Saskatchewan, and for Inuit in Québec, compared to the proportion of all Aboriginal people across Canada who have completed postsecondary education.

When the educational attainment of those living in different-sized communities is compared, there is a positive correlation between increases in the size of the community and increases in the percentage of the population with a university degree. This correlation applies to both Aboriginal and non-Aboriginal populations (Hull, 2005). For example, the percentage of Aboriginal people in rural areas with a university degree is just 6%. It is 7% in towns and 13% in cities. 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.

The trends for employment outcomes are very similar. Mendelson (2004) found that, for Aboriginal people in 1996 and 2001, the unemployment rates were higher and participation rates were lower in the western provinces than in the eastern ones, with those in the Prairie provinces faring the poorest. Mendelson also reported that the unemployment rates for Aboriginal people living in cities was much higher than it was for non-Aboriginal people living in cities. He found that the 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. Senécal (2007) found that the unemployment rates for the four Inuit regions in the Canadian north are lowest in northern Quebec, and the participation rates are highest in Northwest Territories.

There is also evidence of an urban-rural divide. Mendelson (2004), using Statistics Canada data from 2001, compared the unemployment and participation rates of large and small urban centres, rural areas, and on-reserve communities. The unemployment rate is the highest on reserves and much lower in all other categories. Similar to the trend for educational attainment, unemployment rates in rural areas and other small communities are the same, and they are lowest in large urban centres. The participation rates look similar, with the large urban centres having the highest, followed by small urban and rural communities, then on-reserve communities. Ciceri & Scott (2006) also found that Aboriginal people living in urban areas had a higher likelihood of full-time employment, more so than for non-Aboriginal people. The fact that Aboriginal people tend to live in smaller communities also contributed to the gap in employment between them and non-Aboriginal people that was found by Kapsalis (2006).

3.3.4 Program Level and Field of Study

There is very little literature on the influence of Aboriginal students' program level and field of study may have on their postsecondary program completion rates. There is very little literature on the influence of Aboriginal students' program level and field of study may have on their postsecondary program completion rates. In fact, only one study (Hull, 2009) was reviewed. Research conducted by Hull (2009) found that among on-reserve Aboriginal students, college completion rates are significantly higher (63%) than university completion rates (38%). In terms of field of study, the skilled trades programs had the highest completion rates (86%), followed by business administration and management programs (70%) and then technical or para-professional programs (62%). Those enrolled in general studies or upgrading had the lowest rates of completion (23%).

4. Career Aspirations and Reality

There is relatively little literature on the career aspirations of Aboriginal people and their demonstrated ability to achieve those aspirations. There are three main documents of which one

There is relatively little literature on the career aspirations of Aboriginal people and their demonstrated ability to achieve those aspirations. is a Canadian study (Consulbec, 2002), while the other two come from Australia (Craven, Tucker, Munns, Hinkley, Marsh, & Simpson, 2005; Craven, 2006).

A Canadian study by Consulbec was commissioned by the Aboriginal Human Resource Council in order to "determine the career information needs for Aboriginal youth [aged 12–18 years of age] across Canada" (Consulbec, 2002, p. 1). The study focused only on Aboriginal youth and involved a survey of 433 of the 800 individuals – mostly from Ontario and Quebec – who attended the National Aboriginal Career Symposium (NACS) in Ottawa on

October 23–24, 2001. The study asked respondents about their dream job, the jobs they respected, the jobs they wanted to learn about, and the likelihood that they would actually work in a specific job. The study reported on the relationships among these variables.

The two Australian studies come from the Self-concept Enhancement and Learning Facilitation Research Centre in Sydney. They aimed at identifying Indigenous students' aspirations compared to those of non-Indigenous students (Craven, 2006) and at whether or not students distinguish between their desired goals and their attainable goals (Craven et al., 2005).

4.1 Aspirations

Aboriginal youth (aged 12–18) in the Consulbec study demonstrated a wide interest in professional careers and a low interest in trades. The number-one "dream job" among the respondents in Consulbec's study (2002) was "business owner." The authors speculate that a business owner represents independence, autonomy, and self-reliance. Also, business owner may be perceived as a career path of relatively little resistance (e.g., no accreditation needed), one that is a result of parental role modeling, and perhaps one that involves wealth.

Other popular dream jobs (in order of the frequency with which they were selected) cited by Aboriginal youth 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 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). Furthermore, in the Consulbec study (2002), on-reserve respondents identified firefighter, ironworker, teacher, carpenter, and nurse as possible occupational interests, while off-reserve respondents were more likely to choose computer programmer and accountant.

The jobs that the Aboriginal youth in the Consulbec study (2002) perceived they were likely to work in were 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 top five lists of expected jobs. The jobs most frequently identified by those living on-reserve were carpenter, cook, doctor, ironworker, band employee, and truck driver.

Youth were also asked to identify their level of respect for different jobs. Most of the dream jobs they identified were those they most respected. Young women showed more respect for a larger 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).

Indigenous students in Australia and Aboriginal students in Canada indicate that they want to work in jobs that would help their own people, and the broader community (Craven et al., 2005; Firman, 2007; Marlin & Bruce with Doucette, 2009). In Canada, similar aspirations would be indicated by choosing traditional Aboriginal career paths (such as fisherman or woodworker, etc). Although such choices would seem to contradict Consulbec's findings (2002), Firman (2007) acknowledges that many Aboriginal students aspire to traditional careers that are important to their culture and lifestyles, including trapping, hunting, fishing, spinning, hide preparation, article fabrication, woodworking, and herbal medicine. There are often many barriers to pursuing these traditional careers, and these careers are often not well (or at all) supported in mainstream curricula. Marlin et al. (2009), in their study on the Atlantic postsecondary educated labour force, found that Aboriginal people also go to school in a particular area because they have recognized a need in their community and they return home after graduation with the hopes of filling the need.

4.2 Aspirations and Demonstrated Abilities

The general career aspirations of Canadian Aboriginal youth, like all youth, indicate that they "aspire to productive and fulfilling occupations and careers" (Consulbec, 2002). These findings are encouraging, but the youths' choices are often unrealistic. Many of the dream jobs identified by these youth require extensive postsecondary education and training at levels that many students may not be able to reach (Consulbec, 2002). For example, 105 of the 433 respondents (about 25%) in the Consulbec study stated that they expected to become a medical doctor. Not only is this twice the number of current Aboriginal doctors in Canada, but only 62% of these students also expected to complete a university education. There is a very clear mismatch between the education required for specific careers, and the educational intentions of students in their planned efforts to obtain those careers.

Marlin et al. (2009) found a lack of career planning has negatively impacted the postsecondary school to work transitions of Aboriginal people in Canada. Participants in the study, such as First Nations education directors, said that students are not aware of what courses they need to take. The participants said it may be that students did not ask, but there should also be more support at the postsecondary level according to participants. Participants who did not complete their postsecondary studies suggested that academic advisors and career counsellors would have helped them choose the courses they needed. Participants felt that it would help if communities communicated the requirements for jobs that are available at home so that they would be able to design a path that would give them the necessary abilities needed for their chosen career (Marlin et al., 2009).

Similar to Aboriginal youth in Canada, Craven et al. (2005) found that many Australian Indigenous students set goals that were attainable but that did not correspond to their academic achievement. The authors do not suggest that Indigenous students are not intelligent enough to attain higher levels of education. They point out in general that Indigenous students tend to have low perceptions of their own academic abilities. This, in turn, translates into poorer academic performance and lower levels of educational attainment. Furthermore, Indigenous students tend to set their schooling and post-schooling aspirations at lower levels than their non-Indigenous peers (Craven, 2006).

This perceived lack of understanding of the connection between education and mainstream careers is also evident among Native Americans students. Both Jackson & Smith (2001) and Wilder, Jackson & Smith (2001) study of the transitions of Navajo students. Jackson & Smith (2001) found that participants demonstrated little understanding in this area. The authors state that a few participants had clear educational and career plans they wanted to achieve, but most did not have a good understanding of what it would take to reach their goals. Wilder et al. (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, and misunderstanding the relationship of postsecondary training to careers.

This misunderstanding about the connections between training and careers is also evident in the Consulbec study (2002) who found those Aboriginal youth who have high career aspirations may not be able to achieve them. A lack of advice and readily available information that is both reliable and practical may be the cause. Indeed, youth making transitions from school to work assume that they "know about different career options and have adequate information to make decisions" (Taylor & Steinhauer, 2008, p. 47). For example, the Consulbec study (2002) suggests that when examining the realistic job opportunities available to these youth and their anticipated level of education, most of the youth in their study are more likely to work in a job that they respect less than their dream job.

This likelihood is also supported by findings that Australian Indigenous students, compared to non-Indigenous students, are less likely to know much about the sort of job or further education they would like to undertake or the appropriate subjects to take in school (Craven, 2006). Taylor et al. (2009) also found that a lack of clear education and career goals among Aboriginals youth may stem from a lack of access to appropriate information about a broad range of careers, career development opportunities, programs that link school-work learning, and role models. It also may be a function of the tendency for the information that is available to Aboriginal youth to be based on assumptions about their needs and a "we know what's best for you" approach (Consulbec, 2002).

The knowledge base among Canadian Aboriginal students that underpins their decisions about postsecondary education and their career preferences and opportunities may be weaker than that of non-Aboriginal students (ITK, 2005; Taylor et al., 2009). The places where career information is most commonly obtained is first from the school (through formal services provided by guidance counsellors), second from teachers (informally in the classroom), and third from relatives (Consulbec, 2002). ITK (2005) studied the state of Inuit learning in Canada for the Canadian Council on Learning. The authors stress that Inuit students in Canada's north have

little support to help determine their educational career path. Inuit students need to be aware of what opportunities exist and how to prepare for them.

4.3 Aboriginal Representation across Occupational Sectors

There is little literature about 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 Statistics Canada 2006 Census of Population. Those industries that have a higher proportion of Aboriginal people than non-Aboriginal people are primary industries, construction, accommodation and food services, and the public services which include public administration, health care and social assistance, and educational services.

There is little literature about Aboriginal representation across occupational sectors. Industries with a smaller proportion of Aboriginal people compared to non-Aboriginal people are manufacturing, wholesale and retail trade, finance and insurance, professional, scientific and technical services.³ The authors of the report state that while there has been higher Aboriginal participation in the resource sector, there have also been gains in entrepreneurship across all industries. In particular there has been higher Aboriginal participation in the resource

sector but also in entrepreneurship within all economic sectors (TD Bank Financial Group, 2009).

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. They further report that, for better or worse, this success has created the potential to promote an overrepresentation of Indigenous people in skilled labour and semi-professional professions, and a subsequent and continued under-representation in university trained professional programs and careers.

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 D through A (the closer the letter is to the beginning of the alphabet, the higher the skill level required to do the job⁴). Using the 2001 census data, Kapsalis (2006) and Hull (2005)

³ Further data on Aboriginal representation across employment sectors are available from Statistics Canada for Aboriginal/non-Aboriginal, and for each of First Nation, Métis, and Inuit, and for on- and off -reserve, for each group. It can also be broken down by gender and age for any or all of the variables. The data can be found at http://www12.statcan.ca/census-recensement/2006/dp-pd/tbt/Rp-

eng.cfm?TABID=1&LANG=E&A=R&APATH=3&DETAIL=0&DIM=0&FL=A&FREE=0&GC=01&GID=61413 5&GK=1&GRP=1&O=D&PID=97446&PRID=0&PTYPE=88971,97154&S=0&SHOWALL=0&SUB=738&Temp oral=2006&THEME=73&VID=0&VNAMEE=&VNAMEF=&D1=0&D2=0&D3=0&D4=0&D5=0&D6=0

⁴ 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.

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 below.

Hull (2005) compared the sector of the labour force that had any level of postsecondary education (including people who had completed, or who had started but had not completed, their postsecondary education) to their occupation level, gender, and identity groups. Comparing all Aboriginal people (including registered Indians, Métis, Inuit, and non-status Indians) with non-Aboriginal people, Hull found that:

- 24% of Aboriginal people are found in level A occupations, compared with 35.2% of non-Aboriginal people
- 33.8% are found in level B occupations, compared with 34.2%
- 30.6% are found in level C occupations, compared with 26.1%
- 12.8% are found in level D occupations, compared with 7.3%

The same pattern holds true for people in the 18–24 age category (excluding students). Aboriginal people in this age group, regardless of their educational attainment level, are less likely than non-Aboriginal people (21% versus 30%) to be employed in high-skill (level A) occupations; they have approximately equal representation in skilled (32% versus 31%) and semi-skilled (33% versus 30%) occupations (levels B and C); and they are overrepresented in low-skilled (level D) occupations (14% versus 8%) (Kapsalis, 2006).

When considering gender, 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.

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

Breaking down the occupational classifications into specific sectors and industries, there is evidence of differences that can exist between population groups, Aboriginal identity groups, and gender. Kapslis's study (2006) examined the skill levels of 18–64-year-olds in the workforce, and found that Aboriginal workers, regardless of their education level, are most under-represented in high-skilled jobs in the private sector, including the following: private sector 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 overrepresented in public sector management 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% of Aboriginal workers work in the public sector (broadly defined), compared to 23% of non-Aboriginal workers (Kapslis, 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). The sector and industry breakdowns show no skills gaps between Aboriginal identity groups or genders. According to Kapsalis (2006), this lack of a gender gap contrasts with one that exists between non-Aboriginal men and women.

Hull's (2005) analysis revealed differences between Aboriginal identity groups when comparing those with a postsecondary certification/diploma/degree. According to Hull, First Nations men with postsecondary certification were most often found in government services, construction, and education/health/social services industries (47% all together). Another 10% were in the primary industries (e.g., fishing, forestry, mining) and a further 10% were found to be in manufacturing. Hull's work revealed that Inuit men with postsecondary certification were concentrated in a few industries to an even greater extent: over 25% are in government services and 13% were in each of construction and transportation and communication. Almost 64% of registered Indian women with postsecondary certification were found to be clustered in education/health/social services and government services. Hull stated that Métis women were slightly more likely than Métis men to be found in business services (in addition to education/health/social and government services). There also tended to be more non-status Indian women than non-status Indian men in business services and in trades than in government services. These tendencies 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 (2004) studied the capacity of Inuit people in the health field for the National Aboriginal Health Organization. Principals from 27 schools in the four Inuit regions of Canada were interviewed. The authors found that not enough Inuit students are going on to postsecondary programs and that even fewer are choosing the health field. In addition, Inuit students tend to select northern colleges over southern ones but health programs in the northern schools are limited. Students who do chose health programs encounter a variety of challenges such as needing particular high school course that must meet southern standards, financial needs (especially those who have families to support while attending school), as well as a variety of personal issues such as motivation. The Ajunnginiq Centre (2009) stressed that students must have access to detailed information about health careers and the postsecondary education required. In addition they found that postsecondary students wished they had learned about how to save money, budget, how to do homework, manage their time, and study effectively better while they were in high school.

5. Modes of Transition

When Aboriginal postsecondary students have a particular career aspiration and they complete the necessary education to meet their aspirations, they must then begin on the path of transitioning to the work force. This section explores the literature on transition and the variety of supports available to Aboriginal people as they make the move from education to employment.

There are many ways students can transition from secondary, postsecondary, or training programs into the workforce. Statistics Canada has identified a number of possible pathways (Hango & de Broucker, 2007). Figure 1 provides a general overview of the types of pathways that youth might follow into the workforce. Generally speaking, youth leave high school as either "completers" or "leavers". For both, there are a variety of paths. Leavers may enter the workforce directly from school, they may enter the workforce later in life (e.g., because they unable to work, or to focus on other activities, or to raise a family), or they may enter the workforce temporarily before going on to some type of postsecondary education, and then reenter the workforce after completion. Those who leave school may do so at least partially because of their perceived social reality. Historical and current social issues such as colonialism, the legacy of residential schools, poverty, racism, etc. has created mindsets of oppression and social barriers which prevent many Aboriginal people from accessing education and employment.

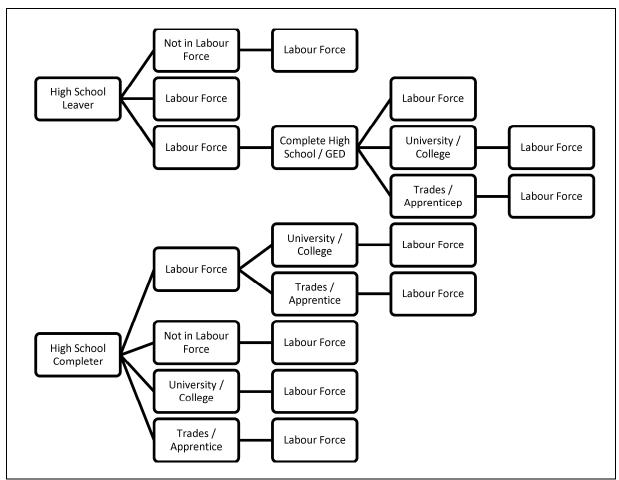
For completers, the paths are quite similar, with the additional possibility of taking one or more types of postsecondary education before entering the workforce. For both groups, any of these paths could be direct or indirect. For example, part-time work and part-time postsecondary education may be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

Hango & de Broucker (2007) found that of 20 possible pathways to the labour market, employed Aboriginal youth are more likely than employed non-Aboriginal youth to be represented in one of the following three groupings:

- 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 then went back and/or received some postsecondary training)
- high school diploma holders (those who graduated from high school and entered the labour market with no postsecondary education or training)

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.

Figure 1: Pathways into the Labour Force



Note: This graph does not indicate how long it takes leavers to attain their chosen career, if they are able to at all.

A recent literature review by Bell & O'Reilly (2008) examined the current state of school to work transition programs in Canada. In reviewing the various practices, programs, and policies, the authors found that there are many innovative, effective, and promising initiatives in Canada directed toward youth in transition, including those youth who are graduating from or dropping out of high school, entering the labour market after high school, entering postsecondary education, making postsecondary program changes, and leaving postsecondary programs (p. 1). However, Bell & O'Reilly also found 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.

Many studies and reports (Wotherspoon &Schissel, 1998; Holmes, 2005; Miller, 2005; Alford & James, 2007; Canadian Council on Learning, 2007b; Ciceri &Scott, 2006; Bell & O'Reilly, 2008; Giddy, Lopez, & Redman, 2009; Hull, 2009) have identified ideas and recommendations about the factors that contribute to successful policies, programs, and strategies targeting Aboriginal youths' school to work transitions.

Many studies and reports have identified ideas and recommendations about the factors that contribute to successful policies, programs, and strategies targeting Aboriginal youths' school to work transitions. According to Bell & O'Reilly (2008), key elements of success at the community level include having a strategic vision, involvement of key stakeholders, methods of addressing the public's 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 that include awareness of career and employment options for students, and finally improved linkages between vocational training/apprenticeships and postsecondary education. While these elements may be considered essential, Bell & O'Reilly (2008) also found that many success stories have further positive qualities that make them stand out, including the following:

- 1. transferability (locally, provincially, nationally, and internationally)
- 2. policies that have associated supporting programs
- 3. evaluated outcomes that were significant and spoke directly to the initiatives' success
- 4. sustainability or longevity
- 5. increased career outcomes (for example, higher incomes)
- 6. development of transferable, employable, and essential skills
- 7. built-in hope for the future

Programs for Aboriginal students must also be particularly culturally sensitive and inclusive, and take into account students' lives, including their families and communities (child care, transportation, and housing needs) (Wotherspoon & Schissel, 1998; Ciceri & Scott, 2006). For example, Wotherspoon & Schissel, who wrote in 1998, offer insights still valid today. They comment 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 authorities who can serve as role models fostering a learning atmosphere where students feel the safest, most comfortable, and most enthused.

While no single program can cover all of these components, Bell & O'Reilly (2008) found that programs with a combination of these characteristics lead to innovative, effective, and promising policies, programs, and practices. Many Aboriginal communities (including First Nations, Métis and Inuit) now partner with institutions to offer community-based programming to address the issue of the lengthy distance between the homes of many Aboriginal students and postsecondary schools (Holmes, 2005; Hull, 2009). Other Aboriginal communities (including First Nations, Métis and Inuit) 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 programs at the postsecondary level specifically for Inuit students and graduates making the transition to work. They submitted their study to the Inuit Education Summit. The authors found the program

design and delivery, innovative governance and partnerships, enhanced culturally unique student support, program funding, unique school to work transition, and program accountability were key factors of successful programs for Inuit students (Silta and Associates, 2007). The authors go on to say that 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 (Silta and Associates, 2007). The authors support community-based programs because of their increased accessibility for Inuit students who have additional family commitments and must stay close to home. They also support internships and summer employment opportunities that would introduce Inuit students to government employment opportunities (Silta and Associates, 2007).

In Australia, Giddy, et al. (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). Furthermore, 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."

According to Australian authors Arthur & David-Petero (2000) and Giddy et al. (2009), successful programs are those that facilitate positive school to work transitions that lead to fulltime 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 (Brigham & Taylor, 2006; Gelade & Stehlik, 2004).

In the United States there is a lack of literature about the postsecondary school to work transitions of and related programs for Native American youth (Shafer & Ramasamy, 1995; Long, 1999), especially of current information. According to Shafer & Ramasamy (1995), there

In the United States there is a lack of literature about the postsecondary school to work transitions of and related programs for Native American youth. is an "extreme paucity of research regarding the post-school outcomes of... Native American youth." The authors argue there is a significant need to assist Native American youth with disabilities to make a smooth transition from school to work and adult living. In addition, the high school dropout rate is higher for Native American students than any other ethnic minority (Shafer & Ramasamy, 1995; Long, 1999). In fact, almost 40% of Native Americans compared to 29% for the entire US population dropout of school before high school graduation (Shafer & Ramasamy, 1995). Long (1999) argues that transition programs mainly focus on transitions from secondary school to college and that there is a lack of help for Native American students wishing to directly enter the secondary labour market. Shafer & Ramasamy (1995) state that many Native Americans have some sort of disability with the most prevalent being a learning disability, speech impairment or being mentally challenged as well as a variety of psychosocial problems such depression, suicide, and substance abuse and that transition programs must be individualised to meet specific needs.

The majority of the very limited literature coming out of the United States on the topic of school to work transitions of Native American students are concentrated in the mid to late 1990s in response to the passing of the Individuals with Disabilities Education Act (IDEA) in 1990. The literature also tends to focus on Aboriginal students with disabilities (Shafer & Ramasamy, 1995; Wilder et al., 2001). IDEA mandates transition planning and counselling for "all students with

There appears to be little information in the literature on the impacts of racism for Aboriginal people during transitions from school to work. disabilities" regardless of the disability, including Native Americans (Wilder, Jackson & Smith, 2001). Wilder et al. (2001) claim that minority ethnic groups, including Native Americans, are overrepresented in special education classes. However, this claim does not make sense as not all of these children would need special education.

As in Canada and Australia, American authors stress the importance of culturally sensitive transition programs for Native Americans that recognize and incorporate the strong family bonds Native Americans have (Shafer & Ramasamy, 1995; Long, 1999; Wilder, et al., 2001). However, there

appears to be little information in the literature on the impacts of racism for Aboriginal people during transitions from school to work.

6. Success and Satisfaction in the Labour Market

Once the transition process has taken place and Aboriginal postsecondary graduates are in the workforce, how successful and satisfied are they? This section looks at the literature regarding the reasons why Aboriginal graduates succeed in attaching to the workforce and are satisfied with their participation. Indicators of success include a worker's 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's study (2006) looked at employment status and the factors that contribute to differences. They found that Aboriginal people aged 24–64, without regard for current labour force status, are 50% 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 distinct identity groups: Inuit have the lowest proportion (81%) working full-time, compared to First Nations people (85%) and Métis (86%).

According to the 2001 census, the average income of the Aboriginal population was 64% of the average income for the total population. The average income of First Nations people was 58% of the national average, and the average income of on-reserve residents was 49% of the national average (Mendelson, 2006). Aboriginal people in the workforce earn 23% less, on average, than non-Aboriginal workers. There is also a small income gap among people with different Aboriginal identities: First Nations people earn the least, and Métis earn the most, on average (Kapsalis, 2006).

6.2 Education Return Rates

Many studies report that the employment rates of Aboriginal people increase as their education levels increase (Brunnen, 2003; Walters et al., 2004; Hull, 2005; Ciceri & Scott, 2006; Kapsalis, 2006; Maxim & White, 2006; Richards, 2008; Sharpe et al., 2008). In fact, Ciceri and Scott (2006) found that Aboriginal university graduates are five times more likely to be employed than

Many studies report that the employment rates of Aboriginal people increase as their education levels increase. 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" (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 having completed high school and having a postsecondary certificate are two important thresholds where people's 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 et al., 2004). Brunnen (2003) reports that 48% of Aboriginal people holding a university degree earn \$40,000 or more per year, compared to only 11% of those without a high school diploma.

Gender also has an influence on income. The study by Walters et al. (2004), using data from the 1995 National Graduates Survey, compares men and women of Aboriginal identities, other visible minority identities, and non-minority identities. According to this study, Aboriginal men with a university degree earn the most compared to the other groups in the study. 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 there is still much work to be done to get more Aboriginal people to pursue and graduate from postsecondary studies (Native Women's Association of Canada, 2009).

Canadian researchers (Hull, 2005; Kapsalis et al., 2006; Sharpe et al., 2007) have reported that the wage gap in Canada is largely attributable to education levels. Slightly less than half of the 2001 income gap between Aboriginal and non-Aboriginal Canadians can be attributed to differences in educational attainment (Sharpe et al., 2007). Indeed Kapsalis (2006) found that 36% of the wage gap between Aboriginal and non-Aboriginal people in the workforce (full-time paid workers aged 18–64) was attributed 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 (to the disadvantage of Aboriginal people) between Aboriginal and non-Aboriginal full-time workers in the same job. The wage gap between the two groups is the largest (35%) for those with managerial occupations (compared to professional, skilled, semi-skilled, and low-skilled occupations).

6.3 Satisfaction with Labour Force Attachment

Various studies (Jetté, 1994; Arthur & David-Petero, 2000, v; Dwyer, 2001; Brown, 2003) have cited the many reasons for workplace satisfaction among Aboriginal people. Factors that influence employment satisfaction include positive employment experiences, cultural backgrounds, and disparity between Aboriginal and non-Aboriginal employees. Positive employment experiences and satisfaction with work are extremely important for anyone in the labour force; more positive experiences increase the level of workforce attachment. Arthur & David-Petero (2000) and Brown (2003) found that Aboriginal people, like other segments of the population, want to feel welcome, have employment in their chosen field which pays well and provides promotion and security. Indeed, Dwyer (2001) found that Aboriginal workers in the public sector cited leadership experiences, education, and job assignments and training as the most important factors leading to their staying and advancing in their workplace. However, their satisfaction with their work and workplace tends to suffer from a number of barriers that are different from those experienced by other groups (Jetté, 1994). However, the research on this topic is dated and suggests a gap in the research available on this subject.

Aboriginal people's cultural backgrounds influence their workplace experiences; they want to feel that their cultures, beliefs, and ways of thinking and problem solving are respected and

Various studies have cited the many reasons for workplace satisfaction among Aboriginal people; however, few discuss negative issues such as racism. valued. However, they often find themselves in workplaces and situations that are incompatible with their values and beliefs (Dwyer et al., 2001). When positive employment opportunities are not found, many have been shown to cease labour force activity altogether. This situation is much the same as Aboriginal students' satisfaction levels with their postsecondary education programs and their participation in apprenticeships and work placements. Brown (2003) states that organizations with a high Aboriginal turn over rate "just do not do the right things to make the few Aboriginal employees feel comfortable." Unfortunately, Brown does not include who these organizations are nor where they are located in Canada.

As stated earlier, there appears to be little information in the literature on the impacts of racism for Aboriginal people during transitios from school to work. Likewise there is limited information on the impacts of racism and discrimination in the workplace. However, a few Australian studies look at the disparity between Indigenous and non-Indigenous employees. This disparity is evident in terms of employment income, types of jobs, promotions, responsibilities, and so on. As well, some Aboriginal employees face discrimination in the workplace. For example, Indigenous Australian youth were found to be more represented than non-Indigenous youth in part-time, low-paid, insecure employment (Long et al. 1998). This is perhaps an indication of discrimination in the workplace. One third of participating Indigenous health workers in another Australian study indicated that they are dissatisfied with their jobs (Dollard, Stewart, Fuller, & Blue, 2001). 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 were identified as the major factors leading to their dissatisfaction.

7. Employers' Characteristics, Perceptions and Recruitment Strategies

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. There is a lack of available information on the types of businesses or

There is a lack of available information on the types of businesses or organizations that are likely to recruit or employ Aboriginal people, their attributes, or what they look for in workers. organizations that are likely to recruit or employ Aboriginal people, their attributes, or what they look for in workers. Nonetheless, employers who seek out and hire Aboriginal workers benefit in a variety of ways, including (but not limited to) acquiring new market opportunities, a better understanding of customers, increased workplace diversity, 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). A few studies (Brown, 2003; Sammartino et al., 2003; Craven et al., 2005; Brigham & Taylor, 2006; Aboriginal Human Resource Council, 2008) offer information about employers' perceptions of Aboriginal people in Canada and Indigenous people in Australia that may influence their labour force

attachment, and about some techniques or best practices that have been used and/or promoted in order to attract Aboriginal people to and retain them in the workforce.

7.1 Employers' Characteristics

There is little evidence in the published literature about special efforts being made by employers to recruit Aboriginal people. There is some discussion about the fact that in regions where there is a high concentration of Aboriginal people who could be employed (places where absolute numbers of Aboriginal people are relatively high), some efforts are made either to recruit them or

There is little evidence in the published literature about special efforts being made by employers to recruit Aboriginal people. to foster their interest in pursuing postsecondary education programs that may lead them into employment in a particular industry or sector. For example, the mining and oil and gas sectors actively recruit Aboriginal workers in the Prairie provinces (especially in rural and northern parts) (Aboriginal Human Resource Council, 2008).

Concerning the location of the Aboriginal population relative to available jobs, the trades sectors have been progressive and successful in promoting and attracting Aboriginal workers

(Craven et al., 2005). The available literature revealed a lack of information about the extent to which other employers or sectors actively work toward recruiting Aboriginal employees.

In a 1999 survey chief executive officers and senior managers of 229 Australian-based businesses (Sammartino, O'Flynn, & Nicholas, 2003), 58% (132 firms) employed Indigenous workers, however, they were usually employed in very small numbers (less than 2 percent of their worksforce). 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%) with Indigenous employees had an EEO policy, and almost three quarters of the firms engaged in EEO training.

It is not clear from the literature if employers, besides taking advantage of the presence of a potential labour force, seek specific characteristics in Aboriginal candidates that are different from those they seek in general in potential employees. Eighty-three percent of firms had documented EEO policies as these are legislatively required in most jurisdictions in Australia. These firms also reported the importance of having Indigenous employment policies and officers as ranking 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 they were also more likely to have these policies in place.

It is not clear from the literature if employers, besides taking advantage of the presence of a potential labour force, seek specific characteristics in Aboriginal candidates that are different from those they seek in general in potential employees. The Canadian federal public service's selection criteria require potential candidates to possess an undergraduate degree. Candidates demonstrating leadership abilities and experience are also valued (Dwyer, 2001). A

positive attitude also appears to be an important skill desired by employers. In fact, Lehman and Taylor (2003 in Brigham & Taylor, 2006) indicate, in an assessment of employability trends, that there tends to be a strong desire for socialization skills and positive attitudes.

7.2 Employers' Perceptions of Aboriginal Workers

A few studies offer information about employers' perceptions of Aboriginal people that may influence Aboriginal people's labour force attachment. A few studies offer information about employers' perceptions of Aboriginal people that may influence Aboriginal people's labour force attachment (Sammartino et al., 2003; Brown, 2003; Brigham & Taylor, 2006; AHRC, 2008).

There is limited Canadian research on the perceptions of Aboriginal workers by current and potential employers. Employer perceptions often stem from prejudices and assumptions that reflect historical stereotypes (Brigham & Taylor, 2006; Brown, 2003). Employers are often uncertain about hiring Aboriginal employees, even when they seem best suited for the job and appear to have a sustained interest in completing their training programs (AHRC, 2008). These perceptions may result in lower expectations by employers of their Aboriginal interns and employees (Brigham & Taylor, 2006), and perhaps in discrimination against Aboriginal candidates. This in turn may lead to lower levels of employment and representation of Aboriginal people across different sectors.

Similar to Canadian studies, Australian studies have documented perceptions that employers hold regarding Indigenous workers including that these workers have lower levels of skills, less commitment and lower performance levels, and higher rates of absenteeism than, and are more difficult to retain compared to, non-Indigenous workers (Sammartino et al., 2003). Perceptions about Indigenous workers compared to others may explain some of the gap in employment outcomes such as income, participation rates, etc. in Australia (Sammartino et al., 2003). Indeed, 62% 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% of non-Indigenous students.

8. Barriers to Successful Transitions

The literature is exceedingly strong in the area of barriers to postsecondary enrolment and completion (A Learning Alberta, 2006). There are many studies (Barsh, 1994; Boswell, 1997; Wotherspoon & Schissel, 1998; Long et al., 1998; Kirkness, 1999; Centre for Education

There are many studies that discuss barriers to making successful transitions from secondary school to postsecondary education programs and the workforce... Information, 2002; Kuhn & Sweetman, 2002; Fleury, 2002; Assembly of First Nations, 2003; R.A. Malatest & Associates, 2004⁵; Gelade & Stehlik, 2004; Walters et al., 2004; Association of Canadian Community Colleges, 2005; Battiste, 2005; Craven et al., 2005; Battiste, Bell, & Findlay, 2006; McCue, 2006; Ciceri & Scott, 2006; Alford & James, 2007; NAHO, 2007; Alford & James, 2007; Taylor et al., 2009; Taylor & Steinhauer, 2008; Orr et al., 2008; Taylor & Steinhauer, 2008; Hull, 2009; Waslander, 2009) that discuss barriers to making successful transitions from secondary school to postsecondary education programs and the workforce including dissatisfaction with postsecondary experiences, as well as historical, personal,

cultural, and geographic, and the mismatch between education attainment and actual requirements of desired jobs.

8.1 Aboriginal People's Dissatisfaction with Postsecondary Experiences

If Aboriginal students are dissatisfied with their educational experiences, it may cause them to have challenges transitioning to the workforce (similar to any student who is dissatisfied). However, for the most part, Aboriginal students have had positive experiences. Studies (The Centre for Education Information, 2002; Holmes, 2005; Maxim and White, 2006; Hull, 2009)

Feelings that Aboriginal students had experienced disrespect appeared as issues in a few studies. that have examined the postsecondary experiences of Aboriginal students and recent graduates generally found students' experiences have been positive. This information can be used to indicate the level of educational success of Aboriginal people and the extent to which the postsecondary experience in and of itself may be a barrier. The premise is that youth whose "educational experience is unsatisfactory to themselves are unlikely to acquire a taste for learning ... [and therefore] see little relevance of their

education to their future work" (Thiessen, 2001, p. iii). Hull (2009) even suggests that the more positive the education experiences for (on-reserve) students, the higher their completion rates.

⁵ R.A. Malatest & Associates (2004) is an important study cited often throughout this literature review. It examines Aboriginal postsecondary education as explored through qualitative interviews with stakeholders working in the field, describing practices and initiatives thought to help increase enrolment and completion rates. The authors claim that a qualitative approach was necessary because there is "virtually no worthwhile empirical or quantitative evidence on the subject" (p.1).

Feelings that Aboriginal students had experienced disrespect appeared as issues in a few studies (Long et al., 1998; R.A. Malatest & Associates, 2004; Wotherspoon & Schissel, 1998). This disrespect is perceived by Aboriginal students to be related to a lack of sensitivity about Aboriginal people and their culture, particularly by teachers and professors and by other students as well. An inhospitable environment in terms of cultural sensitivity toward different learning styles is one of the barriers to successful school experiences most often reported by Aboriginal students (Long et al., 1998; Wotherspoon & Schissel, 1998; R.A. Malatest & Associates, 2004; Alford & James, 2007).

8.2 Historical

Residential schools opened in Canada in the 1880s. They peaked at 80 schools in 1931 and the last one closed in 1986 (Marlin, et al., 2009). 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 were forced labour camps and had high mortality rates among students. More than 90,000 students attended residential schools. Those who survive this racist system and wanted to pursue postsecondary studies rarely did because it meant losing their Indian status. Before the 1960s the Canadian government used postsecondary education to assimilate Aboriginal people into mainstream society. The government forced those with postsecondary education to give up their Indian status (Marlin, et al., 2009). Today many Aboriginal students still see assimilation as a key part of postsecondary education. The historical impacts of colonization, racism, and Aboriginal peoples' residential education in Canada lingers in today's Aboriginal societies (NAHO, 2008) in the forms of distrust (Association of Canadian Community Colleges, 2005), strong feelings of forced assimilation (Orr et al., 2008), and negative parental attitudes passed on through generations (Assembly of First Nations, 2007). This legacy is often linked to current-day barriers to Aboriginal people achieving a postsecondary education (Kirkness, 1999; R.A. Malatest & Associates, 2004; Battiste, 2005; Battiste, Bell, & Findlay, 2006; Marlin et al., 2009) and subsequently moving on to successful employment.

8.3 Social and Personal

Many of the barriers faced by Aboriginal people are social in nature, and dependent on the personal situations of the students or workers (Long et al., 1998; Centre for Education Information, 2002; R.A. Malatest & Associates, 2004; Ajunnginiq Centre, 2004; Craven et al., 2005; Mendelson, 2006; Alford & James, 2007; Orr et al., 2008; Taylor & Steinhauer, 2008). In particular, the Ajunnginiq Centre (2004), in their report on building capacity in the Inuit health field, states that personal issues such as low self-esteem, dependence, depression, confusion, frustration, serious relationships, 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 can lead to problems in school. Furthermore, the social and demographic characteristics of a population directly and indirectly influence an individual's personal situation.

While there are a few other studies (Long et al., 1998; Ajunnginiq Centre, 2004; Craven et al., 2005; Assembly of First Nations, 2007; Alford & James, 2007; Orr et al., 2008; Taylor & Steinhauer, 2008), Mendelson (2006) and R.A. Malatest and Associates (2004) are key studies that examine social barriers Aboriginal people experience. The overall lower education levels of

Parental and community supports and their relationship to education and employment outcomes are cited frequently in the literature as especially relevant for Aboriginal youth. the Aboriginal population compared to those of the non-Aboriginal population are perhaps the largest barrier to successful labour force outcomes for Aboriginal people (Mendelson, 2006), including employment and income levels. Employment and income levels are directly related to a population's socioeconomic status (Mendelson, 2006) and an individual's well-being. Low socioeconomic status and a lack of personal well-being may lead to hardships in forms such as alcohol or drug abuse, health issues, poverty, incarceration, domestic abuse, or teen pregnancy (Long et al., 1998; R.A. Malatest & Associates, 2004; Craven et al., 2005). Each of these problems represents barriers to further education and future employment (Assembly of First Nations, 2007). Some studies also suggest that Aboriginal students often have a "poor self concept which leads to

feelings of powerlessness, apathy, poor mental and physical health, anger and frustration" (R.A. Malatest & Associates, 2004, p. 16).

8.4 Family and Community

Parental and community supports and their relationship to education and employment outcomes are cited frequently in the literature as especially relevant for Aboriginal youth. 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 (Jackson & Smith, 2001; Maxim & White, 2006; Hull, 2009). Thus, on the other hand, dysfunctional communities, lack of role models, language differences, peer pressure, and lack of family and community support are often perceived by Aboriginal people as larger barriers to successful education and employment outcomes than they are by their non-Aboriginal counterparts (Long et al., 1998; Centre for Education Information, 2002; R.A. Malatest & Associates, 2004; Craven et al., 2005; Alford & James, 2007; Orr et al., 2008; Taylor & Steinhauer, 2008).

The results of Jackson and Smith's (2001) study of the transition experiences of 22 Navajo Americans indicate that family influences can be both positive and negative. Participants in the study expressed a sense of pressure from their families to perform well academically and/or to stay close to home. Students who felt both seemed less hopeful they would succeed in their studies and the transition to the job market. Students who did not receive this mixed message from their families saw their futures more positively. Participants also mentioned more selfconfidence, more assurance about career selection, and were less ambiguous about schooling when they had an immediate relative who had graduated from college or was successful in his or her career.

On the negative side, family conflicts can have an unconstructive impact on Aboriginal students' education and transition to the workforce. Family conflicts can arise between the student and other family members. Participants felt family pressure to help in conflicts even if they did not involve them directly. They would even feel the need to return to their home community to help, even if this happened in the middle of a semester or might result in failing a class (Jackson &

Smith, 2001). While positive family situations such as cultural and ceremonial events, may draw students home, other negative family issues such as alcoholism, divorce, dysfunction, etc. also take Aboriginal students back to their home communities for extended periods.

Long (1999) writes about the school to work transitions of Native Americans as well and the implications for transition counsellors. He states that counsellors need to be aware of the strong family bonds held by Native American people and that this often results in graduates taking lesser jobs closer to home. They also often feel the need to drop out before completing their studies in order to help provide for their family. Furthermore, he says that for many Native American students, important decisions must go through the proper channels of family and tribe (Long, 1999).

8.5 Financial

Finances are a commonly cited barrier to accessing postsecondary education for students in general and for Aboriginal students in particular (Jackson & Smith, 2001; R.A. Malatest & Associates, 2004; Association of Canadian Community Colleges, 2005; Holmes, 2006; Taylor & Steinhauer, 2008; Marlin et al., 2009).

There are assistance programs specifically for Aboriginal students to aid them in financing their education. INAC offers three financial programs 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

Finances are a commonly cited barrier to accessing postsecondary education for students in general and for Aboriginal students in particular. 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 (programs summarized from INAC, 2004, and R.A. Malatest & Associates, 2004).

The funding available through the PSE Program was \$285.2 million in 2001–02, and it was determined by a formula related to the number of eligible First Nations and Inuit

students in each region. The funding available under this program was capped by the federal government in 1998 (R.A. Malatest & Associates, 2004). INAC supported 3600 First Nations and Inuit students in 1977-78. This number grew to 27,000 in 1999-2000 and is expected to increase to over 34,000 in 2010 (Usher, 2009). However, INAC has failed to keep pace with the demand from Aboriginal students. In 2000–01, 8,475 students (24% of applicants) who applied for financial assistance did not receive it (Assembly of First Nations, 2005).

Usher (2009) offers a review of INAC's PSSSP and recommends alternative delivery methods. The author explains that the PSSSP is distributed slightly differently in each of INAC's regions but is based on a grant delivered to First Nations by INACs regional offices. A number of audits have uncovered a number of problems with this delivery model. For example, INAC has been found to lack the appropriate internal structure to effectively deal with the program. Staff are not

well educated on the program and thus are not always able to offer appropriate support resulting in inconsistent advice given to First Nations bands who are charged with implementing the program. Furthermore, Usher (2009) feels there has been a lack of accountability with regards to

Many authors acknowledge and reiterate that, while funding assistance is available and helpful for those in receipt of it, the level of funding, and the funding that is available are inadequate and there are constraints on its access for many compared to the growing demand by Aboriginal students. performance measurement standards as well as bands providing expense details to INAC. Bands may authorize expenses which are in fact not covered by the program. The amount of funding available has remained relatively constant for far too long and does not reflect the growing cost of postsecondary education. Usher (2009) suggests that PSSSP program delivery could switch from First Nations to either regional First Nations education organizations, a pan-Canadian Aboriginal education foundation, INAC or HRSDC. However, this argument to eliminate the PSSSP is debatable.

The mixed success of the PSE Program has been reported by research studies. In particular, many authors (R.A. Malatest & Associates, 2004; Assembly of First Nations, 2005; Taylor & Steinhauer, 2008; The Education Policy Institute, 2009) acknowledge and reiterate that, while funding assistance is available and helpful for those in receipt of it, the level of funding, and the funding that is available are inadequate and there are constraints on its access for many compared to the growing demand by Aboriginal students.

The Assembly of First Nations also found that Aboriginal students only receive enough funding to cover 48% of the estimated average provincial cost per student per academic year (Assembly of First Nations in Association of Canadian Community Colleges, 2005). Approximately one quarter of applicants are funded for half of their required costs (R.A. Malatest & Associates, 2004), and as the number of Aboriginal students applying increases, the amount of resources that can be allocated to each applicant decreases (Taylor & Steinhauer, 2008). In addition, access to funding programs can be limited by particular qualifications such as age of applicant, choice of institution, band control of funding allocation, minimum number of courses and class hours. Thus, mature students and those living off-reserve may not always meet the requirements of funding programs. Funding can also stop if a student fails or must take a leave of absence (Holmes, 2006). These concerns represent significant barriers to addressing the overall issue that finances are a large, and perhaps the largest⁶, obstacle to postsecondary education access for Aboriginal students in Canada.

Some recommendations to address the challenges surrounding funding related to transition for Aboriginal students in Canada include removing the age restrictions on funding as well as for coop programs, summer student funding, and wage subsidies for employers to hire students (Native Women's Association, 2009). A key on-reserve reform that would help the financial assistance

⁶According to two reports by the Canada Millennium Scholarship Foundation, in 2005 and 2007, financial challenges are the number-one barrier to Aboriginal people accessing and completing postsecondary education.

situation for bands and individuals would be the creation of First Nations education authorities with budgetary authority in particular (Richards, 2009).

This lack of funding leads to financial barriers both in terms of not being able to afford postsecondary education, and in terms of being able to support other (and sometimes more urgent) costs associated with everyday life, including those for day care, housing, relocation, and travel. Such financial difficulties often lead Aboriginal students to become employed full time in low skilled labour jobs in order to resolve their financial strains, leaving their education behind (Jackson & Smith, 2001; R.A. Malatest & Associates, 2004). Participants in Marlin et al.'s (2009) study of the Atlantic Aboriginal postsecondary labour force explained that funding is often insufficient to cover all student expenses related to going to school so many have to work part time as well. Working takes away from their studies and they may not do as well. Some participants said some students could not strike a good balance and end up dropping out of school to work full time. Jackson & Smith, 2001concluded that Aboriginal student employment outcomes will be less favourable if they cannot secure the funding to cover their postsecondary studies.

8.6 Cultural

One of the most common barriers reported in the literature is the cultural differences that Aboriginal people encounter in school and work environments, differences that are manifested in a number of forms. Culture is not only race or ethnicity but beliefs, values, expectations, customs

One of the most common barriers reported in the literature is the cultural differences that Aboriginal people encounter in school and work environments... and perceptions. Wilder et al. state that "[c]ulture is a pervasive influence on behaviour" (2001, p. 120).

Inappropriate cultural content, teaching methods, and assessments are cited as factors in the lack of successful education outcomes by Aboriginal students than for their non-Aboriginal counterparts (Antone, 2003; Nunavut Tunngavik, 2006; Marlin et al., 2009).The mainstream system often does not cater to different learning styles, particularly the traditional knowledge, oral communication style, and holistic world views of Aboriginal peoples (Battiste, 2005; McCue, 2006; Canadian Council on

Learning, 2007a; National Aboriginal Health Organization, 2008; R.A. Malatest & Associates, 2004; Marlin et al., 2009). Mainstream institutions also present barriers for Aboriginal students who wish to learn about and participate in traditional Aboriginal studies and careers simply by not offering programs in these fields (Firman, 2007). Furthermore, many institutions in both Canada and Australia lack Aboriginal or Indigenous staff and other resources for students (R.A. Malatest & Associates, 2004; Alford & James, 2007; Marlin et al., 2009).

Aboriginal students and employees in Canada as well as Indigenous students and staff in Australia still experience discrimination and racism (Centre for Education Information, 2002; Alford & James, 2007; Taylor et al., 2009; Marlin et al., 2009) in their school and work environments, and sometimes in the school curriculum itself (Craven et al., 2005). In Australia stereotypes and presumptions by teachers about Indigenous culture and Indigenous students' level of motivation to succeed are often cited by Indigenous people as barriers to their educational success (Craven et al., 2005).

Dwyer (2001, p. 94) states that Aboriginal individuals in Canada 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, restrictions, and structures, may lead to misunderstandings between Aboriginal people and their employers or other workers in the form of rules, restrictions, and structures that do not appeal to Aboriginal people (Canadian Tourism Human Resource Council, 2007).

Aboriginal authors call for changes that acknowledge and incorporate First Nations, Métis and Inuit culture both in the classroom and the workplace. For example, the Nunavut Adult Learning Strategy (Nunavut Tunngavik, 2006) stresses the importance of ensuring programs and services are developed and offered in a culturally appropriate way that clearly reflects the needs of Inuit people. The Strategy specifically lists the lack of adult programming in Inuit languages, and of programming that reflects community needs and values.

Other authors (Premier's Economic Advisory Council, 2005) reflect these sentiments and call for a variety of family supports to help address the cultural challenges faced by Aboriginal people. In particular the Premier [of Manitoba's] Economic Advisory Council (2005) held a summit on Aboriginal business development and increasing the Aboriginal workforce. Three key areas for action were identified from summit participants: the importance of training, the need to recruit and retain Aboriginal workers, and the need for improved cross-cultural awareness. Family supports include childcare and training programs available locally to allow more Aboriginal people to gain education and then enter the labour market. This is especially important for Aboriginal women who tend to be single parents more often than Aboriginal men. Furthermore, education and training process will help to break down cultural barriers for Aboriginal people (Premier's Economic Advisory Council, 2005). This is because their culture is not only recognized but incorporated in the training environment thereby making them feel more comfortable and more able to learn.

In the United States Shafer & Ramasamy (1995) explain that school to work transitions may be difficult for Native Americans because of cultural differences between Native Americans and mainstream society. They state that successful transition is based on gainful, competitive employment and leaving the family home live on one's own, both of which are mainstream values (the authors call them "urban Anglo" values). The authors claim these are not universally valued in Native American culture, particularly on reservations that follow a traditional tribal lifestyle. In such communities, cooperation, interdependence and communal responsibility conflict with the culture of independence and competition, which Shafer & Ramasamy (1995) claim are often inferred by transition services.

Wilder et al. (2001), in their report about 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 the importance of specialised transition programming for Native American students that

includes appropriate cultural awareness and sensitivity. They stress that certain techniques that may be effective in one region or with one cultural group, may not be helpful or well received in another. Useful approaches to address culture in transition services for Native Americans include having an awareness and discussion of cultural differences, which can lead to a more culturally compatible program. In addition, including role models from the students' own communities [such as Elders] is an essential part of successful transition because it improves employment outcomes for students. This is because mentors can help students find jobs, share with them what is needed to be successful, and provide support. A role model from one's own culture is very empowering (Wilder et al., 2001).

8.7 Geographic

There is a large quantity of evidence that "geographic location" is a barrier to success for students and workers (Walters et al., 2004; Mendelson, 2004; Gelade & Stehlik, 2004; Craven et al., 2005; Taylor & Steinhauer, 2008; Waslander, 2009;). Geographic location can mean an urban versus rural context or an on-reserve versus off-reserve context. Often the two are closely related, in that reserves are more often found in rural communities.

There is a large quantity of evidence that "geographic location" is a barrier to success for students and workers. Many Aboriginal people have a strong desire to find employment in their home communities, reflecting not only living preferences but their culture, identity, and tradition (Mendelson, 2004). Australian researchers have found that Indigenous youth are often very interested in returning 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, the general conclusion of Craven et al. (2005) is 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 few opportunities exist for employment on-reserve or in nearby small communities and rural areas (Gelade & Stehlik, 2004; Craven et al., 2005; Taylor & Steinhauer, 2008; Walters et al., 2004; Waslander, 2009). 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).

Supporting the theory that fewer employment and economic opportunities exist on reserves, Mendelson (2004) reported that in 2001 Canadian unemployment rates were highest and labour force participation rates were lowest on reserves, compared with other communities (e.g., small towns, small cities, larger urban centres). This pattern is echoed by others (Assembly of First Nations, 2007; Kuhn & Sweetman, 2002) who have found that labour market success is greater for Aboriginal people who live off-reserve than for those who live on-reserve.

Another geographical barrier is the location of most postsecondary education institutions in Canada, which are largely found in large urban centres, far from most on-reserve communities. With limited opportunities to pursue postsecondary education while staying at home (on-

reserve), it is not surprising that, in general, most students — and workers, for that matter — migrate to urban centres to complete their education and to find financial well-being (Barsh, 1994; Fleury, 2002; Hull, 2009). Many Aboriginal secondary students have indicated, however, that they would like to stay at home for postsecondary education studies, but recognize the need to relocate for better educational and economic opportunities (Consulbec, 2002).

8.8 Education-Labour Force Linkages

Another barrier for Aboriginal people in the successful transition from postsecondary education to the workforce is the poor linkage between educational attainments and the education requirement of the jobs in which they intend or desire to work. The poor linkage is indicated by the fact that Aboriginal people are more likely than non-Aboriginal people to be both under qualified and overqualified for their jobs (Ciceri & Scott, 2006). Looking at only those people who hold full-time jobs, only 42% of Aboriginal people have jobs that match their skills and training, compared to 48% of non-Aboriginal people. In addition, 35% of Aboriginal people hold full-time jobs for which they are overqualified, and 24% hold jobs for which they are under

Many authors feel that most secondary schools and postsecondary institutions may not adequately prepare students in general, and Aboriginal people living on reserves in particular, for the reality of the workforce. qualified. This compares to 32% and 20% respectively for non-Aboriginal people (Ciceri & Scott, 2006).

Possibly as a precursor to holding jobs that are not consistent with one's skill set, education (either the level of attainment or the speciality of the degree program) may be improperly aligned with career goals or with actual employment opportunities available in the region. Furthermore, many authors feel that most secondary schools and postsecondary institutions may not adequately prepare students in general, and Aboriginal people living on reserves in particular, for the reality of the workforce (R.A. Malatest & Associates, 2004; McCue, 2006; Loizides & Zieminksi, 1998 in Brigham & Taylor, 2006; Taylor & Steinhauer, 2008; Orr, 2008; Marlin et al., 2009; Battiste et al., 2002). Many Aboriginal students often lack numeracy and literacy skills (Alford & James, 2007). Among other reasons, inadequate preparations for postsecondary education often lead to higher dropout rates

(Association of Canadian Community Colleges, 2005).

The authors of the Learning Alberta (2006) study on First Nations, Métis and Inuit learning access and success prefer not to focus on the many barriers and challenges for Aboriginal people but to look toward future opportunities. They state that it is "important to take a forward-looking view of new possibilities within the full spectrum of advanced learning opportunities, including the trades, community adult learning initiatives and programs, and initiatives within... advanced learning institutions" (A Learning Alberta, 2006, p. 1). They prefer to build on the respectful partnerships and relationships rather than differences between Aboriginal people and non-Aboriginal people. However, equality does not always mean equity and therefore to address the unique needs of Aboriginal peoples efforts are needed to identify and address how their situations are not equal to those of other people. Furthermore work to address those differences should be approached with equity-oriented interventions and or endeavours.

9. Summary and Suggestions for Further Research

9.1 Strengths and Gaps in the Literature

This literature review focused on five important research questions as outlined in section 2. The following is a summary of key findings related to each question along with the areas in the literature that are strong and where gaps exist.

1. What are the key barriers that Aboriginal postsecondary graduates face in transitioning to the labour market?

There is some literature on the barriers specifically associated with transitioning to the labour market. However, the literature is very strong in the barriers associated with completing secondary and/or postsecondary education. Barriers that are discussed most frequently in the literature are family issues, finances, culture, and geographic location. However, there is little information on the impacts of racism on Aboriginal people transitioning to the labour market. Completing secondary education is a key factor in eventual success in the labour market because it is an important factor in choosing to go on to attend postsecondary education in the pursuit of a well-paying job. However, we know that in some cases there is a mismatch between the choice of postsecondary program (and the career it prepares a student for) and the availability of employment in the desired or chosen career field. This tendency of Aboriginal people to return to their home communities is largely a reflection of their values expressed through culture. Transition or attachment to the labour-force upon returning to their home community complicated matters as, on average, there are simply fewer jobs available there and in surrounding rural communities.

2. What are the career aspirations of Aboriginal youth?

There is relatively little literature on the career aspirations of Aboriginal people and their demonstrated ability to achieve those aspirations. There are three main documents of which one is a Canadian study, while the other two come from Australia. The key Canadian study (Consulbec, 2002) addressing this issue examined the interests of Aboriginal youth aged 12–18 who had attended a National Aboriginal Career Symposium in 2001. "Business owner" was the number-one career choice. This particular option may have been identified because it appears to be one of relatively little "resistance" (e.g., no accreditation needed), as a function of parental role modeling, or perhaps because of a perception of wealth associated with it. Other "dream jobs" identified were doctor, lawyer, teacher, and engineer, in order of the frequency with which they were selected. 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 respondents increased. Young women gravitated toward occupations such as doctor, lawyer, and artisan. Young men tended to identify occupations such as athlete, officer, and engineer.

There is little correspondence between the career aspirations of Aboriginal youth, and the expected educational attainment they will achieve, which, typically, is much lower than the level of education they will require to qualify for the jobs they want or have been exposed to. Lack of exposure to other professions as options, while living within remote rural settings such as reserves is also a contributing factor, and there appears to be little written on this subject. Many of the desired careers appear to be either idealistic or unattainable, unless the youth who choose them are better counselled and supported to be able to complete the education and training necessary to qualify for such occupations.

There also appears to be a lack of advice and readily available information that is both reliable and practical to guide students and other youth in their career paths. An apparent lack of clear education and career goals may stem from a lack of access to appropriate information about a broad range of careers, career development opportunities, programs that link school to work learning, and role models.

3. How successful are Aboriginal youth in attaching to the labour market?

There is strength in the Canadian literature on employment outcomes for Aboriginal people. Furthermore, there is a great deal of literature on the variables than can contribute to positive education and employment outcomes such as age and geographic location. However, there is very little literature on the influence of Aboriginal students' program level and field of study may have on their postsecondary program completion rates.

There is mixed evidence about the success of Aboriginal youth in the labour market. The employment rate in 2006 of Aboriginal people with a university degree (bachelor's or higher) was higher than that of non-Aboriginal people with a university degree. However, there is a widening gap between Aboriginal and non-Aboriginal youth between the ages of 20 and 24 years in terms of the percentage who obtained a university degree (bachelor's or higher) between 2001 and 2006, suggesting that Aboriginal youth may be opting for other types of postsecondary education, or that further culturally specific supports are needed.

Young Aboriginal people in the labour force (those aged 18–24, excluding students) are overrepresented in low-skill occupations compared with non-Aboriginal people in the same age category. Aboriginal people in general are under-represented in high-skill jobs in the private sector. They are overrepresented in public sector management positions and in scientific occupations.

4. What are the main reasons Aboriginal postsecondary graduates are able to succeed in attaching to the workforce?

Apart from the many studies that link increased employment rates of Aboriginal people with their increased education levels, there was little in the available secondary literature that explicitly identifies the reasons Aboriginal postsecondary graduates successfully attach themselves to the workforce, although some information may exist in dissertations and student papers at universities across Canada. The literature explains that some Aboriginal people face challenges in the workplace once they are employed. These challenges include discrimination and wage disparity compared to others who have similar education and qualifications. They also include the feeling among Aboriginal people that their culture (in the broadest sense) is not respected in the workplace, that their approaches to thinking, problem solving, and engaging with other people are not viewed in the same light as those of "others." Role models and mentors rarely exist for recently hired Aboriginal youth, to follow or connect with, in many workplace situations. The literature states that successful programs and initiatives in which the Aboriginal community (broadly defined, including specific reserve communities and Aboriginal sector organizations) has a strong partnership presence are important. It is implied that Aboriginal postsecondary graduates who demand to be treated like others in the workforce (in terms of competitive wages, opportunities for growth and development, and opportunities for career advancement) are more successful.

5. How do the aspirations, barriers and successes of Aboriginal youth compare to those of non-Aboriginal youth?

There is much literature that compares the general Canadian population with the Aboriginal population. There are fewer studies that compare the Aboriginal sub groups (First Nation, Métis and Inuit) to the entire Canadian population though. The percentage of students 18–20-years-old who are considered "leavers" or "dropouts" from secondary school is about twice as high for Aboriginal students as for non-Aboriginal students. A study of Aboriginal students in high schools found that only 70% aspired to pursue postsecondary education, compared to 90% of their non-Aboriginal students. However the education goals of both Aboriginal and non-Aboriginal youth who wish to pursue some type of postsecondary education are quite similar: 36% of Aboriginal and 37% of non-Aboriginal students want to complete a bachelor's degree.

The lower rates of enrolment in and completion of postsecondary education programs by Aboriginal people compared to non-Aboriginal people suggest that there are important initial barriers for Aboriginal people in general, and for Aboriginal youth in particular, preventing their transition from secondary to postsecondary education and subsequently to the labour market. These barriers include historical, social and personal, financial, cultural, geographical, and education-labour force linkages.

Employed Aboriginal youth are more likely than employed non-Aboriginal youth to have entered the labour market from one of three common paths: as high school dropouts, as "second chancers" (having dropped out and then returned to school), and as holders of only a high school diploma. A greater proportion of non-Aboriginal youth tend to enter the labour market through some type of postsecondary education path.

Studies (The Centre for Education Information, 2002; Holmes, 2005; Maxim and White, 2006; Hull, 2009) do suggest that those Aboriginal students and/or recent Aboriginal graduates who choose postsecondary education generally have positive or satisfactory experiences. However, looking at people who hold full-time jobs, only 42% of Aboriginal people have jobs that match their skills and training, compared to 48% of non-Aboriginal people.

9.2 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.

Perspectives beyond the Literature

Given that the project methodology was restricted to a review of published and unpublished literature, the findings of this report are somewhat limited by the lack of primary research, such as interviews of employers, policy and program officers, and Aboriginal people themselves. Interviews on this subject would inform and enhance the analysis of the literature significantly. In particular it would be beneficial to conduct a qualitative analysis of transition issues.

Research Topic #1: Conduct a qualitative analysis of transition issues that addresses the following questions:

- 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, transitions of Aboriginal people from education to the labour market?

Longitudinal Studies of Graduates

"[T]he lack of a more frequent survey tracking education trends of the Aboriginal population at a detailed level make 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 surveys of graduates of their community college systems. There is an opportunity to develop an integrated, comprehensive national 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 on 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" of the postsecondary education systems to determine why they leave, and to determine if there are important differences over time between the outcomes for the two groups. Furthermore, research should examine why Aboriginal female students appear to be more successful at the university level then their male counterparts.

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

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. There appears to be a lack of a comprehensive analysis of 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 and case study summary of the best practices could be beneficial to all who are concerned with this issue.

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.

Career Aspirations and Planning Supports

There is relatively little information in the literature concerning the career aspirations and potential of Aboriginal youth. There is a need to understand the career aspirations of different groups of youth as well — those in primary schools, those in secondary schools, and those in postsecondary programs. The only study uncovered was based on a survey of participants in a 2001 National Aboriginal Career Symposium. 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.

Research Topic #4: Conduct research examining the career aspirations of Aboriginal youth with a view to developing appropriate information and services for them.

Attraction and Retention of Aboriginal Employees

There is some discussion in the literature about the strategies used by some employers to attract and retain Aboriginal employees, but questions remain about the extent to which there is or is not a targeted or specific approach that might be useful. There is also some discussion in the literature about lower rates of employee retention for Aboriginal people, but little in the way of concrete evidence from data. Understanding more about these issues, from the perspectives of both employers and employees, would be useful in the design of human resource strategies for all.

Research Topic #5: Conduct research on appropriate human resource strategies targeted at attracting and retaining Aboriginal employees that addresses the following issues:

- a. What recruitment strategies work best? Are there specific sectors or locations 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, and what resources do they need to address, the issues related to retention of Aboriginal employees?
- d. What evidence, if any, is there that employers' negative perceptions and beliefs about potential Aboriginal employees are accurate? To what extent do they reflect biases and prejudice?

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