

Prior to European settlers, Indigenous peoples had their own well-established education systems. These were rooted in the community and the natural environment, and were situated within a spiritual worldview

(Standing Senate Committee on Aboriginal Peoples [SSCAP], 2011).



© Credit iStockPhoto.com, ID 184910616

and youth (aged 15-24) comprised 28% and 18.2% respectively of the Indigenous population compared to 16.5% and 12.9% for the non-Indigenous population (Statistics Canada, 2013a). This segment of the population is growing faster than any other segment of the Canadian population. Of the three primary Indigenous populations, Inuit are the most youthful, with a median age of 23 years compared to 26 for First Nations and 31 for Métis (Statistics Canada, 2013a). This population profile indicates that a demographic wave is coming with potentially tremendous socio-economic impacts, not only within Indigenous communities but within Canada as a whole.

This fact sheet will examine some of the key factors contributing to or hindering academic success for Indigenous peoples, and current

levels of educational attainment for this population. It will conclude by highlighting some promising practices in advancing education among Indigenous peoples.

Factors affecting educational attainment among Indigenous peoples

A wide range of factors can affect learning for Indigenous peoples across all life stages, from early childhood education, kindergarten to Grade 12 (K-12), and post-secondary education. These factors operate from the individual to broader societal and environmental levels, and are primarily associated with historic and contemporary impacts of colonialism, including socio-economic marginalization, inappropriate education systems, and inequitable funding for education.

Historic and contemporary impacts of colonialism on educational attainment

Prior to European settlers, Indigenous peoples had their own well-established education systems. These were rooted in the community and the natural environment, and were situated within a spiritual worldview (Standing Senate Committee on Aboriginal Peoples [SSCAP], 2011). Knowledge was passed through the generations through oral traditions and experientially, and aimed to provide children with the skills and knowledge they needed to ensure they, their families and their communities survived (SSCAP, 2011). After the arrival of European settlers, formal education systems, based on Euro-Christian values, were imposed on Indigenous peoples

and dominated by churches and governments. In particular, the imposition of the Indian Residential School (IRS) system, which aimed to assimilate Indigenous peoples through segregating children from their families and communities, played a definitive role in contributing to the current state of education among Indigenous peoples today (Truth and Reconciliation Commission [TRC] of Canada, 2015). Instead of empowering Indigenous students, residential schools impoverished them and successive generations (SSCAP, 2011). The TRC (2015) highlighted the physical, emotional and sexual abuses many Indigenous students experienced in the Residential Schools, and the role these schools played in denigrating Indigenous cultures and severing children's connections to their families, communities and identities. The Residential School system led, for many, to a diminished sense of self-worth and self-determination, as well as a legacy of intergenerational trauma² and socio-economic marginalization which continue to have significant impacts on the health and well-being of Indigenous peoples and communities (Bombay, Matheson, & Anisman, 2009, 2014; TRC, 2015). The association between self-esteem, self-concept and self-worth with academic achievement has been well documented (see for example, Marsh & Martin, 2011), including within some Indigenous populations (see for example, Bodkin-Andrews, O'Rourke, & Craven, 2010; Whitesell et al., 2009; Whitley, Rawana, & Brownlee, 2014). Additionally, several studies have

shown correlations between having a family member who attended residential school with poorer educational outcomes (Bougie & Senécal, 2010; Feir, 2016; O'Gorman & Pandey, 2015).

While assimilation is no longer overtly forced on Indigenous peoples through Residential Schools, the formal education system continues to be dominated by Eurocentric knowledge and hegemonic structures, which perpetuate the values of colonialism and contribute to the marginalization of Indigenous students (Battiste, 2004, 2013). Too often knowledge is viewed as something that can be possessed or controlled by some but not others, reinforcing relationships based on the superiority of one culture over another (Battiste, 2002; Munroe, Borden, Orr, Toney, & Meader, 2013). Too often pedagogical approaches that utilize a one-way transfer of knowledge from teacher to student and value having the right answers are given preference over approaches that foster creativity, innovation and collaboration, thus denying Indigenous students with opportunities to build critical thinking skills and develop the tools they need to successfully face life's challenges (Munroe et al., 2013). Too often Indigenous peoples are portrayed in curriculum as problems resistant to solution, as backwards, and in other ways which promote colonial arrogance and perpetuate the maintenance of stereotypes and prejudice (Battiste, 2013; Godlewska, Moore, & Bednasek, 2010). The exclusion of Indigenous peoples'

histories, worldviews, languages and cultures from education inhibits the development of a strong identity and sense of self-worth, which are critical for empowering students to learn (Nguyen, 2011; Richmond & Smith, 2012). Additionally, measures of academic success too often focus on learning deficits rather than on positive learning outcomes, and promote individual competitiveness over personal growth, which may further disempower Indigenous students (CCL, 2007; Sisco, et al., 2012).

Additionally, the learning environment itself can contribute to poorer educational outcomes for Indigenous students. Overt and subconscious racism and discrimination within schools by classmates and by teachers can contribute to feelings of not belonging or a diminished sense of identity and self-worth, thus exacerbating the problem of low academic achievement for Indigenous students (Glass & Westmount, 2014; Neeganagwedgin, 2011; Riley & Ungerleider, 2012; Whitley et al., 2014). Schools may also lack culturally appropriate supports that would enable Indigenous students to succeed academically, as teachers and support staff may not understand the challenges Indigenous students face or be able to foster trust-based relationships with Indigenous students (Cherubini, 2012; Desmoulin, 2009; Richmond & Smith, 2012). As a result, Indigenous students may become alienated from their learning and drop-out.

² See Aguiar & Halseth (2015) for information on how intergenerational trauma manifests in Indigenous communities.

Socio-economic marginalization

Socio-economic marginalization is considered to be a leading factor associated with poorer educational attainment (Sisco et al., 2012). Poverty is associated with a number of factors which can influence children's physical and mental well-being and ability to learn, including detrimental impacts to cognitive development, lack of parental role modelling or support, unstable or unsafe home environment, poor quality or overcrowded housing, and food insecurity (Ferguson, Bovaird, & Mueller, 2007; Lacour & Tissington, 2011; Treanor, 2012). Poverty restricts access to education through the financial costs of schooling, such as school fees, transportation, and books, and through limiting an individual's access to further education because

of responsibilities to support a household. When poverty is prevalent within a community, recruiting and retaining high quality teachers and accessing high quality educational resources may be more challenging, which affects the quality of learning. Finally, in communities where poverty is prevalent there may be fewer employment opportunities and the economic benefits of education may not be apparent to, or valued by, individuals (van der Berg, 2008; Sisco et al., 2012).

A greater proportion of Indigenous people, especially First Nations living on reserve and Inuit people, are living in conditions of poverty, including living in poor quality and overcrowded housing and experiencing food insecurity, compared to the general population (Reading & Wien, 2009). This

marginalization is rooted in Indigenous peoples' historic and contemporary experiences with colonialism, including forced relocation onto reserves, destruction of traditional ways of living, the residential school system, funding and service inequities in health, education and social services sectors, as well as racism and discrimination within employment sectors and in daily life (Reading & Wien, 2009).

Inequitable funding for education

One of the primary barriers to learning for Indigenous peoples is the disparity in educational funding for Indigenous education systems, especially in rural and remote areas where access to schools and educational programs may be extremely limited. Currently, the federal government has responsibility



One of the primary barriers to learning for Indigenous peoples is the disparity in educational funding for Indigenous education systems, especially in rural and remote areas where access to schools and educational programs may be extremely limited.



for education on reserve. It funds early childhood programs, such as Aboriginal Head Start (on and off reserve) and the First Nations and Inuit Child Care Initiatives, it operates seven federal schools on reserve,³ and it funds approximately 518 band-operated elementary and secondary schools serving 60% of First Nations students on reserve (Assembly of First Nations [AFN], 2011). Each of the band-operated schools is required to develop and deliver educational services comparable to those in provincial/territorial jurisdictions, but without the same supports as mainstream schools (SSCAP, 2011). Responsibility for educating Indigenous students off reserve lies with the provincial/territorial governments, and thus the degree to which their unique needs are being met may vary widely across jurisdictions. The federal government also offers several programs which provide Indigenous students with

support to pursue training and post-secondary educational opportunities (Service Canada, 2013).

Federally supported Indigenous educational systems have been chronically underfunded for many years. Despite population and inflationary pressures, increases in funding for Indigenous and Northern Affairs (INAC) programs for First Nations and Inuit have remained capped at 2% annually since the mid-1990s (Chiefs Assembly on Education [CAE], 2012). In addition, the current funding formula does not take into account all the components required to operate a modern school system including libraries, student assessments, athletic programs and facilities, technology, curriculum development and language programs (SSCAP, 2011). There is also no additional funding to accommodate special needs students or to implement provincially

mandated programs, despite the fact that provincial school boards receive targeted funding to implement such programs within their schools (SSCAP, 2011). This funding disparity is considered to be one of the most critical factors preventing the delivery of high quality education services on First Nations reserves and in Inuit communities, especially in northern and remote regions where the cost of delivering education may be exceptionally high due to a sparse population and long travel distances (Sisco et al., 2012). The chronic underfunding of education has limited Indigenous students' access to educational services and programs across all levels. A 2011 survey revealed that while 67% of First Nations communities had early learning and child care (ELCC) programs, only 22% of First Nations children had access to these programs due to long wait lists (CAE, 2012). It

³ These are schools that are both funded and operated by the federal government for First Nations on reserve (at their request) rather than being funded by the federal government but operated by the First Nations bands themselves. There are currently seven of these schools (six in Ontario and one in Alberta).

Having to attend secondary school some distance away from home communities is a significant barrier to high school completion for First Nations students living on reserve.



© Credit: iStockPhoto.com, ID 140454940

also showed that approximately 31% of First Nations students attended off-reserve provincial schools, primarily secondary schools which are generally lacking in First Nations on-reserve communities. Having to attend secondary school some distance away from home communities is a significant barrier to high school completion for First Nations students living on reserve. Further, the number of Indigenous students who have been able to pursue post-secondary education has been limited by the lack of access to post-secondary educational opportunities in rural and remote communities, as well as by the 2% funding cap on federal post-secondary education support programs. A recent CBC News article, for example, highlighted an 18.3% decline since 1997 in the number of students funded through the Post-Secondary Student Support Program (Tasker, 2016).

Chronic underfunding of education has also had a significant impact

on the quality of educational infrastructure in Indigenous communities. In 2011, a reported 74% of First Nations schools on-reserve required major repairs, 32% lacked access to clean drinking water, and 72% had health and safety concerns (CAE, 2012). Additionally, a significant proportion of First Nations schools on reserve lacked access to additional amenities considered essential for supporting student learning, including fully equipped playing or outdoor fields, kitchens, science labs, libraries, and access to technology (CAE, 2012). It remains to be seen whether the federal government's promised funding in the 2016 Budget of \$2.6 billion to address on-reserve primary and secondary education and infrastructure needs, and \$129.4 million for Aboriginal Head Start and First Nation and Inuit Child Care Initiatives (Government of Canada, 2016), will have any positive impacts on Indigenous peoples' educational attainment levels.

Personal factors

Personal factors may also affect educational attainment for Indigenous students. For example, Bougie, Kelly-Scott and Arriagada (2013), drawing on 2012 Aboriginal Peoples Survey data, found that First Nations (living off reserve), Inuit and Métis males⁴ aged 18-44 commonly dropped out of high school due to a desire to work, money problems, school problems and a lack of interest, while their female counterparts cited pregnancy or childcare responsibilities as the main reasons for leaving. Arriagada (2015), using this same data source, found that engagement with extracurricular activities, having friends and family valuing and engaging with education, and having safe and supportive home and school environments were factors associated with high school completion for Indigenous adults. While Indigenous students dropped out of school at fairly high rates, this study showed that many went back and completed their high school

⁴ This study used 2012 Aboriginal Peoples Survey data which includes only First Nations people living off-reserve, Inuit and Métis people.

at some later point in time. An estimated 14% of off-reserve First Nations (off-reserve), 15% of Inuit and 9% of Métis had dropped out at least once before completing their high school diploma, highlighting the need for multiple pathways to pursue post-secondary education (Bougie et al., 2013).

The need for systemic change and the decolonization of education

For many Indigenous people, learning is holistic, lifelong, land-based, experiential, rooted in Indigenous languages and cultures, spiritually oriented, and a communal activity, involving family, community and Elders (Canadian Council on Learning [CCL], 2007). These values, beliefs and goals are not adequately reflected within formal education systems, especially within mainstream systems. There is a strong consensus among Indigenous education researchers that the “...exclusive use of Eurocentric knowledge in education has failed Indigenous children” (Battiste, 2002, p. 9), and that the education system must be completely transformed and decolonized so that the effects of colonization can be “healed and transcended” (Cajete, 2000, p. 181). As noted by Wildcat, McDonald, Irlbacher-Fox, and Coulthard (2014), “if colonization is fundamentally about dispossessing Indigenous peoples from land, decolonization must involve forms of education that reconnect Indigenous peoples to land and the social relations, knowledges and languages that arise from the land” (p. 1). As Battiste (2002) notes, decolonization is about:

raising the collective voice of Indigenous peoples, exposing injustices in colonial history, deconstructing the past by critically examining the many reasons for silencing of Aboriginal voices in Canadian history, legitimating the voices and experiences of Aboriginal people in the curriculum, recognizing it as a dynamic context of knowledge and knowing, and communicating the emotional journey that such explorations will generate. (p. 20)

This process entails that policy-makers, curriculum developers, administrators and educators at all levels consider the inequities that come from their choices, and “unlearn racism and superiority in all its manifestations, ... [examine the] ... social constructions in [their] judgements and learn new ways of knowing, valuing others, accepting diversity, and making equity and inclusion foundations for all learners” (Battiste, 2013, p. 166).

Some elements of decolonizing education identified in the literature include:

- utilizing processes which are active rather than passive, and which would allow Indigenous students to build critical thinking skills and relate what they’ve learned to the contexts of their everyday lives (Battiste, 2002; Munroe et al., 2013);

- co-constructing curriculum for language and culture revitalization, drawing from community contexts (Munroe et al., 2013), and utilizing Elders as educational treasures (Battiste, 2002);
- making Indigenous education a mission or priority for universities across Canada (Battiste, 2002);
- reforming education by redefining literacy in ways which affirm Indigenous languages and consciousness as essential to Indigenous learning and identity (Battiste, 2002); and
- effectively and fully integrating Indigenous knowledges, perspectives and pedagogies into educational curricula, which entails validating Indigenous knowledge as a full and equal partner rather than being treated as an ‘add on’ or ‘other’ way of knowing (Battiste, 2002; Munroe et al., 2013; CCL, 2007).

Decolonizing education is critical not only for restoring a strong sense of identity and pride in Indigenous peoples, which is associated with academic success (Schissel & Wotherspoon, 2003), but since education plays such a transformative role in Canadian society, it is also critical for advancing reconciliation and improving relationships between Indigenous and non-Indigenous peoples in Canada.

For many Indigenous people, learning is holistic, lifelong, land-based, experiential, rooted in Indigenous languages and cultures, spiritually oriented, and a communal activity, involving family, community and Elders

(Canadian Council on Learning [CCL], 2007).

Current levels of educational attainment

Rates of educational attainment among Indigenous peoples have improved considerably over recent decades; however, a number of educational gaps remain across gender, age, Indigenous groups and geography. Rates of educational attainment are consistently higher for Métis and First Nations living off reserve, and consistently lower for First Nations living on reserve, registered/status First Nations, and Inuit (Arrigata & Hango, 2016; Bougie et al., 2013; Gordon & White, 2014; Statistics Canada, 2013b). Younger generations (25-44 years) have higher post-secondary certification levels compared to older generations (Richards, 2014). With the exception of a trades certificate, First Nations, Inuit and Métis women are more likely to have obtained higher levels of education compared to men (Statistics Canada, 2013b). Educational attainment levels are also not uniform across all provinces and territories, with the Maritime provinces, Ontario, Quebec, and British Columbia (BC) having higher levels than Nunavut, the Northwest Territories, and the Prairie Provinces (Richards, 2014). As shown in Table 1, there continues to be significant gaps in attaining a university degree and secondary school completion (a critical requirement for improving post-secondary rates) across all Indigenous groups.

The link between education and improving life circumstances is well established. The unemployment rate for Indigenous individuals who do not complete high school is more than 25% greater than for those who

TABLE 1: EDUCATIONAL ATTAINMENT LEVELS OF INDIGENOUS PEOPLES COMPARED TO THE GENERAL POPULATION (AGED 25-64)

	Aboriginal	First Nations	Inuit	Métis	Non-Aboriginal
Post-secondary qualification	48.4%	52.1%	35.6%	54.8%	64.7%
Trades certificate	14.4%	13.2%	13.2%	16.3%	12.0%
College diploma	20.6%	21.2%	15.6%	23.2%	21.3%
University certificate or diploma below bachelor's level	3.5%	3.6%	1.7%	3.5%	4.9%
University degree	9.8%	10.9%	5.1%	11.7%	26.5%
High school diploma (age 18-44)*	No comparable data	72% (off-reserve)	42%	77%	89%

Source: Statistics Canada, 2013b; *Bougie et al., 2013

do, and incomes increase significantly the greater one's level of education (Richards, 2014). These education gaps are a real roadblock for improving the social determinants which underlie Indigenous people's health and well-being (Gordon & White, 2014). It is expected that this gap will continue over the next 5-10 years and, in fact, worsen for First Nations living on reserve, Status Indians and Inuit (White & Peters, 2013; Gordon & White, 2014).

Advances in education for Indigenous peoples

Numerous initiatives have been implemented across multiple levels to advance Indigenous education. These

initiatives highlight the many ways in which Indigenous control over education (including incorporation of Indigenous culture and language in curriculum and use of Indigenous modes of learning), high quality infrastructure, and socio-economic improvements are critical to fostering environments which are more conducive to student learning, giving students hope for the future, and enabling students and community members alike to take pride in their schools. While it is beyond the scope of this paper to provide a comprehensive list of all of these initiatives, several are profiled here in order to highlight the breadth of programs across Indigenous groups, educational levels, and program and policy realms.

Early learning and care initiatives

Much progress has been made in instilling language and culture into community-based early learning and care programs like Aboriginal Head Start, which are considered to be key sites for healthy child development and for improving school readiness and interest in lifelong learning. The federal government provides funding for Aboriginal Head Start programs in reserve communities through the First Nations Health Branch, Health Canada, and for urban and northern Indigenous communities through the Public Health Agency of Canada. These programs are holistic, incorporating not only language and culture, but also education, health promotion, nutrition, social support and parental involvement. They have shown positive impacts on Indigenous children and their families, including fostering self-confidence, self-worth and pride in identity, as well as greater cognitive skills, a desire for lifelong learning, and improved family relationships and parenting skills (Nguyen, 2011).

Kindergarten to Grade 12

Indigenous control over education systems was identified in the literature as being important for student success (Gordon & White, 2014; Nguyen, 2011). Since the dissolution of the residential school system, there has been a slow policy shift towards transferring jurisdiction over elementary and secondary education to on-reserve First Nations and Inuit peoples.

Much of this policy shift has emerged through Land Claims Agreements, including the James Bay and Northern Quebec Land Claims Agreement in 1975, which saw the establishment of a Cree School Board and Cree control over all aspects of their children's education, as well as the establishment of the Kativik School Board, which has exclusive jurisdiction over preschool, elementary, secondary and adult education within 14 Inuit communities in Nunavik (SSCAP, 2011). The Mi'kmaq Education Act, enacted by Parliament in 1998, gave 11 Mi'kmaq communities control over K-12 and post-secondary education (Association of Canadian Deans of Education [ACDE], 2010). In BC, the First Nations Jurisdiction over Education Act (Bill C34), introduced in 2006, gave participating First Nations jurisdiction over on-reserve K-12 education, and established a First Nations Education Authority to support them in exercising this jurisdiction in the areas of teacher certification, school certification, and the establishment of curriculum and examination standards (SSCAP, 2011).

There is a strong body of evidence that including Indigenous culture and language in education is associated with developmental and academic outcomes for Indigenous students (Findlay & Kohen, 2013). Language and cultural programming are increasingly being offered in the K-12 education system. Approximately 88% of First Nations schools offer some type of Indigenous language programming, 17% offer full Indigenous language immersion programming, 91% offer periodic cultural activities, and 57% offer regular and ongoing cultural programming (CAE, 2012). There are also a number of On the Land programs,⁵ which provide students with opportunities to explore many traditional activities as part of their daily school curriculum. Many include a language component and encourage parents to participate with their children (Sisco et al., 2012).

When Indigenous principles and perspectives of learning are incorporated into Indigenous education (ie. learning is holistic, experiential, rooted in Indigenous languages and cultures, spiritually oriented, and relational), the benefits can be wide reaching. For example,

When Indigenous principles and perspectives of learning are incorporated into Indigenous education (ie. learning is holistic, experiential, rooted in Indigenous languages and cultures, spiritually oriented, and relational), the benefits can be wide reaching.

⁵ See for example Beaufort Delta Educational Council's program offered in Moose Kerr School in Aklavik, NWT (Sisco et al., 2012).

the Outma Sqilx'w Cultural School in Penticton is a stunning, fully resourced school that offers a full-range of educational programs to address the spiritual, emotional, psychological and physical needs of students. The school also serves as a hub for school and community activity, and is viewed with pride by both students and community members alike. Not only have students been meeting provincial learning objectives (Penticton Indian Band, n.d.), but there is also some evidence of increased social cohesion, parental involvement, volunteerism, First Nation teacher attraction and retention, as well as reduced student truancy (Trotter, 2014).

There have been several initiatives which aim to address the lack of supportive educational services in First Nations schools. The Manitoba

First Nations Education Resource Centre, established by the Assembly of Manitoba Chiefs in 1998, provides coordinated education, administration, technology, language, and culture services to 58 schools in 49 First Nations communities in Manitoba (Manitoba First Nations Education Resource Centre Inc., n.d.). In December of 2016, INAC announced a new funding formula and the creation of a unique and historic First Nations designed and operated school board in Manitoba which will determine curriculum and professional development, hiring of faculty and staffing, and the allocation of student resources in that province (Pauls, 2016). There is also the Mi'kmaw Kina'matnewey, the central coordinating body representing the educational interests of Mi'kmaq communities in Nova Scotia, which provides oversight,

common services and resources to member schools (Lewington, 2012).

Universities have been working to improve the quality of teachers so they may better meet the needs of Indigenous students. Many have established Indigenous teacher education programs to increase the number of Indigenous teachers, while others (e.g. Lakehead, Trent) are incorporating curriculum on Indigenous histories, cultures and perspectives as a mandatory requirement for all student teachers so that they know more about Indigenous issues.

At the policy level, provincial ministries of education and Indigenous organizations have been developing policy frameworks and strategies for First Nations, Inuit and Métis education. These have included



© Credit: iStockPhoto.com, ID 589097066

Ontario's 2007 *First Nation, Métis, and Inuit Education Policy Framework*, Manitoba's 2016-19 *First Nation, Métis and Inuit Education Policy Framework*, the Assembly of First Nations' (2005) *First Nations Education Action Plan*, and the Inuit Tapiriit Kanatami *First Canadians, Canadians first: National Strategy on Inuit Education 2011*. The Métis Nation continues to work towards developing its own Métis Nation education strategy (Métis Nation, 2014). All of these strategies aim to increase learning outcomes through enhancing cultural heritage and history, establishing collaborative shared strategies, and enhancing broader understanding of Indigenous education issues and challenges.

Post-secondary education

Within post-secondary education settings, steps have been taken to foster Indigenous student success by addressing some of the unique barriers to post-secondary attainment. Provincial government frameworks, strategies, and action plans, such as BC's (n.d.) *Aboriginal Post-Secondary Education and Training Policy Framework and Action Plan*, have been implemented to address systemic barriers and initiate systemic institutional change to support Indigenous learners. The ACDE's (2010) *Accord on Indigenous Education* calls on universities and colleges across Canada to work together with the aim of enabling "Indigenous identities, cultures, languages, values, ways of knowing, and knowledge systems... [to] flourish in all Canadian settings" (p.4). A movement has also been emerging to make Indigenous studies mandatory

within universities to counter prevailing prejudices and stereotypes and to provide greater emphasis on teaching Indigenous history and perspectives, a recent Truth and Reconciliation Commission (TRC) 'Call to Action' (TRC, 2015). In 2016, the University of Winnipeg and Lakehead University became the first Canadian universities to make at least one Indigenous course required learning for all students (MacIntosh, 2016).

Innovative education delivery models have also been implemented to engage Indigenous post-secondary learners and help them overcome geographic barriers to education. For example, the University of Northern British Columbia has offered a number of experiential learning opportunities related to Indigenous cultural heritage, including: FNST 444: First Nations Cultural Heritage through Moose-Hide Tanning; FNST 161 - Making a Pit House; and FNST 208/284/303: Dakelh Studies – The Dugout Cottonwood Canoe courses (UNBC, 2016). Partnerships have been established between northern colleges and southern universities, and among different sectors, to provide select degree programs in underserved areas. Locally controlled higher Indigenous education centres have also emerged which utilize Indigenous pedagogy and perspectives to promote pride in Indigenous heritage, while offering courses and programs, often in partnership with other educational institutions, to advance Indigenous post-secondary education. An example of this is Blue Quills University in St. Paul, Alberta,

which evolved from a former church operated residential school to a university that provides academic and training courses in partnership with other academic institutions (Blue Quills University, n.d.).

Other initiatives have aimed to provide alternative pathways to post-secondary education or foster a more welcoming environment for Indigenous students. For example, the Nunavut Sivuniksavut Program allows Inuit youth who are beneficiaries of the Nunavut Land Claims Agreement to participate in an eight-month transitional program that teaches them about Inuit culture, history, organizations, land claims and issues, as well as the life skills needed to be healthy functioning adults. Upon completion of the program, students receive a certificate from Algonquin College, with transferable credits for Arctic College programs such as management (Sisco et al., 2012). The program has a long track record of success and has produced important leaders in Inuit organizations and government (Sisco et al., 2012). Indigenous student centres have also been established in many universities, as well as some mainstream primary and secondary schools,⁶ to provide Indigenous students with an inclusive, welcoming and respectful environment where they can feel they belong. These centres encourage "student empowerment, identity, community connection, and Indigenous ways of learning," (University of Regina, 2016), and support the academic and personal success of Indigenous students.

⁶ See for example the Aboriginal Student Program at Soaring Heights Secondary School in southern Ontario (Cherubini, 2014)

Conclusion

Improving education is critical for improving quality of life and the health and well-being of Indigenous peoples and communities. Since education has historically been a key site for the colonization of Indigenous peoples, in order to improve educational outcomes, these colonizing processes must be reversed and education systems must be re-indigenized (Battiste, 2013). Key features in this process are Indigenous-led education and the incorporation of Indigenous knowledges, languages and cultures in educational programs across all levels.

However, since the factors which impede educational attainment for Indigenous peoples are deeply rooted and complex, and operate at individual as well as systemic levels, intergovernmental and intersectoral approaches will also be required to address existing gaps in educational attainment. Within the education sector, initiatives should aim to foster a positive, welcoming, respectful and supportive learning environment within and outside all educational settings; consider the various pathways by which Indigenous people seek out higher educational opportunities; and address funding inequities for Indigenous education systems so that Indigenous

students can access a wide range of educational opportunities and receive high quality education at all levels. Within other sectors, initiatives must address the deeply rooted social and economic challenges faced by many Indigenous people and communities that act as barriers to student learning and educational attainment. This includes programs that foster economic development opportunities; support and strengthen families; address poverty, food insecurity and housing needs; and reduce crime and violence within Indigenous communities.

... the factors which impede educational attainment for Indigenous peoples are deeply rooted and complex, and operate at individual as well as systemic levels, intergovernmental and intersectoral approaches will also be required to address existing gaps in educational attainment.



© Credit: iStockPhoto.com, ID 171308229

Since education has historically been a key site for the colonization of Indigenous peoples, in order to improve educational outcomes, these colonizing processes must be reversed and education systems must be re-indigenized

(Battiste, 2013).

Resources

The Martin Family Initiative – a not for profit enterprise which seeks to improve elementary and secondary school outcomes for Indigenous Canadians through the implementation of training programs for educators, support for the development of school strategies, programs for Indigenous students, and other initiatives grounded in Indigenous cultures which aim to produce optimal education outcomes for all Indigenous students. themfi.ca/about-mfi

Indspire – a national charitable organization which works in partnership with a range of stakeholders to support the educational goals of First Nations, Inuit and Métis students through the provision of scholarships and bursaries, the delivery of programs and the sharing of resources with the goal of closing the gap in education. indspire.ca

Indigenous Education Network – Ontario Institute for Studies in Education – a group of students, faculty and community members undertaking initiatives to include Indigenous content and knowledge in graduate and teacher education courses to better prepare them to engage with learners from Indigenous communities. oise.utoronto.ca/ien

Service Canada – Education and Training for Aboriginal Peoples program – a website that provides access to information about programs that assist Indigenous peoples in accessing training and post-secondary education opportunities. canada.ca/en/services/benefits/audience/indigenous.html

Raham, M. (2009). *Best practices in Aboriginal education: A literature review and analysis for policy directions* – provides a summary of best practices in the delivery of language and literacy instruction, culturally-based programming, student engagement and retention, home and community partnerships, instruction, teacher preparation and support, school leadership and programming, assessment and monitoring, and governance related to Indigenous education in Canada and internationally. firstpeoplesgroup.com/mnsiurban/PDF/education/Best_Practices_in_Aboriginal_Education-2009.pdf

Rupertsland Institute – provides scholarships for Métis students interested in post-secondary education in Alberta. rupertsland.org/post-secondary-funding

AboriginalStudents.ca – a website which provides access to opportunities for Indigenous students. aboriginalstudents.ca

Indigenous and Northern Affairs Canada, Post-Secondary Student Support Program. aadnc-aandc.gc.ca/eng/1100100033682/1100100033683



References

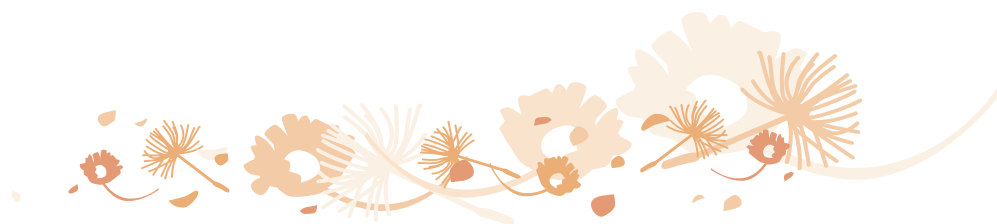
- Aboriginal Education Directorate. (2016). *2016-2019 First Nation, Métis and Inuit education policy framework*. Winnipeg, MB: Manitoba Education and Advanced Learning, Government of Manitoba.
- Aboriginal Education Office. (2007). *Ontario First Nation, Métis, and Inuit education policy framework*. Toronto, ON: Ministry of Education, Government of Ontario.
- Aguiar, W., & Halseth, R. (2015). *Aboriginal peoples and historic trauma: The processes of intergenerational transmission*. Prince George, BC: National Collaborating Centre for Aboriginal Health.
- Arriagada, P. (2015). *Participation in extracurricular activities and high school completion among off-reserve First Nations people*. Ottawa, ON: Statistics Canada, Catalogue no. 75-006-X.
- Arriagada, P., & Hango, D. (2016). *Literacy and numeracy among off-reserve First Nations people and Métis: Do higher skill levels improve labour market outcomes?* Ottawa, ON: Statistics Canada, Catalogue no. 75-006-X.
- Assembly of First Nations [AFN]. (2005). *First Nations education action plan*. Ottawa, ON: Author.
- Assembly of First Nations [AFN]. (2011). *First Nation elementary and secondary education: A discussion guide*. Ottawa, ON: Authors.
- Association of Canadian Deans of Education [ACDE]. (2010). *Accord on Indigenous education*. Retrieved August 26, 2016 from http://www.csse-scee.ca/docs/acde/ACDE_Accord_on_Indigenous_Education.pdf
- Baker, D.P., Leon, J., Smith Greenaway, E.G., Collins, J., & Movit, M. (2011). The education effect on population health: A reassessment. *Population and Development Review*, 37(2), 307-332.
- Battiste, M. (2002). *Indigenous knowledge and pedagogy in First Nations education: A literature review with recommendations*. Ottawa, ON: Prepared for the National Working Group on Education and the Minister of Indian Affairs Indian and Northern Affairs Canada (INAC). Retrieved December 22, 2016 from http://www.usask.ca/education/documents/profiles/battiste/ikp_e.pdf
- Battiste, M. (2004). *Animating sites of postcolonial education: Indigenous knowledge and the humanities*. Manitoba, MB: CSSE Plenary Address, May 29. Retrieved November 21, 2016 from <http://www.nvit.ca/docs/animating%20sites%20of%20postcolonial%20education%20indigenous%20knowledge%20and%20the%20humanities.pdf>
- Battiste, M. (2013). *Decolonizing education: Nourishing the learning spirit*. Vancouver, BC: Purich Publishing Ltd.
- Blue Quills University. (n.d.). *About us*. <http://www.bluequills.ca/welcome/about-us/>
- Bodkin-Andrews, G., O'Rourke, V., & Craven, R.G. (2010). The utility of general self-esteem and domain-specific self-concepts: Their influence on Indigenous and non-Indigenous students' educational outcomes. *Australian Journal of Education*, 54(3), 277-306.
- Bombay, A., Matheson, K., & Anisman, H. (2009). Intergenerational trauma: Convergence of multiple processes among First Nations peoples in Canada. *Journal of Aboriginal Health*, 5(4), 6-47.
- Bombay, A., Matheson, K., & Anisman, H. (2014). The intergenerational effects of Indian Residential Schools: Implications for the concept of historical trauma. *Transcultural Psychiatry*, 51(3), 320-38.
- Bougie, E., Kelly-Scott, K., & Arriagada, P. (2013). *The education and employment experiences of First Nations people living off reserve, Inuit, and Métis: Selected findings from the 2012 Aboriginal Peoples Survey*. Ottawa, ON: Statistics Canada, Catalogue no. 89-653-X-No. 001.
- Bougie, E., & Senécal, S. (2010). Registered Indian children's school success and intergenerational effects of residential schooling in Canada. *The International Indigenous Policy Journal*, 1(1), Article 5.
- Cajete, G. (2000). Indigenous knowledge: The Pueblo metaphor of Indigenous education. In M. Battiste (ed.), *Reclaiming Indigenous voice and vision* (pp. 181-191). Vancouver, BC: University of British Columbia Press.



- Canadian Council on Learning [CCL]. (2007). *Redefining how success is measured in First Nations, Inuit and Métis learning*. Ottawa, ON: Author. Retrieved September 22, 2016 from http://www.afn.ca/uploads/files/education/5_2007_redefining_how_success_is_measured_en.pdf
- Cherubini, L. (2014). *Aboriginal student engagement and achievement: Educational practices and cultural sustainability*. Vancouver, BC: UBC Press.
- Chiefs Assembly on Education [CAE]. (2012). *A portrait of First Nations and education*. Gatineau, QC: Palais des Congrès de Gatineau, October 1-3. Retrieved August 25, 2016 from http://www.afn.ca/uploads/files/events/fact_sheet-ccoe-3.pdf
- Desmoulins, L.A. (2009). *E/raced: Aboriginal youth identities and schooling*. Unpublished PhD dissertation, Lakehead University, Thunder Bay, Ontario.
- Feir, D.L. (2016). The intergenerational effects of residential schools on children's educational experiences in Ontario and Canada's western provinces. *The International Indigenous Policy Journal*, 7(3), Article 5.
- Ferguson, H.B., Bovaird, S., & Mueller, M.P. (2007). The impact of poverty on educational outcomes for children. *Paediatric & Child Health*, 12(8), 701-706.
- Findlay, L.C., & Kohen, D.E. (2013). Linking culture and language to Aboriginal children's outcomes: Lessons from Canadian data. In *Proceedings of the 17th Foundation for Endangered Languages Conference* (pp. 132-137). Hungerford, UK: Foundation for Endangered Languages.
- Friis, K., Lasgaard, M., Rowlands, G., Osborne, R.H., & Maindal, H.T. (2016). Health literacy mediates the relationship between educational attainment and health behavior: A Danish population-based study. *Journal of Health Communication*, 21(2), 54-60.
- Glass, C.R., & Westmont, C.M. (2014). Comparative effects of belongingness on the academic success and cross-cultural interactions of domestic and international students. *International Journal of Intercultural Relations*, 38, 106-119.
- Global Partnership for Education. (2017). *The benefits of education*. Washington, DC: Author. <http://www.globalpartnership.org/education/the-benefits-of-education>
- Godlewska, A., Moore, J., & Bednasek, C.D. (2010). Cultivating ignorance of Aboriginal realities. *The Canadian Geographer*, 54(4), 417-40.
- Gordon, C.E., & White, J.P. (2014). Indigenous educational attainment in Canada. *International Indigenous Policy Journal*, 5(3), 6.
- Government of Canada. (2016). *Budget 2016*. Ottawa, ON: Author. Retrieved December 1, 2016 from <http://www.budget.gc.ca/2016/docs/planch3-en.html>
- Inuit Tapiriit Kanatami [ITK]. (2011). *First Canadians, Canadians first: National strategy on Inuit education 2011*. Ottawa, ON: Authors.
- Lacour, M., & Tissington, L.D. (2011). The effects of poverty on academic achievement. *Educational Research and Reviews*, 6(7), 522-27.
- Lewington, J. (2012). In Nova Scotia, a Mi'kmaw model for First Nations education. *Education Canada Magazine*, 52(5). Retrieved December 1, 2016 from <http://www.cea-ace.ca/education-canada/article/nova-scotia-mi%E2%80%99kmaw-model-first-nation-education>
- MacIntosh, C. (2016). University of Winnipeg makes Indigenous studies mandatory. *CBC News*, September 15. Retrieved December 1, 2016 from <http://www.cbc.ca/news/canada/manitoba/university-of-winnipeg-makes-indigenous-studies-mandatory-1.3763846>
- Manitoba First Nations Education Resource Centre Inc. (n.d.). About. <http://mfnerc.org/about/>
- Marsh, H.W., & Martin, A.J. (2011). Academic self-concept and academic achievement: Relations and causal ordering. *British Journal of Educational Psychology*, 81(1), 49-77.

- Mendelson, J. (2006). *Aboriginal peoples and postsecondary education in Canada*. Ottawa, ON: Caledon Institute of Social Policy.
- Métis Nation. (2014). *Toward a Métis Nation education strategy*. Ottawa, ON: Author.
- Ministry of Advanced Education. (n.d.). *Aboriginal post-secondary education and training policy framework and action plan: 2020 vision for the future*. Victoria, BC: Government of BC.
- Munroe, E.A., Borden, L.L., Orr, A.M., Toney, D., & Meader, J. (2013). Decolonizing Aboriginal education in the 21st Century. *McGill Journal of Education*, 48(2): 317-338.
- Neeganagwedgin, E. (2011). A critical review of Aboriginal education in Canada: Eurocentric dominance impact and everyday denial. *International Journal of Inclusive Education*, 17(1), 15-31.
- Nguyen, M. (2011). Closing the education gap: A case for Aboriginal early childhood education in Canada. A look at the Aboriginal Headstart Program. *Canadian Journal of Education*, 34(3), 229-248.
- O’Gorman, M., & Pandey, M. (2015). Explaining low high school attainment in northern Aboriginal communities: An analysis of the Aboriginal People’s surveys. *Canadian Public Policy*, 41(4), 156-165.
- Organisation for Economic Co-operation and Development [OECD]. (2013). What are the social benefits of education? *Education Indicators in Focus*, 1, 1-4. Retrieved March 28, 2017 from [https://www.oecd.org/education/skills-beyond-school/EDIF%202013--N%C2%B010%20\(eng\)--v9%20FINAL%20bis.pdf](https://www.oecd.org/education/skills-beyond-school/EDIF%202013--N%C2%B010%20(eng)--v9%20FINAL%20bis.pdf)
- Pauls, K. (2016). New Indigenous school board in Manitoba ‘historic,’ federal cabinet minister says. *CBC News*, December 15. Retrieved January 3, 2017 from <http://www.cbc.ca/news/canada/manitoba/indigenous-education-manitoba-1.3988241>
- Penticton Indian Band. (n.d.). *Outma Sqilx’w Cultural School*. Penticton, BC: Author. http://pib.ca/?page_id=635
- Reading, C., & Wien, F. (2009). *Health inequalities and social determinants of Aboriginal peoples’ health*. Prince George, BC: National Collaborating Centre for Aboriginal Health.
- Richards, J. (2014). *Are we making progress? New evidence on Aboriginal education outcomes in provincial and reserve schools*. Toronto, ON: C.D. Howe Institute, Commentary, No. 408.
- Richmond, C., & Smith, D. (2012). Sense of belonging in the urban school environments of Aboriginal youth. *International Indigenous Policy Journal*, 3(1), Article 1.
- Riley, T., & Ungerleider, C. (2012). Self-fulfilling prophecy: How teachers’ attributions, expectations and stereotypes influence the learning opportunities afforded Aboriginal students. *Canadian Journal of Education*, 35(2), 303-33.
- Schissel, B., & Wotherspoon, T. (2003). *The legacy of school for Aboriginal People: Education, oppression, and emancipation*. Don Mills, ON: Oxford University Press.
- Service Canada. (2013). *Education and training – for Aboriginal peoples*. Ottawa, ON: Author. Retrieved March 28, 2017 from <https://www.canada.ca/en/employment-social-development/topic/education.html>
- Sisco, A., Caron-Vuotari, M., Stonebridge, C., Sutherland, G., & Rhéaume, G. (2012). *Lessons learned: Achieving positive educational outcomes in northern communities*. Ottawa, ON: Centre for the North, Conference Board of Canada.
- Standing Senate Committee on Aboriginal Peoples [SSCAP]. (2011). *Reforming First Nations education: From crisis to hope*. Ottawa, ON: Author.
- Statistics Canada. (2013a). *Aboriginal Peoples in Canada: First Nations People, Métis and Inuit – National Household Survey, 2011*. Ottawa, ON: Ministry of Industry.

- Statistics Canada. (2013b). *NHS in Brief: The educational attainment of Aboriginal peoples in Canada – National Household Survey (NHS), 2011*. Ottawa, ON: Author, Catalogue no. 99-012-X2011003.
- Tasker, J.P. (2016). Cap leads to steep drop in First Nations students receiving post-secondary support. *CBC News*, September 12. Retrieved September 15, 2016 from <http://www.cbc.ca/news/politics/first-nations-cap-higher-education-1.3753021>
- Treanor, M.C. (2012). *Impacts of poverty on children and young people*. Stirling, UK: Scottish Child Care and Protection Network.
- Trotter, M. (2014). *To develop new architectural initiatives to enhance education facilities for disadvantaged and disengaged youth*. Canberra, AU: The Winston Churchill Memorial Trust of Australia. Retrieved August 25, 2016 from https://www.churchilltrust.com.au/media/fellows/To_develop_new_architectural_initiatives_to_enhance___M_Trotter_2013.pdf
- Truth and Reconciliation Commission of Canada. (2015). Volume 1. *Honouring the truth, reconciling for the future: Summary of the Final Report of the Truth and Reconciliation Commission of Canada*. Winnipeg, MB: Author.
- University of Northern British Columbia [UNBC]. (2016). Experiential learning courses. *First Nations Studies*. Prince George, BC: Author. Retrieved December 1, 2016 from <http://www.unbc.ca/first-nations-studies/experiential-learning-courses>
- University of Regina. (2016). Aboriginal Student Centre, <http://www.uregina.ca/student/asc/>
- Van der Berg, S. (2008). *Poverty and education*. Paris, France: International Academy of Education and the International Institute for Educational Planning (UNESCO). Retrieved September 15, 2016 from <http://citeseerx.ist.psu.edu/viewdoc/download?doi=10.1.1.464.9607&rep=rep1&type=pdf>
- Van der Heide, I., Wang, J., Droomers, M., Spreuwenberg, P., Rademakers, J., & Uiters, E. (2013). The relationship between health, education, and health literacy: Results from the Dutch Adult Literacy and Life Skills Survey. *Journal of Health Communication*, 18(Suppl 1), 172-184.
- White, J.P., & Peters, J. (2013). Editors' commentary: The challenges in improving Indigenous educational attainment. *The International Indigenous Policy Journal*, 4(4), Article 6.
- Whitesell, N.R., Mitchell, C.M., Spicer, P., & The Voices of Indian Teens Project Team. (2009). A longitudinal study of self-esteem, cultural identity, and academic success among American Indian adolescents. *Cultural Diversity and Ethnic Minority Psychology*, 15(1), 38-50.
- Whitley, J., Rawana, E., & Brownlee, K. (2014). A comparison of Aboriginal and non-Aboriginal students on the inter-related dimensions of self-concept, strengths and achievement. *Brock Education: A Journal of Educational Research & Practice*, 23(2): 24-46.
- Wildcat, M., McDonald, M., Irlbacher-Fox, S., & Coulthard, G. (2014). Learning from the land: Indigenous land based pedagogy and decolonization. *Decolonization: Indigeneity, Education & Society*, 3(3), pp. i-xv.
- Winkleby, M., Jatulis, D., Frank, E., & Fortmann, S. (1992). Socioeconomic status and health: How education, income, and occupation contribute to risk factors for cardiovascular disease. *American Journal of Public Health*, 82(6), 816-820.
- World Health Organization [WHO]. (1998). *Social determinants of health: The solid facts*. Geneva: WHO.

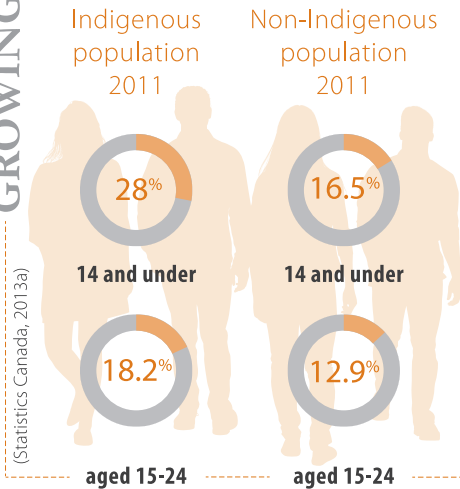


INFOGRAPHIC OVERVIEW



YOUTHFULNESS

GROWING



(Statistics Canada, 2013a)

MEDIAN AGE

Growing faster than any other segment of the Canadian population

31 Métis
26 First Nations
23 Inuit

For many Indigenous people, experience with Canada's formal education systems has been a traumatic one and despite improvements over the decades, Indigenous people continue to have significantly lower levels of education than the general population. Addressing these educational gaps is especially imperative given the youthfulness of the Indigenous population.

DEMOGRAPHIC WAVE

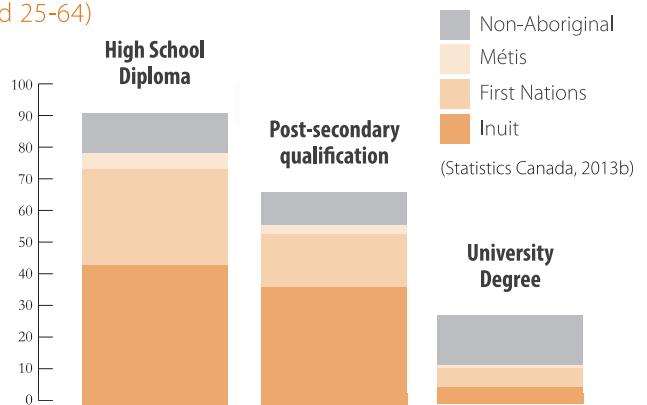
PERSONAL FACTORS

While Indigenous students dropped out of school at fairly high rates, this study showed that many went back and completed their high school at some later point in time. An estimated 14% of off-reserve First Nations, 15% of Inuit and 9% of Métis had dropped out at least once before completing their high school diploma, highlighting the need for multiple pathways to pursue post-secondary education (Bougie et al., 2013).



EDUCATIONAL ATTAINMENT

(aged 25-64)

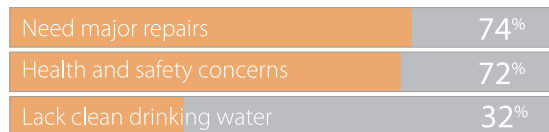


(Statistics Canada, 2013b)

Please see pg. 7 of the fact sheet for the complete table of educational attainment levels of Indigenous Peoples compared to the general population.

UNDERFUNDING

Reported in 2011, First Nations schools on-reserve:



(Chiefs Assembly on Education [CAE], 2012)

CHRONIC

31% of First Nations students attended off-reserve provincial schools. Having to attend secondary school some distance away from home communities is a significant barrier to high school completion for First Nations students living on reserve.

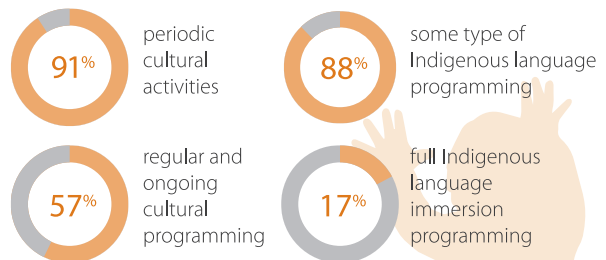
Despite population and inflationary pressures, increases in funding for INAC programs for First Nations and Inuit have remained capped at 2% annually since the mid-1990s (CAE, 2012).

18.3% decline since 1997 in the number of students funded through the Post-Secondary Student Support Program (Tasker, 2016).

ISOLATION BARRIERS

DECOLONIZING EDUCATION

First Nations schools offer approximately: (CAE, 2012)



There is a strong body of evidence that including Indigenous culture and language in education is associated with developmental and academic outcomes for Indigenous students (Findlay & Koben, 2013).

CULTURAL PROGRAMMING

DISPARITIES IN QUALITY AND ACCESS



Employment as a social determinant of First Nations, Inuit and Métis health

This fact sheet examines Indigenous peoples' participation in the labour market, including context, demographics and barriers to employment. It describes how un/employment can impact health and well-being and highlights some current initiatives to address employment inequities for Indigenous peoples.



Housing as a social determinant for First Nations, Inuit, and Métis health

This fact sheet provides a review of the living and housing conditions of Indigenous households in Canada. The fact sheet begins by presenting demographic data, housing statistics and the rates of homelessness, followed by samples of innovative community-based housing initiatives, developments and options that are underway in Canada to improve the living conditions of Indigenous peoples.



Culture and language as social determinants of First Nations, Inuit, and Métis health

Culture is the foundation of individual and collective identity, and is expressed and maintained through language. The erosion of culture and language can adversely affect mental health and well-being. This fact sheet reviews disruptions to, and current trends, in language use and cultural practices for First Nations, Inuit and Métis peoples, provides an overview of how language and culture influence Indigenous perceptions of health and illness, and highlight some promising initiatives in revitalizing their languages and cultures.



Pathways to improving well-being for Indigenous Peoples: How living conditions decide health

This report provides a broad overview of socio-economic determinants of Indigenous health, including income, education, unemployment, housing, social support, health care access, education, healthy living, and social exclusion.



Tackling Poverty in Indigenous Communities in Canada

For First Nation, Inuit and Métis peoples in Canada, who experience a disproportionate burden of illness, poverty is both deep and widespread. This paper briefly examines the breadth and depth of poverty in Indigenous communities using standard economic indicators.



Health inequalities and the social determinants of Aboriginal peoples' health

Available data is used in this report to describe health inequalities experienced by diverse Aboriginal peoples in Canada, linking social determinants to health inequalities rooted in contexts specific to Indigenous peoples. This is an update from the original 2009 report.



The health of Aboriginal people residing in urban areas

Aboriginal people in Canada are increasingly becoming urbanized, with more than half living in urban centres. Despite this growing trend, the health of Aboriginal peoples residing in urban areas is not well known. The NCCAH report examines the health and well-being of Canada's demographically and culturally diverse urban Aboriginal population.



Strengthening Urban Aboriginal Families: Exploring promising practices

This report identifies promising practices that agencies, practitioners, and policy makers can use to strengthen urban Aboriginal families. It includes six detailed case studies of service agencies that have all been successful in building service and matching community needs.



