The Impact of the Aboriginal Education Gap in Ontario

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1. Introduction

An education is one of the most valuable assets a person can have; it allows freedom of thought, expression, and the ability to understand life's complexities. Sadly, there is a large Aboriginal education gap occurring in Canada, and especially in Ontario. Aboriginal persons have, on average, much lower education rates than those of the non-Aboriginal population. Ontario has one of the largest populations of Aboriginal people, accounting for approximately 21.5%¹ of the total Aboriginal population in Canada. The gap between the education levels of Aboriginals and non-Aboriginals is growing and the aboriginal community is being left farther and farther behind.

The lack of education in the Aboriginal community is negatively affecting them in a few different ways. Many members of the Aboriginal community are losing the monetary benefit that goes along with a higher education. In addition, they are also missing out on non-monetary benefits such as longer vacation time and better health benefits that are congruent with jobs obtained by more educated individuals.

Aboriginal communities are not the only ones that are suffering due to this education gap. All Ontarians feel the negative impact of this education gap and reducing it would benefit all Ontarians; non-Aboriginals and Aboriginals alike. Studies have shown that increases in education lead to a decrease in crime rates and also increases productivity.²

¹ http://www12.statcan.gc.ca/nhs-enm/2011/as-sa/99-011-x/99-011-x2011001-eng.cfm#bx2

² Wolfe, B., & Hayeman, R. Social and nonmarket benefits from education in an advanced economy.

The following paper will analyze the effect of education on the lives of Ontarians and the impact the Aboriginal education gap has on both the Aboriginal community and the Ontario economy.

2. Relationship between Education and Future Earnings

In Ontario, if a typical Aboriginal female drops out of high school instead of completing her high school diploma, she is forgoing an additional \$3.77 an hour in wages. If instead of dropping out of high school she completed a bachelor degree or higher, she would increase her lifetime earnings by over \$1 million. The findings for Aboriginal males show a similar relationship between education and earnings. These numbers demonstrate that there are huge monetary benefits for Aboriginal persons who further their education. However, the education gap in Ontario is increasing rather than decreasing. The reasons for this increase, such as population growth and past education levels, will be discussed later in this paper.

To better understand the impact of education on earnings, this paper will look at the earnings of 16 average Ontarians. Ontarians will be grouped by sex, Aboriginal status, and education level. Persons with one of the following four education levels will be analyzed:

- 1. No certificate, diploma, or degree
- 2. High school certificate or equivalent
- 3. Postsecondary certificate or diploma below bachelor level
- 4. University certificate, diploma, or degree at bachelor level or above

The lifetime earnings of these groups are shown in Tables 1 and 2 below. The results show patterns that would be expected, such as that men earn more than women at each level of education. However, women benefit more from education than males.

Table 1 shows the median lifetime earnings of non-Aboriginal Ontarians discounted to their present value, using a 2% interest rate. This means that 50% of Ontarians earn more and 50% earn less than the amounts given. The gap in earnings between males and females with no certificate, diploma, or degree is huge, with females earning only 56% of what males do. However, the difference in earnings is reduced significantly as education increases. Females with a university certificate, diploma, or degree at or above a bachelor level earn 73% of what males with the same level of education earn.

Table 1: Lifetime Earnings of Non-Aboriginal Ontarians

	Male	Female
No certificate, diploma,	\$709,452.60	\$399,304.79
or degree		
High school certificate	\$931,151.24	\$619,849.75
or equivalent		
Postsecondary	\$1,354,677.79	\$933,364.77
certificate or diploma		
below bachelor level		
University certificate,	\$1,758,408.32	\$1,291,138.38
diploma, or degree at		
bachelor level or above		

Table 2 shows the median lifetime earnings of Aboriginal Ontarians discounted to their present value using a 2% interest rate as well. The changes in income across

education levels are similar to those in Table 1 but overall the income of Aboriginal persons is slightly lower than those of non-Aboriginals. Again, women earn less than men at every education level, but they benefit more from education. Also, the earnings gap, the difference in lifetime earnings, between males and females is drastically reduced at the bachelor degree level and above. Aboriginal women with no certificate, diploma, or degree earn only 51% of what Aboriginal men with no certificate, diploma, or degree earn. However, Aboriginal women with a bachelor degree or above earn 83% of what Aboriginal men with the same education level earn.

Table 2: Lifetime Earnings of Aboriginal Ontarians

Education Level	Male	Female
No certificate, diploma,	\$625,896.20	\$323,148.04
or degree		
High school certificate	\$741,028.53	\$522,454.63
or equivalent		
Postsecondary	\$1,217,533.07	\$862,871.52
certificate or diploma		
below bachelor level		
University certificate,	\$1,695,714.38	\$1,412,925.17
diploma, or degree at		
bachelor level or above		

It is easy to see from Figures 1 and 2 below the reduction in the earnings gap that is taking place between female earnings and male earnings as level of education increases.

Figure 1: Comparison of Lifetime Earnings of Non-Aboriginal Ontarians \$2,000,000.00 \$1,800,000.00 \$1,600,000.00 \$1,400,000.00 \$1,200,000.00 \$1,000,000.00 \$800,000.00 Male \$600,000.00 ■ Female \$400,000.00 \$200,000.00 \$0.00 No certificate, High school Postsecondary University diploma or degree certificate or certificate or certificate, equivalent diploma below diploma or degree bachelor level at bachelor level or above

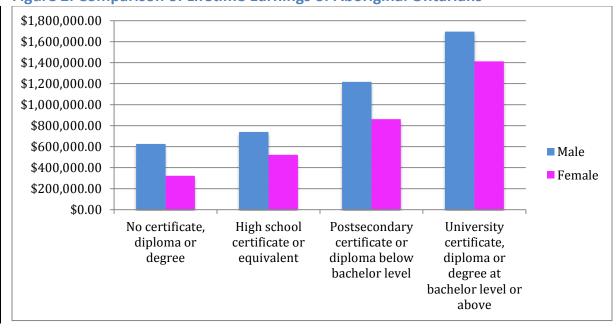


Figure 2: Comparison of Lifetime Earnings of Aboriginal Ontarians

Tables 3 and 4 below show the percentage change in lifetime earnings of non-Aboriginal and Aboriginal Ontarians, respectively. The tables show that earnings for all persons increase with education. When comparing the two tables it is clear that Aboriginals benefit more from education, in general, than non-Aboriginals. As seen previously, females benefit significantly more than males for both non-Aboriginals and Aboriginals. Aboriginal males experience the highest increase in earnings when they get a postsecondary education below the bachelor level instead of finishing their education with high school. However, it is somewhat unexpected to see that Aboriginal females experience relatively similar increases to their earnings with each increase in education. Their lifetime earnings increase, on average, by 63.5% for every increase in education, which is significantly more and notably steadier than any other group, including non-Aboriginal females.

Table 3: Percentage Change in Earnings of Non-Aboriginal Ontarians

Education Level	Male	Female
Earns High school	30% increase in earnings	55% increase in earnings
certificate instead of		
dropping out		
Earns postsecondary	45% increase in earnings	51% increase in earnings
certificate or diploma		
below bachelor level		
Earns a university	29% increase in earnings	38% increase in earnings
certificate, diploma, or		
degree at bachelor level		
or above		

Table 4: Percentage Change in Lifetime Earnings of Aboriginal Ontarians

Education Level	Male	Female
Earns High school	18% increase in earnings	62% increase in earnings
certificate instead of		
dropping out		
Earns postsecondary	64% increase in earnings	65% increase in earnings
certificate or diploma		
below bachelor level		
Earns a university	39% increase in earnings	63% increase in earnings
certificate, diploma, or		
degree at bachelor level		
or above		

It can be concluded that females benefit the most from education. However, since women start at much lower expected lifetime earnings, especially Aboriginal females who earn a meager \$323,148.04 in a lifetime if they drop out of high school, it should be expected that their earnings increase more drastically than higher-earning males.

3. How Big is the Education Gap and What is its Impact?

The Size of the Education Gap

The previous section looked at the relationship between education levels and potential lifetime earnings. It showed increases in earnings based on education level, and it found that women benefit more from education than men. The preceding tables also indicated that Aboriginals experience higher increases in earnings with increases in education levels than non-Aboriginals. The tables below show the percentage of the non-Aboriginal and Aboriginal populations in Ontario at each education level. Given what was found in the previous section, many would think that most Aboriginal persons would receive at least a postsecondary education because males' earnings increase by 64% and females' increase by 65%. However, Table 6 shows that 40% of Aboriginal males and 36% of Aboriginal females are not even graduating from high school. Yet, of the remaining population who do graduate high school, a large proportion (approximately 62% of males and 61% of females) will continue on with their education after high school.

Table 5 shows the percentage of the non-Aboriginal population at each education level in Ontario, and Table 6 shows the percentage of the Aboriginal population at each education level. When comparing the two tables it is easy to spot the large education gap. The percentage of non-Aboriginal high school graduates in Ontario is approximately 78% for males and females, whereas for the Aboriginal population it is approximately 60% and 64% for males and females respectively. This makes the difference approximately 20%, which is very significant. The percentages of the population for the two groups with high school certificates only or postsecondary certificates below a bachelor level are very

similar, ranging from the mid-20s to low 30s. However, another large education gap is seen with persons holding a university certificate at or above the bachelor level. For the non-Aboriginal population, about 20% of males and females receive a degree at or above the bachelor level; however, only about 7% of the Aboriginal population has the same level of education. Table 7 shows the difference between the percentages of non-Aboriginal persons and Aboriginal persons at each education level. The largest gap occurs at the high school level, where 18% more Aboriginal males than non-Aboriginal males are high school dropouts. The next largest is the different between Aboriginal and non-Aboriginal males at the university degree at or above a bachelor level. The table shows that 15% more of the non-Aboriginal male population has a university degree at the bachelor level or above the bachelor level.

Table 5: Percent of Non-Aboriginal Population by Education Level

Education Level	Male	Female	Both
No certificate, diploma, or	22%	22%	22%
degree			
High school certificate or	26%	28%	27%
equivalent			
Postsecondary certificate	31%	30%	30.5%
or diploma below			
bachelor level			
University certificate,	21%	20%	20.5%
diploma, or degree at			
bachelor level or above			

Table 6: Percent of Aboriginal Population by Education Level

Education Level	Male	Female	Both
No certificate, diploma or	40%	36%	38%
degree			
High school certificate or	23%	25%	24%
equivalent			
Postsecondary certificate	31%	31%	31%
or diploma below			
bachelor level			
University certificate,	6%	8%	7%
diploma, or degree at			
bachelor level or above			

Table 7: Aboriginal Education Gap 2011

Education Level	Gap: Male	Gap: Female	Gap: Both
No certificate, diploma, or	18%	14%	16%
degree			
High school certificate or	-3%	-3%	-3%
equivalent			
Postsecondary certificate	0%	1%	0.5%
or diploma below bachelor			
level			
University certificate,	-15%	-12%	-13.5%
diploma, or degree at			
bachelor level or above			

The drastic difference between the distribution of the Aboriginal and non-Aboriginal populations based on education levels is shown by Figure 3. There are a few interesting characteristics of the distributions that should be highlighted. First, the

distribution of the non-Aboriginal population in Ontario is much smoother than that of the Aboriginal population. Secondly, the distribution of the Aboriginal population is skewed to the left, whereas the non-Aboriginal distribution is more skewed to the right. In other words, the majority of the Aboriginal population (62%) has below a postsecondary education, and the majority (51%) of the non-Aboriginal population has an education at or above a postsecondary level.

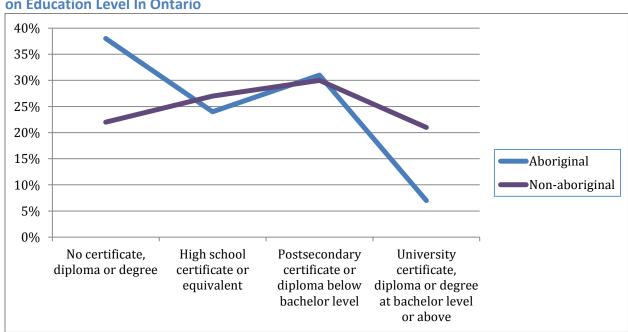


Figure 3: Distribution of the Percentage of Non-Aboriginal and Aboriginal Populations Based on Education Level In Ontario

The Impact of the Education Gap

Monetary Impact

By using the information from previous tables the impact of the education gap on the Aboriginal population in Ontario can be estimated. Looking at Aboriginal males first, it is obvious that there is a big loss of potential income. The 40% who are not graduating

high school are losing out on a maximum of \$1,069,818.18 in potential lifetime earnings that they could have earned had they received a degree or diploma at or above a bachelor level. In other words, they are forgoing an amount equal to over 170% of their current expected lifetime earnings. However, the incentive for an Aboriginal male to simply graduate from high school is not huge because their expected lifetime earnings only increase by 18%. This is a minimal increase when compared to the increase of 30% experienced by non-Aboriginal males. This could be a contributor to the higher number of high-school dropouts in the Aboriginal community than in the non-Aboriginal community. Due to the 18% more high-school dropouts in the Aboriginal male community, it is losing approximately \$1,759,659,505.00 over one lifetime. Conversely, the incentive to continue on after high school and receive a postsecondary education is quite persuasive since there is an approximate 64% resultant increase in expected lifetime earnings for an Aboriginal male. This is congruent with the data, which show that over 61% of Aboriginal males who graduate from high school will continue on with their education. There are no real significant gaps between the Aboriginal and non-Aboriginal male communities at the high school and postsecondary education below a bachelor degree education levels. The second significant gap is at the university degree or diploma at or above the bachelor level. The Aboriginal male community is 15% below the non-Aboriginal male population of Ontario at this level. This gap leads to a significant financial loss of more than \$6 billion over a lifetime to the Aboriginal male community. Therefore, the approximate net financial loss to the male Aboriginal community in Ontario over one lifetime due to the education gap is \$7,850,015,760.00.

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Now, looking at the female Aboriginal community it can be expected the losses will be similar if not greater. As discussed earlier, women experience larger incentives than men to continue their education, which means they give up more by not continuing. The 36% who are not graduating from high school are losing out on a maximum amount of \$1,089,777.13 over a lifetime, which is more than the maximum losses of Aboriginal males. The education gap between Aboriginal and non-Aboriginal females who have not graduated high school is still quite significant, at 14%. This is surprising because, unlike Aboriginal males, there are strong incentives for Aboriginal females to get a high school degree. By dropping out of high school and not completing at least a high school degree, 14% of the Aboriginal females in Ontario are accounting for a loss to their community of approximately \$3,345,719,865.00 in one lifetime. Similar to males, there is no significant difference between the percentage of female Aboriginals and non-Aboriginals who have a high school-level education or a postsecondary education level under a bachelor degree. Therefore, the next significant gap in education is at the education level at or above a university bachelor degree. Aboriginal females have 12% less of their population at this education level than non-Aboriginal females. This leads to a loss of roughly \$6,155,760,408.00 over one lifetime. Cumulatively, there is a total loss to the female Aboriginal community in Ontario of just over \$9.5 billion owing to the education gap. It should be noted that even though the percentage gaps between the female communities are slightly smaller than the gaps between the male communities, the female Aboriginal community is losing more money. This is because of the previously stated fact that women lose significantly more money due to a lack of education than males.

Combining the losses of the two above groups, the net loss to the Ontario Aboriginal community can be estimated at over \$15.5 billion over one lifetime. This is a very significant loss to the community, which experiences higher rates of poverty than most others.

If this loss were to be rectified it would not only benefit the Aboriginal community but also Ontario as a whole. The monetary value to the Ontario economy that would be realized by bridging the Aboriginal education gap is no doubt substantial. For every increase in income experienced by an Ontarian, there is an increase in taxes paid to the province. If the gap were to be eliminated there would also be an increase in earnings of \$15.5 billion, and the tax benefits to the province would be sizable. This tax money could be spent on improvements for the whole community such as road repair and free social programs. Additionally, more money being earned leads to more money being spent. Increases in spending are desirable because they benefit the Ontario economy in a few different ways. Due to the money multiplier effect, the \$15.5 billion dollars recognized by the Aboriginal community would multiply once spent, and therefore Ontario would experience a much higher net dollar amount being circulated in the economy. Dr. Eric Howe, who focused on the Aboriginal education gap in Alberta, conducted a similar study and found that Alberta would benefit by over \$250 billion³ if the gap were to be bridged. The difference between the macroeconomic model for Alberta and for Ontario is minimal and therefore we can conclude that Ontario would experience a similar benefit. The monetary benefit to Ontario would be worth bridging the gap on its own; however, there are also social reasons that make eradicating the Aboriginal education gap worthwhile.

³ http://www.rupertsland.org./Bridging_the_Aboriginal_Education_Gap_in_Alberta.pdf

Non-Monetary Impact

Setting aside monetary gains, there are many other benefits to both the individual and the community when one increases their education level. Firstly, there are many studies that show increases in education levels lead to better health and life expectancy. This can be due to a few factors. Jobs that demand more education are usually less hazardous than jobs requiring little formal education. Therefore, higher education allows individuals more job safety. Additionally, along with education usually comes a better understanding of healthy lifestyle choices, such as the perils of smoking and the benefits of eating healthy.

The education of one family member has been proven to affect the entire family. This is called the *intrafamily effect*⁴ of education, and studies have shown that the education of one spouse has direct effects on the rest of the family. For example, a wife's education is positively related to the earnings of her spouse. Not surprisingly, the education of parents has a direct relation to the education of children. Children of parents who have graduated high school are much more likely to graduate from high school themselves than children whose parents did not graduate. Furthermore, parents with postsecondary education tend to have children with higher cognitive ability and higher estimated future earnings. Parent education is also correlated with the health of the children. Higher-educated parents tend to have healthier children. This could be due to the fact that the rate of vaccinations is positively related to the parent's education. Also, infant mortality rates are lower with more educated parents. In general, better-educated people are more able to secure a desired family size, perhaps due to their knowledge about

⁴ https://bostonfed.org/economic/conf/conf47/conf47g.pdf

avoiding unwanted births or increasing fertility. Finally, the education of parents appears to be negatively related to the probability of a child giving birth out of wedlock as a teenager. The Aboriginal community in Ontario faces some of these problems, which education can help solve, and therefore Aboriginals would benefit greatly from an increase in their education levels.

The benefit to the whole community in general is also substantial. There is a positive correlation between amount of time and money donated to charity and education levels. If the education gap were to be reduced, there would most likely be an increase in charitable donations made in Ontario. For example, one study showed that university graduates donated almost double the amount of hours and approximately 50% more of their income than high school graduates.⁵ Higher schooling is also associated with a lower probability of using transfer benefits such as disability or welfare. A decrease in people dependent on welfare and other government funding would be beneficial, as those funds could be used to improve other issues in Ontario. Studies have also shown that crime rates are negatively related to the average education level of a community. This means an increase in education levels in the Aboriginal community would hopefully lead to a decrease in crime. In recent months there has been a lot of media coverage surrounding the high numbers of Indigenous women in Ontario being victims of violent crime. Many believe that this is a social problem, and a part of the solution may be increasing education levels in these communities. Also, a higher education will help people make more informed decisions when voting and increase their participation in the community.

⁵ https://bostonfed.org/economic/conf/conf47/conf47g.pdf

Increasing education levels in all communities in Ontario would be beneficial.

However, the Aboriginal community is greatly lagging behind the rest of Ontarians and until that is addressed Ontario cannot fully reach its economic and social potential.

4. Causes of the Aboriginal Education Gap

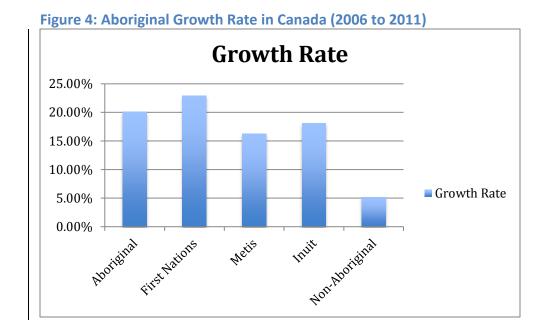
Determining the exact cause of the Aboriginal education gap in Ontario is difficult. However, some leading contributors to the ever-growing gap are the population growth of aboriginals and education levels. Their education level is a cyclical problem because children with uneducated parents are less likely to get an education. This pattern adds to the growing education gap. Dr. Eric Howe reported in 2012, "In both of those provinces [Ontario and Saskatchewan], the Aboriginal education gap is growing both absolutely (due to population increase) and relatively (due to the education levels of Aboriginal people falling behind those of non-Aboriginals)."

Population Growth

It is well documented that the Aboriginal population in Canada is growing fast. In 2006 the Aboriginal population accounted for 2.8% of the Canadian population, and by 2011 it had almost doubled to 4.3% of the total Canadian population. Since Ontario has the largest population of Aboriginal persons is has experienced similar growth rates. The Aboriginal population in Ontario accounted for 1.5% in 1996 and grew to 2.2% by 2011. These high growth rates are due mostly to the fact that the Aboriginal population is

⁶ Howe, 2012, pg 41

younger than the rest of the Canadian population and has a higher fertility rate. The increases in population will of course lead to an increase in losses resulting from the education gap. Education among Aboriginals and non-Aboriginals alike has been increasing over the years. However, the population growth of the Aboriginal community far surpasses the increase in education taking place in the community. If the population continues to grow at this rate and the gap is not addressed, the Aboriginal and non-Aboriginal communities in Ontario will all suffer.



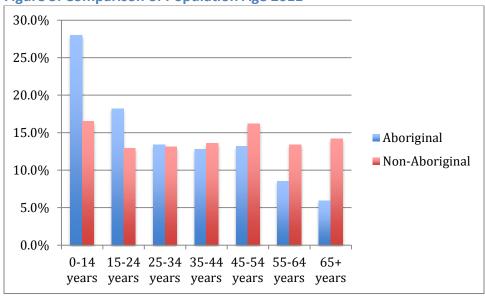


Figure 5: Comparison of Population Age 2011

Table 8: Percent of Aboriginal and Non-Aboriginal Population by Education Level 2001

Education Level	Aboriginal	Non- Aboriginal	Gap	Change in Gap from 2001 to 2011
No certificate, diploma, or degree	42%	30%	12%	4% increase
High school certificate or equivalent	24%	26%	-2%	1% increase
Postsecondary certificate or diploma below bachelor level	28%	27%	1%	0.5% decrease
University certificate, diploma, or degree at bachelor level or above	6%	18%	-12%	1.5% increase

Education Level

The education level of the Aboriginal community in Ontario is on the rise, but, as stated above, it is not rising as much as the non-Aboriginal community's education is rising. This is very problematic because it is actually leading to an increase in the education gap, as seen in Table 8 (column 5). As said earlier, a child's education depends a lot on their parents', especially mother's, education level. This creates a somewhat cyclical problem for the Aboriginal population. Aboriginal families are expanding and having more kids than before. However, the education levels of the parents are not increasing at the same rate, therefore there are more children with mothers without an education than there are who have mothers with an education. This leads to an expanding number of Aboriginal children who have a high probability of not receiving a higher education.

The education level of the Aboriginal community has faced many barriers, starting with the colonization of what would become Canada by the Europeans. From the very beginning there was a push to eradicate the Aboriginal culture and "Europeanize" the Aboriginal people. Aboriginal children were placed in schools that focused only on European teachings and ignored Aboriginal lessons. The hope was to stop future generations from learning the Aboriginal traditions. The practice of suppressing the Aboriginal culture in school has continued throughout Canada's history, first with the installment of federal schools on reserves and then with the integration of Aboriginal children into provincial schools. The total disregard for their culture made school a negative experience for Aboriginal students. There was a lack of interest in schooling and distrust of the education system. Thus, education was neither promoted nor valued in Aboriginal households. It is no wonder the Aboriginal education gap developed, since parental encouragement is vital in the education of children. Therefore, a main cause of the Aboriginal education gap is the lack of understanding and acceptance of Aboriginal cultures in the education systems.

Solving the Education Gap and What has Been Done Already

As mentioned before, the past schooling of Aboriginal persons in Canada did not cater to their best interest. To help solve the gap, education should now be used to enhance and embrace the Aboriginal culture. "Education can enhance survival of First Nations people only if it contributes to identity development through learning our

languages, our cultural traditions, and our spiritual beliefs."⁷ Research has shown that an Aboriginal education system needs to include forms of learning that relate to their culture.

8 Their education needs to have a spiritual element, and it should be more nature based.

One way of doing this is implementing required field trips to historical aboriginal sites, nature reserves and other similar locations.

As of now, funding is one of the main constraints holding back the revamping of the Aboriginal school system into a more effective system. As of now, most books and textbooks used in the Ontario school system do not include the history of the Aboriginal people. Money is needed to buy new books that include their history, for the benefit of both Aboriginal and non-Aboriginal people. There is a simple, basic need to incorporate the Aboriginal culture into the education system in Ontario.

A specific curriculum that catered to Aboriginal children and their cultural needs would go far in eradicating the damage made in the past. Not only would it help Aboriginal children relate better in school and ease their learning, but it would also go a far way in making them successful in all stages in life. In the past, schools have made it seem that the Aboriginal culture was insignificant because it was not taught. However, if that changed and children could see how important their culture is they would have a better image of themselves and be proud to be Aboriginal. This will lead to greater self-confidence, which will help him or her become successful at every education level and stage of life. The

⁷ Longboat, 1994, p.39-40. Dan Longboat is the director of Indigenous Studies at Trent University and has taught Mohawk culture at Trent for many years.

⁸ Faries, E. Closing the gap for Aboriginal students. Retrieved July 6, 2014, from http://www.edu.gov.on.ca/eng/research/efaries.pdf

Ontario government acknowledges the need to change the school system and has released two policies that will be discussed in the following section.

The Ontario school system will not only have to change their teaching styles, but the government will have to work hard to encourage Aboriginal students to attend school. This will take more funding and more promotion. In the following section the two main policies that the Ontario government has implemented to help eliminate the Aboriginal education gap will be discussed.

The government of Ontario has known about the Aboriginal education gap for a while and has accepted that a solution needs to be found. Other provinces, such as Alberta, have set up specific programs aimed at helping Aboriginal persons get an education and find jobs. Ontario has implemented two similar programs to address the gap.

Ontario First Nations, Metis, and Inuit Education Policy Framework

In 2007 the Ontario provincial government made a conscious effort to improve the achievement of Aboriginal persons and to reduce the education gap between Aboriginals and non-Aboriginals. The hope was to reduce the gaps in literacy rates, graduation rates, and advancement to post-secondary studies significantly by 2016. The government of Ontario released the Ontario First Nations, Metis, and Inuit Education Policy Framework in 2007, which detailed their plan to achieve their 2016 goals. Their policies were implemented on provincially run elementary and secondary schools in hopes of improving the education of approximately 50,000 Aboriginal students. The government highlights that the main area of concern in the schools are teachers' lack of understanding of the Aboriginal culture and the best strategies in teaching Aboriginal students. One of the main priorities of the policy changes is to make sure students feel welcome in schools and begin

to regain trust in the education system, which was lost during the residential school period.

Their mission statement listed the following objectives:

- Increase the capacity of the education system to respond to the learning and cultural needs of First Nations, Metis, and Inuit students;
- Provide quality programs, services, and resources to help create learning
 opportunities that support improved academic achievement and identity building
 for First Nations, Metis, and Inuit students;
- Provide a curriculum that facilitates learning about contemporary and traditional
 First Nation, Metis, and Inuit cultures, histories, and perspectives among all
 students, and that also contributes to the education of school board staff, teachers,
 and elected trustees; and
- Develop and implement strategies that facilitate increased participation by First Nation, Metis, and Inuit parents, students, communities, and organizations in working to support academic success.⁹

The three primary goals of the Ontario government when implementing this policy framework are:

- 1. Reach a high level of student achievement,
- 2. Reduce gaps in student achievement, and
- 3. High levels of public confidence.

The strategies the government will use to achieve their first goal consist of creating a school environment that encourages effective teaching and assessing practices and

⁹ Ontario Ministry, 2007, p.7 http://www.edu.gov.on.ca/eng/aboriginal/fnmiframework.pdf

supports efficiency, transparency, and awareness in the education system. The government will use two measures to determine if the goal is being met. First they will look at the percent increase of Aboriginal students meeting the provincial standards on province wide assessments of reading, writing and mathematics. Secondly, they will also look at the increase in the number of Aboriginal teaching and non-teaching staff employed by the Ontario school system.

The strategies implemented to achieve the second goal were meant to increase focus on literacy and numeracy skills in particular and then other areas needing attention. To determine whether the goal is being reached the government looked at a few different things. Most importantly they looked for significant increases in graduation rates of Aboriginal students while also looking for improvements in Aboriginal achievements and self-esteem. Additionally, they watched for improved cooperation between First Nation school boards and provincially run school boards to ensure a smooth transition for Aboriginal students into the provincial education system. Finally, they watched for increased satisfaction among educators in the provincial school system when it comes to teaching Aboriginal students effectively.

The third and final goal will be met, it is hoped, by implementing three main strategies. The first strategy is to build educational leadership capacity and coordination among Aboriginal students. The second strategy is to generate respect for the Aboriginal culture amongst students, teachers, and other staff. Lastly, the government will make an effort to include families and communities in the educational process. The ways the government can do this is by incorporating traditional aboriginal language and culture into the curriculum, as well as encouraging aboriginal community Elders to come speak in

classes. The government can help ensure that teachers are following through with these changes by rewarding schools with higher aboriginal test scores and attendance rates. To determine the effectiveness of their strategies the government looked at the following three things: (1) an increase in the participation of Aboriginal families in the education of their children, (2) an increase cooperation amongst Aboriginal communities and governments with the Ontario school board, and (3) an improvement in the general appreciation of the Aboriginal culture.

When comparing the numbers from 2011 and 2001, we can see that the education gap has not improved at all and has even broadened. This means that the policies put into place in 2007 by the Ontario government are either ineffective or need more than four years to make an impact. Perhaps the 2016 census conducted by Statistics Canada, which looks at education levels of the population, will find a drastic improvement in the education gap. However, until then it cannot be said with certainty that the Ontario First Nations, Metis, and Inuit Education Policy Framework has been effective.

Postsecondary Education and Training Policy Framework

After 2007 there was another policy implemented in regards to Aboriginal education levels. In 2011 the Ontario government came out with the Aboriginal Postsecondary Education and Training Policy Framework, which is somewhat of a continuation of their 2007 policy framework. The government is focusing on postsecondary education with this policy framework in hopes of making substantial changes in the postsecondary education attainment of the Aboriginal population.

The Ministry of Training, Colleges, and Universities developed the Aboriginal Postsecondary Education and Training Policy Framework over a one-year period, from 2009 to 2010. There are five fundamental principles of the framework. First, they strive for excellence and accountability. This means a better postsecondary education that includes cultural, social, and economic development. Additionally, the government will remain accountable to the ministry and the Aboriginal communities that they work with. Second, the framework is designed to benefit all Aboriginal people equally. This means that the policies implemented are aimed at helping all Aboriginals regardless of their gender, age, geography, or political beliefs. The government is aware that there is a lot of diversity among the Aboriginal community and therefore maintains flexibility in their policies to allow for diversity in the postsecondary education system. Thirdly, cooperation among the leaders of the ministry and the Aboriginal communities is believed to be a necessity. The government of Ontario hopes for increased communication and cooperation among Aboriginal community leaders and postsecondary education and training sectors. Next, the need for respect for the Constitutional and treaty rights of Aboriginal persons is a fundamental principle of this framework. The framework respects the rights of the Aboriginal communities under section 35 in the Constitution. The Ontario government made it a priority to ensure that no policies implemented according to this framework would infringe on these rights. Lastly, the creators of this framework understood the importance of the contributions made by the Indigenous population of Canada. Therefore, there will be a conscious effort to include Aboriginal knowledge, culture and world-views in the education of non-Aboriginal postsecondary students.

The Ontario provincial government hopes to increase postsecondary educational attainment in general by 70% through its Open Ontario plan. To help, Ontario's Student Access Guarantee is committed to finding places for all qualified Ontarians who want to

attend college or university. To achieve this goal the government is putting more money into postsecondary education institutions, improving employment opportunities after schooling and expanding the education in Northern Ontario. This new increase in postsecondary education will help with the goal of increasing postsecondary educational attainment of the Aboriginal community. There will be more funds available, and in return, if the Aboriginal population increases their postsecondary education levels, it will help the Ontario government reach the 70% increase they are aiming for.

With respect to the Aboriginal community in particular, the government has four main goals. Their first goal is to make improvement in the reporting and information available on postsecondary education. The plan to achieve this goal is to develop more information about ministry-run postsecondary education and distribute it to Aboriginal communities. The government also plans on making it easier for Aboriginal persons thinking of attending a postsecondary school to ask questions and find information through the government. This means being more organized and having faster response times to the questions being asked. Additionally, the government will remain accountable and increase reporting on the progress being made. By organizing an Aboriginal Postsecondary Education Performance Measures Strategy, which will be discussed later, the government will be able to better monitor the changes and, hopefully, the progress being made.

The next goal is to ensure that postsecondary and training systems are sensitive and understanding of the Aboriginal cultures. The government plans on attaining this goal mainly by keeping up a strong relationship with Aboriginal communities. This includes making it a priority to have Aboriginal staff and faculty in all areas of the postsecondary education system.

Thirdly, the government wants to see a significant increase in the number of Aboriginal persons enrolled in postsecondary schooling. The Ontario government hopes to make this goal reachable by increasing the capacity of postsecondary education and training systems. This is largely going to be achieved by increasing the funding for these institutions. On top of increasing capacity, the government plans on making a postsecondary education easier to access for Aboriginal persons. They plan on doing this by using Contact North's network of approximately 110 local access centers across Ontario and online resources to reach Aboriginal communities and give them easier access to postsecondary education. Also, the government will continue to implement the Aboriginal Student Bursary fund to ease the financial burden of a postsecondary education. These programs are using money to encourage aboriginal students. The Ontario government can mimic what Manitoba did and offer either free of greatly discounted services such as:

- Individual academic advising
- Introduction to university courses for degree credit
- Tutorials
- Regular consultation with academic advisors
- Personal support/counseling
- Housing assistance
- Childcare assistance
- University/urban adjustment assistance
- Communication and personal development workshops, and

• Career counseling. 10

The fourth and last goal is to dramatically increase the number of Aboriginal persons participating in the Ontario labor market. By providing Employment Ontario with the information, tools, and resources that allow them to be responsive and to understand the uniqueness of the Aboriginal community, the government hopes to reach this last goal. On top of providing information, the government will also facilitate on-the-job training to increase the chances of successful employment.

To summarize, the main strategies that the government is using to reach these four goals include remaining accountable, keeping frequent communication with Aboriginal communities, making the postsecondary education system easily accessible, and facilitating transitions of Aboriginal students into the labor market. The 2007 policy framework focused mainly on education alone, whereas the 2011 policy framework looks at education and life after schooling. The goal of helping Aboriginal persons find jobs is important since it addresses another gap, the Aboriginal employment gap.

In order to measure whether their goals are being met, the Ontario government has developed the Aboriginal Postsecondary Education Performance Measures Strategy. This measuring strategy will include both data gathered from preexisting surveys generated by the ministry and postsecondary institutions and research gathered during the preliminary stages of the policy's framework implementation.

In order for the measurements to be accurate, the government is concerned with a few different things. Primarily, the data they use need to be consistent and reliable. The

 $^{^{10}}$ R.A. Malatest & Associates Ltd. Aboriginal Peoples and Post-Secondary EducationWhat Educators Have Learned http://www.turtleisland.org/education/postseced.pdf

main issue with data collection is the difficulty of tracking and gathering information on Aboriginal students in postsecondary institutions. Changes and improvements need to be made to the data collection process in order to ensure proper measurements. Another issue is the self-identification process used in the postsecondary education system. The process is not standardized across institutions and can therefore cause discrepancy in the data. The government hopes to generate a consistent means of identifying Aboriginal students in order to avoid any misrepresentation.

The 2011 framework is being used to advise the Ministry of Training, Colleges and Universities on the visions, hopes and strategies for the Aboriginal postsecondary education, trainings, and skills development in Ontario. Additionally, it is being used to create awareness in postsecondary institutions and the workforce on the unique needs and abilities of the Aboriginal community.

It acknowledges that the Aboriginal learning techniques need to be holistic, spiritual, emotional, and natural. The individuality of the Aboriginal communities in Canada means that policy frameworks also need to be unique. The 2016 census will deliver the data needed to best determine if the 2011 framework has had a positive impact on the Aboriginal education gap in Ontario, but hopefully it has.

United States Indigenous Education Studies

In the United States, Ronald Tharp preformed a study on the Kamehameha Early Education Program (KEEP) in 1982. This program focused on the education of Hawaiian children and the incorporation of indigenous Hawaiian culture into the curriculum. Tharp found clear evidence that adding aspects of their culture to their education positively affected Hawaiian children's test scores. Another study by Jerry Lipka and Barbara Adams

in 2004 looked at Math in a Cultural Context (MCC). They found that culturally based mathematics also had a positive effect on Yup'ik students in Alaska. ¹¹ Both of these studies also found that increased involvement of the teachers as having a positive effect on their students' academic achievement.

Both of these studies support the idea that incorporating aboriginal culture into schools would help increase the education levels of aboriginal students. However, both of these studies looked at adding culture into core academic subjects rather than teaching the history and languages of the culture. Therefore, further study is needed to determine the effectiveness of the programs implemented by the Ontario government.

Conclusion

Since Ontario is the province with the largest Aboriginal population, the education gap between the Ontario Aboriginal and non-Aboriginal communities is very important and needs to be addressed. According to 2011 data, approximately 16% more of the Aboriginal community have no diploma or degree than the non-Aboriginal community in Ontario. Additionally, 13.5% more of the non-Aboriginal population have a degree at the bachelor level or above than the non-Aboriginal population. These numbers are very troubling, and Ontarians as a whole are suffering losses because of them. The Aboriginal community is losing out on income, and the Ontario economy is losing out on revenue.

As stated in the previous sections, the government has implemented two policy frameworks over the past seven years to address the education gap. The first program,

¹¹ http://www.cmec.ca/Publications/Lists/Publications/Attachments/295/Key-Policy-Issues-in-Aboriginal-Education_EN.pdf

begun in 2007, has so far not been successful, and the second program, implemented in 2011, is still too new to determine its impact. However, the fact that the government has put so much effort into addressing the issue shows just how important eradicating the gap is to the Aboriginal community and to Ontario in general.

The impact on the Aboriginal community is severe, and if their educational attainment does not improve to numbers comparable to the non-Aboriginal community, there will be only more hardships in their future. Today, the Aboriginal community faces difficulties at every turn. There are still stereotypes shrouding the community that are damaging. The community needs to increase education levels and increase labour participation in order to help their circumstances. As of right now the Aboriginal community has higher poverty and crime rates than almost any other community. As previously said, education will increase income and also decrease crime, thereby solving the majority of the issues the community faces.

The general understanding of why there is a large education gap is the lack of apathy towards the Aboriginal culture in the education system. The two policies both addressed this issue and have main focuses of increasing Aboriginal awareness. Hopefully, with increased consciousness of the Aboriginal education gap there will be improvements and the Ontario government will see drastic improvements in the education attainment of the Aboriginal community.

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