Education Pathways & Income:

A comparison of earnings and expenses by level of education in Canada

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Contents:

1.0	Highlights	3
2.0	Introduction	4
3.0	Apprenticeship	
	Earnings	5
	Educational Expenses	6
	Additional Notes	7
4.0	College & University	
	Earnings	8
	Educational Expenses	10
	Additional Notes	12
5.0	Comparisons	
	Short-Term	13
	Long-Term	17
6.0	Additional Considerations	20
7.0	Conclusion	23
8.0	Appendix	25

1.0 Highlights

- **Short-term earnings are as expected**
  Using median employment incomes and average educational costs in Canada, the typical journeyperson will have a greater cumulative income than college or university graduates in the short-term. After 11 years, from the time of starting school, people with trade certificates have 69% more cumulative income than people with college diplomas, 80% more than people with bachelor's degrees, and 93% more than master's degree holders.

- **Earnings by education pathway vary dramatically by gender**
  Over the 11-year period, males with trade certificates have 47% more cumulative income than college diploma holders, 69% more than university bachelor's degree holders, and 81% more than master's degree holders. On the other hand, women with college diplomas have 2% more cumulative income than bachelor's degree holders, 9% more than master's degree holders, and 78% more than journeywomen.

- **Long-term earnings reveal new trends**
  After 40 years, when considering both sexes, people with master's degrees have 8% more cumulative net income than people with trades certificates, 13% more than bachelor's degree holders, and 39% more than college diploma holders. Males follow similar trends, in that men with master's degrees accumulate 9% more net income than journeymen, 11% more than men with bachelor's degrees, and 26% more than men with a college diploma. Again, the trends for women look completely different; women with master's degrees accumulate 15% more net income than bachelor's degree holders, 48% more than women with college diplomas, and 110% more than journeywomen.

- **Journeypeople and master's degree holders are more likely to find jobs related to their studies**
  88% of respondents to the 2015 National Apprenticeship Survey reported that they found jobs related to their education. In response to the 2013 National Graduates Survey, 91% of master's degree graduates, 79% of college diploma graduates, and 77% of university bachelor's degree graduates stated that they found jobs that were at least somewhat related to their studies.

- **44% of master's degree students, 50% of bachelor's degree students, and 43% of college diploma students owed debt at graduation**
  41% of master's degree students, 41% of bachelor's degree students, and 16% of college diploma students owed more than $25,000 at the time of graduation. Also, the average amount of debt owed at graduation was $26,700 for master's degree students, $26,300 for bachelor's degree students and $14,900 for college students.

2.0 Introduction

Canadians have several postsecondary options available to them in addition to countless fields of study within each educational pathway. Naturally, with so many programs to choose from, parents, students, and people in general become overwhelmed with information and rely on what others say. Most will say "Stay in school" and, in general, these people would be correct. Many studies have found that with higher educational attainment comes higher earnings. Of course, there are myriad factors that will affect an individual's net income such as education, personality, networking opportunities, lifestyle, etc.

Unfortunately, this report will not be able to account for every factor. **Instead, this report will test the idea that higher education should be the default route for postsecondary students.** Too many people enter university without any real sense of what they want to do or what they need to learn in order to achieve their career and life goals. Only after paying enormous tuition fees and studying abstract concepts do these students consider college or trade school. To most, these pathways are considered easier or less distinguished, but they offer very strong earnings, rewarding experiences, and a respectable career.

This report begins by explaining median/typical earnings and expenses associated with an apprenticeship in Canada. This information is then combined into a table to find cumulative net income. Then, the same is done for a typical college diploma, bachelor's degree, and master's degree. After the data, sources, and methodology are explained, section 5.0 begins to make comparisons between the pathways over the short-term and by gender. We then extend the data to include 40 years and get a more general idea of the long-term outcomes of each pathway and by gender. Finally, there are a few results about how closely related one's studies are to their job, debt levels in each pathway, as well as unemployment rates by level of educational attainment.

3.0 Apprenticeship

Earnings

Using the Registered Apprenticeship Information System (RAIS), the Postsecondary Student Information System (PSIS) and income tax data, Statistics Canada provides a longitudinal analysis of median employment incomes of apprentices who certify in select trades at: 4 years before certification, 2 years before certification, year of certification, 2 years after certification, and 4 years after certification[1]. Here, selected trades include 14 Red Seal trades with the largest number of registrations in Canada. The selected trades also include four non-Red Seal trades in Ontario (Child and Youth Worker, Developmental Services Worker, Early Childhood Educator and Educational Assistant). These are designated trades only in Ontario and have high proportions of female apprentices. While 2012 is the reference year, all income data are adjusted for inflation and are reported in 2016 constant Canadian Dollars. Refer to appendix 8.1.

Median incomes were used for this report as it mitigates the influence of outliers. For instance, industrial electricians earn significantly more than average at all time periods but only account for 1% of the data. Another important note is that the following are employment incomes and therefore do not include income from other sources such as investments or secondary jobs. Since the data does not have a median for the total group of selected trades, weighted medians were calculated (table 3.1) to find the middle-most employment income for each time period. It is unclear why the median income 4 years after certification is less than the median income 2 years after certification. Refer to appendix 8.2.

Table 3.1: Weighted Median Employment Incomes for Selected Trades

Weighted Median Employment Income at:	Selected Trades
4 years before certification	$34,400
2 years before certification	$43,780
Year of certification	$57,930
2 years after certification	$72,250
4 years after certification	$70,620

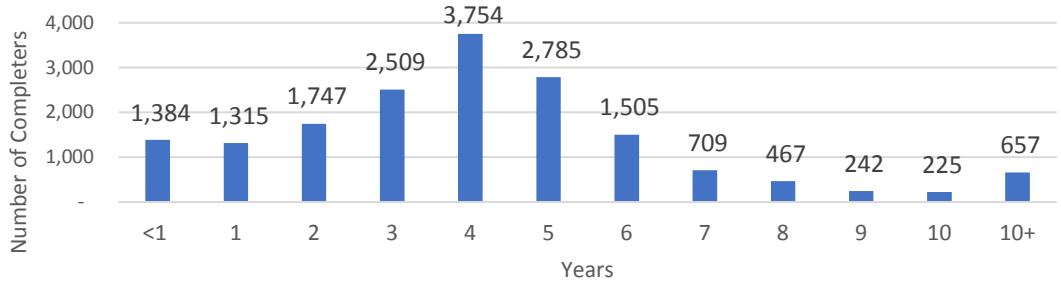
[1] Statistics Canada. Table 37-10-0017-01 Median employment income of apprentices who certify in select trades at: 4 years before certification; 2 years before certification; year of certification; 2 years after certification; and 4 years after certification, longitudinal analysis

Educational Expenses

Next, we look at the expenses associated with an apprenticeship in Canada. Firstly, note that the actual costs will vary by apprenticeship type, tools required, province of training, union status, etc. However, a 2006 study found that average direct expenses for tuition, textbooks, registration fees, and tools of the trade were found to be $1,334 per level (or year) of training[2]. More recent estimates do not exist, but the Ontario Youth Apprenticeship Program website currently approximates the cost of a typical course for apprentices at $400 per 8-week course and $600 per 10-week course[3] in Ontario. The most populated trades in Canada are construction electrician and carpenter[4] where apprenticeship tools cost $200-$800[5] and $400[6] respectively, so we'll assume an average of $500 in our calculations. Lastly, some trade schools include additional fees (such as student society or technology fees) or cost of books in their program fees while other sites don't mention them at all, but we will assume $200 per year/level which is in line with many school websites, for instance, Algonquin College[7]. We will use these amounts in table 3.3.

The 2015 National Apprenticeship Survey (NAS) provides data about the number of years it takes for apprentices to complete their training. About 52% of apprentices complete their training in 3-5 years, with 22% completing it in year 4 alone. Also, about 62% of respondents complete their training in 4 years or less, so we will assume that the typical apprenticeship requires 4 years to complete. This information is captured in table 3.2.

Table 3.2: Years until Apprenticeship Completion



[2] Krywulak, T., Dietsche, P., & Toneguzzo, A. (n.d.). Apprentices Enrolled at Publicly Funded Canadian Colleges and Institutes. Retrieved from https://caf-fca.org/wp-content/uploads/2017/07/Apprentices-Enrolled-at-Public-Funded-Colleges-and-Institutes.pdf

[3] Typical Cost of an Apprenticeship. (n.d.). Retrieved from https://oyap.com/en/about_apprenticeship/financial_information/

[4] Frank, Kristyn, and Emily Jovic. "National Apprenticeship Survey: Canada Overview Report 2015 National Apprenticeship Survey: Canada Overview Report 2015." Statistics Canada. March 29, 2017. Accessed July 25, 2019. https://www150.statcan.gc.ca/n1/pub/81-598-x/81-598-x2017001-eng.htm.

[5] "Electrician Apprentice Tools Guide." Electrician Apprentice Headquarters. January 12, 2019. Accessed July 16, 2019. https://electricianapprenticehq.com/electrician-apprentice-tools/.

[6] "General Carpenter Apprenticeship FAQ." Carpenters District Council of Ontario. Accessed July 16, 2019. https://thecarpentersunion.ca/general-carpenter-apprenticeship-faq/.

[7] "Apprenticeship Fees." Registrar's Office & Financial Aid. Accessed August 13, 2019. https://www.algonquincollege.com/ro/plan-getting-accepted-into-college/apprenticeships/apprenticeship-fees/.

The following table summarizes the typical education costs of an apprenticeship in Canada assuming 4 years of study.

Table 3.3: Apprenticeship Education Costs

	Year 1	Year 2	Year 3	Year 4
Trade School Registration	$600	$600	$600	$600
Tools	$500	$500	$500	$500
Additional Fees	$200	$200	$200	$200
Certificate of Qualification	$0	$0	$0	$150

Table 3.4 shows the net income and cumulative income of the typical apprenticeship in Canada, using the weighted median incomes and typical expenses from above. Firstly, earnings in year 2, 4, 6, and 8 are the employment incomes from table 3.1. Earnings in year 1, 3, 5, and 7 are averages of the earnings from the year prior and after. It is expanded across 11 years in order to make comparisons later in the report more easily.

Table 3.4: Net and Cumulative Income of Typical Apprenticeship

Apprenticeship	School/Training				Workforce						
	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10	Year 11
Earnings	$39,090	$43,780	$ 50,855	$ 57,930	$ 65,090	$ 72,250	$ 71,435	$ 70,620	$ 70,620	$ 70,620	$ 70,620
CoT Registration	$ 60	$ 60	$ 60	$ 60	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Trade School	$ 600	$ 600	$ 600	$ 600	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Tools	$ 500	$ 500	$ 500	$ 500	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Additional Fees	$ 200	$ 200	$ 200	$ 200	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Certificate of Qual.	$ -	$ -	$ -	$ 150	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Net Earnings	$37,730	$42,420	$ 49,495	$ 56,420	$ 65,090	$ 72,250	$ 71,435	$ 70,620	$ 70,620	$ 70,620	$ 70,620
Cumulative Earnings	$37,730	$80,150	$129,645	$186,065	$251,155	$323,405	$394,840	$465,460	$536,080	$606,700	$677,320

** Current and future apprentices no longer pay College of Trades registration fees.

Additional Notes

Lastly, it is important to note that apprentices have numerous government incentives available to assist with school/training expenses as well as to encourage more applicants. These amounts were not included in the calculations as it is up to each apprentice to apply for these incentives, meaning that each individual will qualify for different amounts. Currently, there is over $10,000 available for qualified applicants. Appendix 8.3 lists current financial incentives and government grants that are available for apprentices[8].

[8] Typical Cost of an Apprenticeship. (n.d.). Retrieved from https://oyap.com/en/about_apprenticeship/financial_information/

4.0 College & University

Earnings

Using the PSIS, Statistics Canada provides a longitudinal study of median employment income of postsecondary graduates two and five years after graduation[9]. With this, graduates of a given cohort are observed for five years after graduation. For example, graduates of the calendar year 2010 are observed in 2012 and 2015. Here, we use only Canadian students and while 2010 is the reference year, all incomes are reported in 2016 constant Canadian Dollars. Refer to appendix 8.4.

The following table highlights the median employment incomes two years and five years after graduation by level of educational qualification. Only the total field of study results are included for each level of educational qualification, not individual fields of study such as Visual and Performing Arts, Humanities, Mathematics, etc. This table will be used for median incomes of graduates with a college diploma, university bachelor's degree, or a university master's degree.

Table 4.1: Median Employment Incomes by Level of Educational Qualification

Educational qualification	Median employment income two years after graduation	Median employment income five years after graduation
Career, technical or professional training certificate	$34,700	$38,500
Career, technical or professional training diploma	$40,300	$44,000
Undergraduate degree	$46,200	$55,100
Professional degree	$82,500	$93,800
Master's degree	$61,400	$69,400
Doctoral degree	$58,900	$74,500

One key difference between apprenticeships and other postsecondary educations is that about 90% of an apprenticeship is paid on-the-job training[10]. College and university students, however, must take up a part-time job during the school year and/or work full time over the summer to earn an income while studying.

[9] Statistics Canada. Table 37-10-0115-01 Characteristics and median employment income of longitudinal cohorts of postsecondary graduates two and five years after graduation, by educational qualification and field of study, 2010 and 2011 cohorts

[10] Typical Cost of an Apprenticeship. (n.d.). Retrieved from https://oyap.com/en/about_apprenticeship/financial_information/

Using the average minimum wage in Canada, $12.23/hour[11], we can calculate the amount of money that a typical college or university student could earn by working part time during the academic year and by working full time over the summer. Listed below are a few statistics about the typical number of hours worked by postsecondary students during the academic year:

- According to the 2017 Middle-Years University Student Survey, the most common sources of financing for the current year of university education were: parents, family or spouse (64%), with many also using earnings from summer (49%) or current (44%) employment. About 54% of middle-years were employed, working about 17 hours a week[12].
- According to the 2018 Graduating Student Survey, the most common sources of financing for the current year of university education were: parents, family or spouse (56%), with many also using earnings from summer (41%) or current (47%) employment. About 60% of graduating students are employed, working about 18 hours per week[13].
- According to the 2019 First Year Students Survey, about 36% of first-year students were employed, working about 14 hours per week[14]. As this was a study of first-years, no data was provided for the percentage of students that work over the summer.

Moving forward, assume all students (college and university) work part-time during the school year and full-time over the summer using the averages stated above. Obviously, not every student will work while studying and/or work over the summer, nor will every student be paid the national minimum wage. Similarly, one could argue that master's students would earn more per hour while working part-time as an instructional assistant, however, one could also argue that post-graduate studies demand much more attention, leaving these students with less time/energy for work. So, the numbers presented in the following tables should serve as a guide under these assumptions.

Table 4.2: Earnings while Studying (Diploma)

	Year 1	Year 2
Part-time during School	$ 5,137	$ 6,604
> Rate	$ 12.23	$ 12.23
> Hours/Week	14	18
> Weeks/Year	30	30
Full-time over Summer	$ 6,849	$ 6,849
> Rate	$ 12.23	$ 12.23
> Hours/Week	35	35
> Weeks/Year	16	16
Total	$ 11,985	$ 13,453

[11] Financial Consumer Agency of Canada. "Working to Pay for Your Education." Canada.ca. October 03, 2018. Accessed July 9, 2019. https://www.canada.ca/en/financial-consumer-agency/services/saving-education.html.
[12] 2017 CUSC Middle-Years Survey. (2017, June). Retrieved from http://cusc-ccreu.ca/?page_id=32&lang=en
[13] 2018 CUSC Graduating Survey. (2018, June). Retrieved from http://cusc-ccreu.ca/?page_id=32&lang=en
[14] 2019 CUSC First Year Students Survey. (2019, June). Retrieved from http://cusc-ccreu.ca/?page_id=32&lang=en

Table 4.3: Earnings while Studying (Bachelor's Degree)

	Year 1	Year 2	Year 3	Year 4
Part-time during School	$ 5,137	$ 6,237	$ 6,237	$ 6,604
> Rate	$ 12.23	$ 12.23	$ 12.23	$ 12.23
> Hours/Week	14	17	17	18
> Weeks/Year	30	30	30	30
Full-time over Summer	$ 6,849	$ 6,849	$ 6,849	$ 6,849
> Rate	$ 12.23	$ 12.23	$ 12.23	$ 12.23
> Hours/Week	35	35	35	35
> Weeks/Year	16	16	16	16
Earnings	$ 11,985	$ 13,086	$ 13,086	$ 13,453

Educational Expenses

Next, we look at the expenses associated with college and university education. In either case, students will need to pay for tuition, ancillary fees, and books and/or other supplies. These are educational expenses and therefore do not include other costs of living such as rent, food, transportation, daycare, foregone wages, etc.

Appendix 8.5 lists the Canadian undergraduate tuition fees gathered by Statistics Canada and the Tuition and Living Accommodation Costs (TLAC). To keep the dollars consistent with earlier tables, and because data for 2018/2019 is preliminary, we will use the 2015/2016 Canada tuition fees[15]:

- Undergraduate = $6,201
- Graduate = $6,537

Unfortunately, there are not similar datasets for tuition fees of Canadian colleges, however, ontariocolleges.ca states that an average cost of tuition for one academic year in an Ontario college diploma program is around $2,400[16]. It also states that ancillary fees (student activity fees, athletic fees, insurance, etc.) average around $800 while books/supplies average $1,300 per year. Since every school and every program will vary in costs, we will use these amounts in our calculations for simplicity (refer to appendix 8.6 for tuitions and fees of select colleges). Keep in mind that Ontario is home to many of the country's top colleges and is generally more expensive than other provinces.

[15] Statistics Canada. Table 37-10-0045-01 Canadian and international tuition fees by level of study

[16] "Paying for College: Tuition and Financial Assistance." Ontario Colleges. Accessed July 8, 2019. https://www.ontariocolleges.ca/en/colleges/paying-for-college.

Table 4.5: Net and Cumulative Income of a Typical College Diploma

College Diploma	School/Training		Workforce								
	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10	Year 11
Earnings	$11,985	$13,453	$ 40,200	$ 40,200	$ 41,433	$ 42,667	$ 43,900	$ 43,900	$ 43,900	$ 43,900	$ 43,900
Tuition	$ 2,400	$ 2,400	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Ancillary Fees	$ 800	$ 800	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Books/Supplies	$ 1,300	$ 1,300	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Net Earnings	$ 7,485	$ 8,953	$ 40,200	$ 40,200	$ 41,433	$ 42,667	$ 43,900	$ 43,900	$ 43,900	$ 43,900	$ 43,900
Cumulative Earnings	$ 7,485	$16,438	$ 56,638	$ 96,838	$138,272	$180,938	$224,838	$268,738	$312,638	$356,538	$400,438

Table 4.6: Net and Cumulative Income of a Typical University Bachelor's Degree

Bachelor's Degree	School/Training				Workforce						
	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10	Year 11
Earnings	$11,985	$13,086	$ 13,086	$ 13,453	$ 46,000	$ 46,200	$ 49,167	$ 52,133	$ 55,100	$ 55,100	$ 55,100
Tuition	$ 6,201	$ 6,201	$ 6,201	$ 6,201	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Ancillary Fees	$ 800	$ 800	$ 800	$ 800	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Books/Supplies	$ 1,300	$ 1,300	$ 1,300	$ 1,300	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Net Income	$ 3,684	$ 4,785	$ 4,785	$ 5,152	$ 46,000	$ 46,200	$ 49,167	$ 52,133	$ 55,100	$ 55,100	$ 55,100
Cumulative Income	$ 3,684	$ 8,470	$ 13,255	$ 18,407	$ 64,407	$110,607	$159,773	$211,907	$267,007	$322,107	$377,207

Table 4.7: Net and Cumulative Income of a Typical University Master's Degree

Master's Degree	School/Training						Workforce				
	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10	Year 11
Earnings	$11,985	$13,086	$ 13,086	$ 13,453	$ 13,453	$ 13,453	$ 61,400	$ 61,400	$ 64,067	$ 66,733	$ 69,400
Tuition	$ 6,201	$ 6,201	$ 6,201	$ 6,201	$ 6,537	$ 6,537	$ -	$ -	$ -	$ -	$ -
Ancillary Fees	$ 800	$ 800	$ 800	$ 800	$ 800	$ 800	$ -	$ -	$ -	$ -	$ -
Books/Supplies	$ 1,300	$ 1,300	$ 1,300	$ 1,300	$ 1,300	$ 1,300	$ -	$ -	$ -	$ -	$ -
Net Income	$ 3,684	$ 4,785	$ 4,785	$ 5,152	$ 4,816	$ 4,816	$ 61,400	$ 61,400	$ 64,067	$ 66,733	$ 69,400
Cumulative Income	$ 3,684	$ 8,470	$ 13,255	$ 18,407	$ 23,223	$ 28,039	$ 89,439	$150,839	$214,905	$281,639	$351,039

Additional Notes

Since the data from Statistics Canada provides us with employment income up to 5 years after graduation, we are assuming income remains constant up to year 11. Later, when we extend the charts to include 40 years, we will use a new median income amount to get a better understanding of long-term earnings. Similarly, the year 2 employment income is used for year 1 as this data is not provided, however, they should be relatively similar to one another in the real world.

Tuition rates are known to increase year over year so it's not fair to assume a constant value. However, this analysis uses the 2015/2016 tuition rates for all years because it is simpler, and it roughly averages out with the tuition rates from a few years before and after. Also, we use the average graduate tuition rate, $6,537, in the calculations but actual tuition rates vary by program and field of study. For instance, the average tuition for an executive MBA was $49,798 in 2018/2019[17].

A very common source of supplementary financing for postsecondary students is scholarships/bursaries. The calculations in this report exclude scholarships/bursaries because they are available to students in each of the educational pathways of interest, the amount of money per scholarship/bursary varies from a few hundred to tens of thousands of dollars, and because each scholarship has different requirements/qualifications.

[17] "Tuition Fees for Degree Programs, 2018/2019." The Daily. September 05, 2018. Accessed August 09, 2019. https://www150.statcan.gc.ca/n1/daily-quotidien/180905/dq180905b-eng.htm.

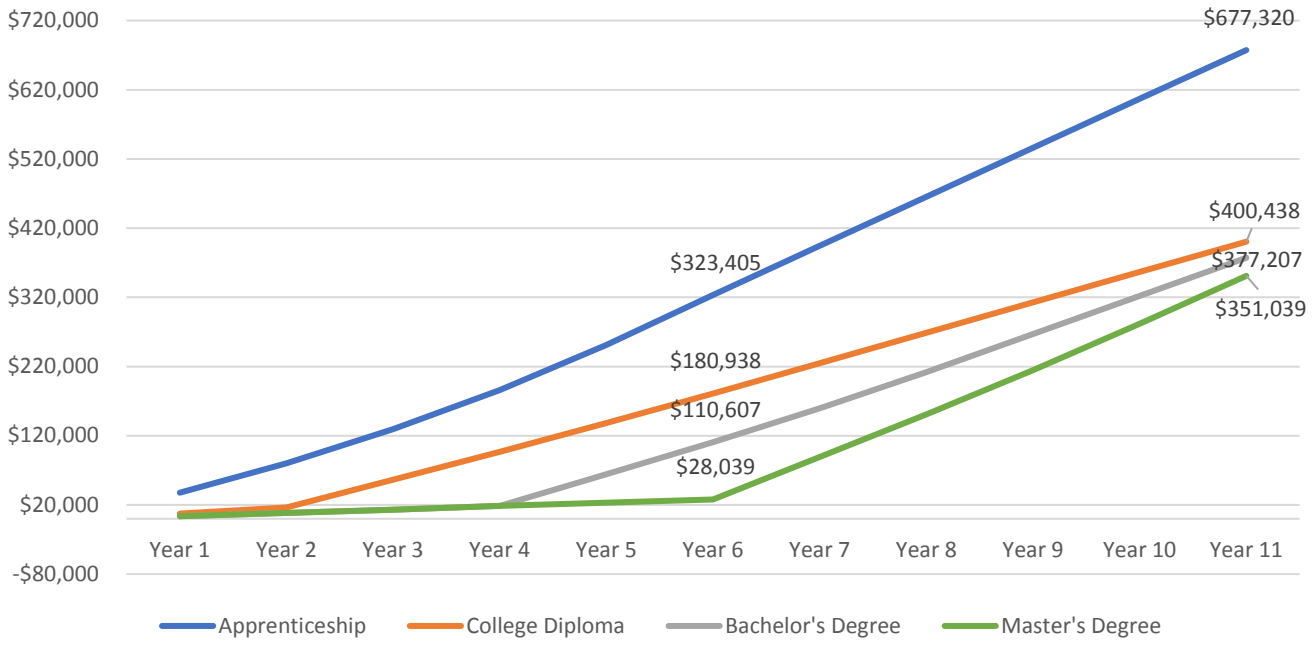
5.0 Comparisons

This section presents the information that has been gathered earlier in the report side-by-side and follows the same assumptions that were made. It starts by comparing totals for each educational pathway in the short-term and then separates the information by gender. Then, we extend the chart to 40 years to analyze long-term results and potentially reveal different trends.

Short-Term

The following chart compares the cumulative earnings from tables 3.4 (typical apprenticeship), 4.5 (typical college diploma), 4.6 (typical bachelor's degree), and 4.7 (typical master's degree). Refer to appendix 8.14.

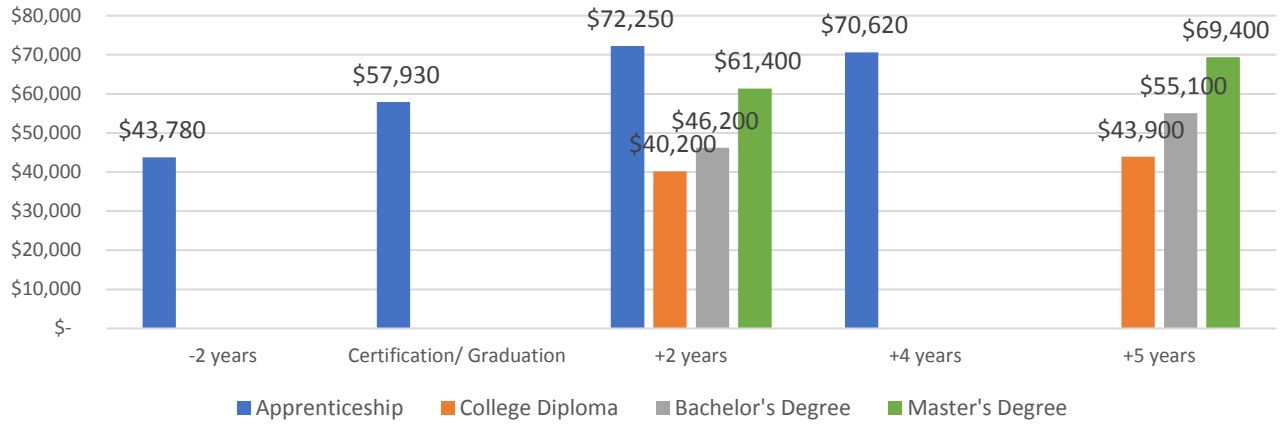
Chart 5.1: Comparison of Cumulative Earnings of Each Pathways



We see that over the course of 11 years, starting at the time of school/training, a typical apprenticeship will allow for the greatest cumulative earnings. This is due to apprentices earning money while working towards certification as well as having higher median incomes in the first few years after certification. We can see, especially by looking at year 6, that college and university costs significantly reduce and delay students' cumulative earnings. At year 11, the typical journeyperson has 69% more cumulative net employment income than college diploma holders, 80% more than graduates with a bachelor's degree, and 93% more than graduates with a master's degree.

The following chart compares the median employment incomes of each pathway provided by Statistics Canada. These are the same amounts from earlier in the report but are presented differently to allow for easier visual comparison over time (for instance, it's easy to see that apprentices earn more at the time of certification than bachelor's degree holders earn 2 years after graduation). Unfortunately, the time periods do not line up perfectly and Statistics Canada does not provide any employment income data for college or university students before graduation like they do for apprentices.

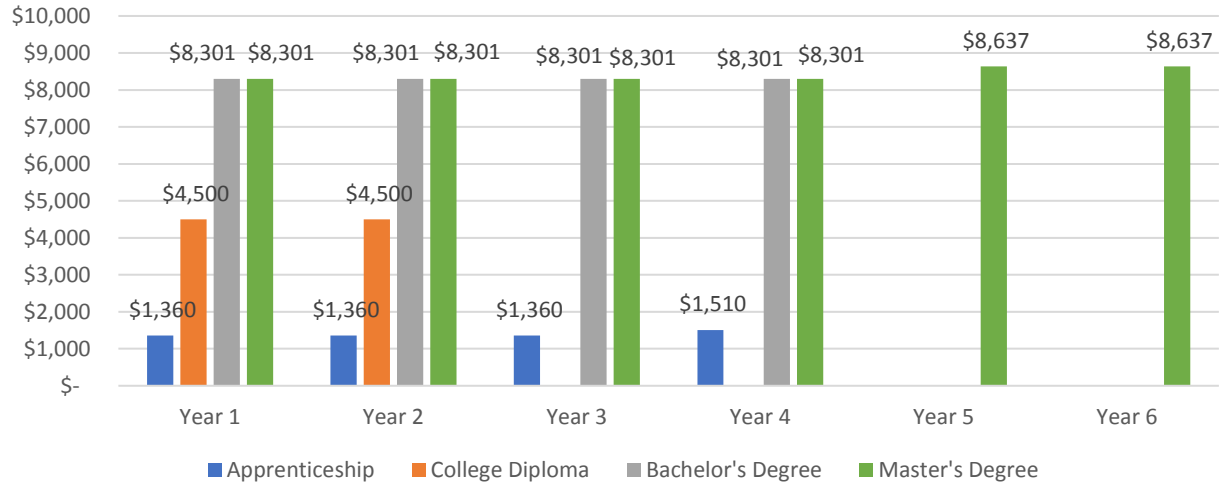
Chart 5.2: Comparison of Median Employment Incomes of Each Pathway



The following chart compares educational expenses associated with each pathway per year. These expenses are the same as how they appear earlier in the report, just presented differently to allow for easy comparison. The total educational expenses for a typical:

- Apprenticeship are **$5,590 over 4 years**
- College Diploma are **$9,000 over 2 years**
- University Bachelor's Degree are **$33,204 over 4 years**
- University Master's Degree are **$50,478 over 6 years**

Chart 5.3: Comparison of Educational Expenses of Each Pathway



Since men and women earn considerably different amounts, even with the same educational attainment, the following tables and charts will investigate the outcomes of these four different pathways by gender. Refer to appendices 8.7, 8.8, 8.9, 8.10, 8.15, and 8.16.

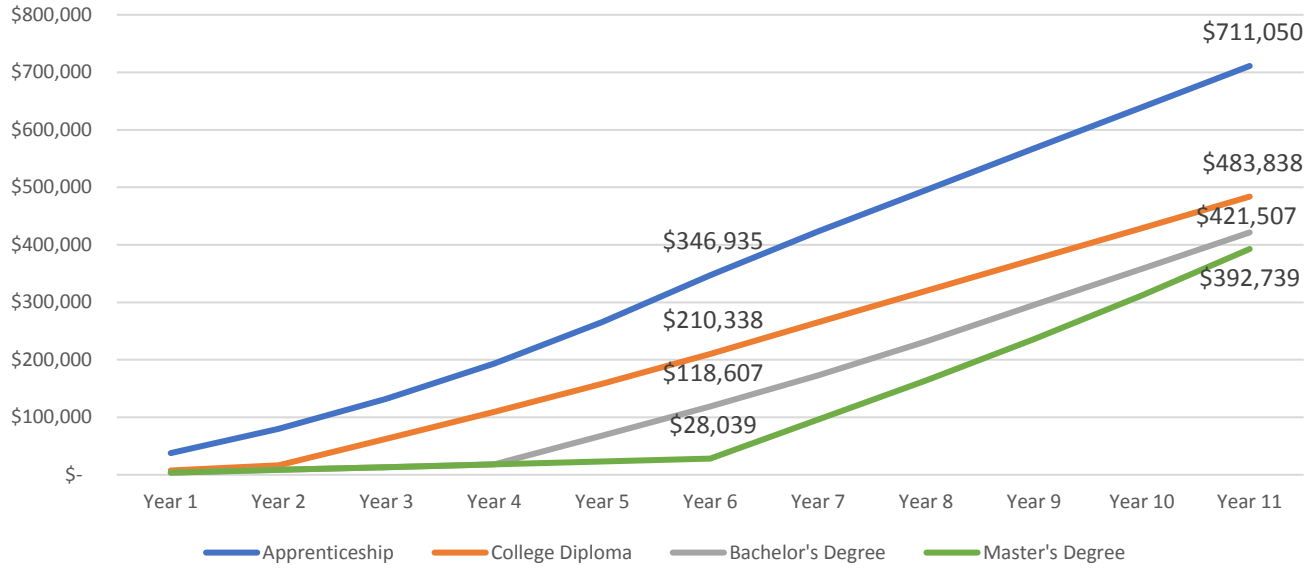
Table 5.4: Weighted Median Employment Incomes for Selected Trades by Gender[1]

Weighted Median Employment Income at:	Selected Trades (Men)	Selected Trades (Women)
4 years before certification	$34,390	$10,260
2 years before certification	$43,810	$13,150
Year of certification	$62,940	$19,910
2 years after certification	$81,220	$20,570
4 years after certification	$71,890	$20,600

Table 5.5: Median Employment Incomes by Level of Educational Qualification [9]

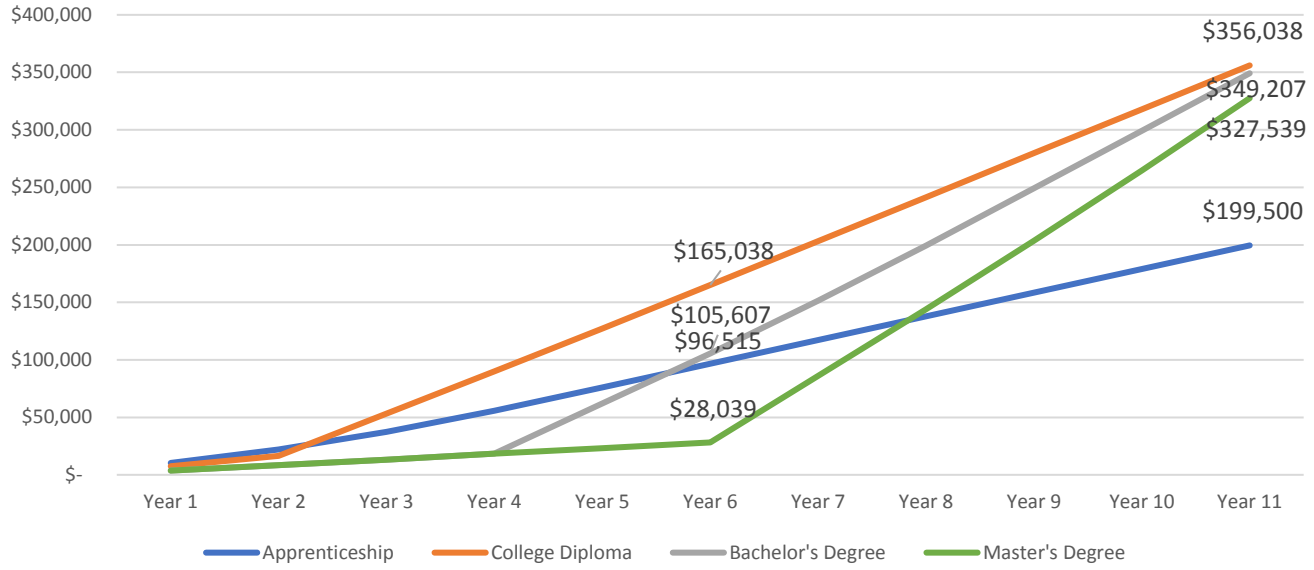
Educational qualification	Median employment income two years after graduation		Median employment income five years after graduation	
	Men	Women	Men	Women
Career, technical or professional training certificate	$42,100	$30,300	$49,300	$32,100
Career, technical or professional training diploma	$46,400	$36,00	$54,700	$38,200
Undergraduate degree	$50,100	$43,600	$63,200	$50,000
Professional degree	$83,400	$81,900	$100,800	$89,300
Master's degree	$67,900	$57,900	$80,500	$62,900
Doctoral degree	$65,200	$53,300	$82,200	$65,700

Chart 5.7: Comparison of Cumulative Earnings (Men only)



When looking at male graduates, we see similar trends to chart 5.1. Over 11 years, journeymen have 47% more cumulative net employment income than college diploma holders, 69% more than bachelor's degree holders, and 81% more than master's degree holders.

Chart 5.8: Comparison of Cumulative Earnings (Women only)



When looking exclusively at female graduates over the 11-year period, we see different results than with male graduates. Women with college diplomas have 2% more cumulative net employment income than bachelor's degree holders, 9% more than women with master's degrees and 78% more than journeywomen.

Long-Term

Earlier, we compared the median employment incomes based on the year of graduation/certification, but now we'll make a comparison between the pathways in a slightly different way. From Statistics Canada[18] and the Census of Population 2016 sample data, we'll look at the median annual earnings of men and women aged 25 to 64 who worked full time and full year as paid employees in 2015, by highest level of education. We will also extend the charts to include 40 years which will provide more information about the long-term outcomes of each education pathway. Here, university certificates, diplomas or degrees above bachelor level are used for the earnings of master's degree holders as there is no other data that allows for meaningful comparison. However, the number of master's degree students account for 75%[19] of this cohort so the values will be heavily biased towards the actual median value for master's degree holders. Refer to appendix 8.11, 8.12, and 8.13.

Table 5.9: Median Annual Earnings of Canadians aged 25 to 64 by Highest Level of Education

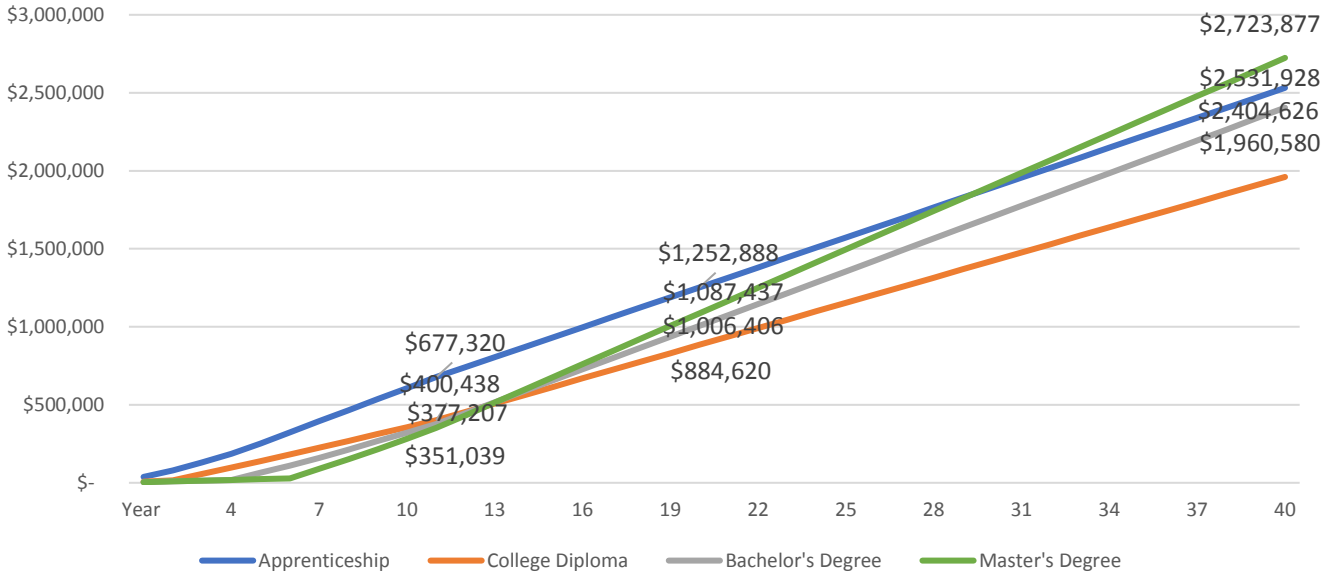
	Apprenticeship Certificate	College Diploma	Bachelor's Degree	Master's Degree
Total	$63,952	$53,798	$69,911	$81,822
Women	$35,039	$47,018	$64,164	$76,628
Men	$68,840	$64,244	$76,916	$88,328

The following charts will use the median annual earnings of Canadians aged 25 to 64 for the earnings of each pathway from year 12 onwards. Years 1-11 will still use the same earnings and expenses as before. (Note: data tables for charts 5.10, 5.11, and 5.12 were excluded from the appendix as they cannot be sized down to fit on the pages)

[18] Statistics Canada, 2016 Census of Population, Statistics Canada Catalogue no. 98-400-X2016261

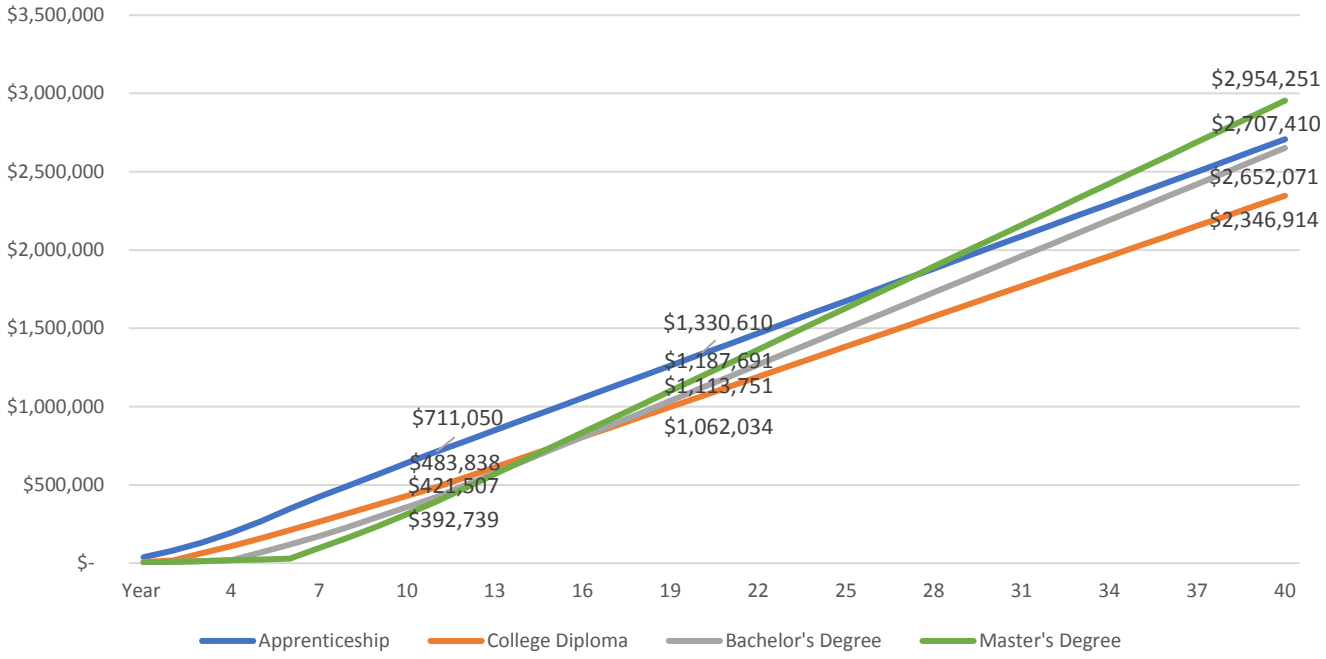
[19] Statistics Canada. Table 37-10-0115-01 Characteristics and median employment income of longitudinal cohorts of postsecondary graduates two and five years after graduation, by educational qualification and field of study, 2010 and 2011 cohorts

Chart 5.10: Comparison of Cumulative Earnings in the Long-Term (Total)



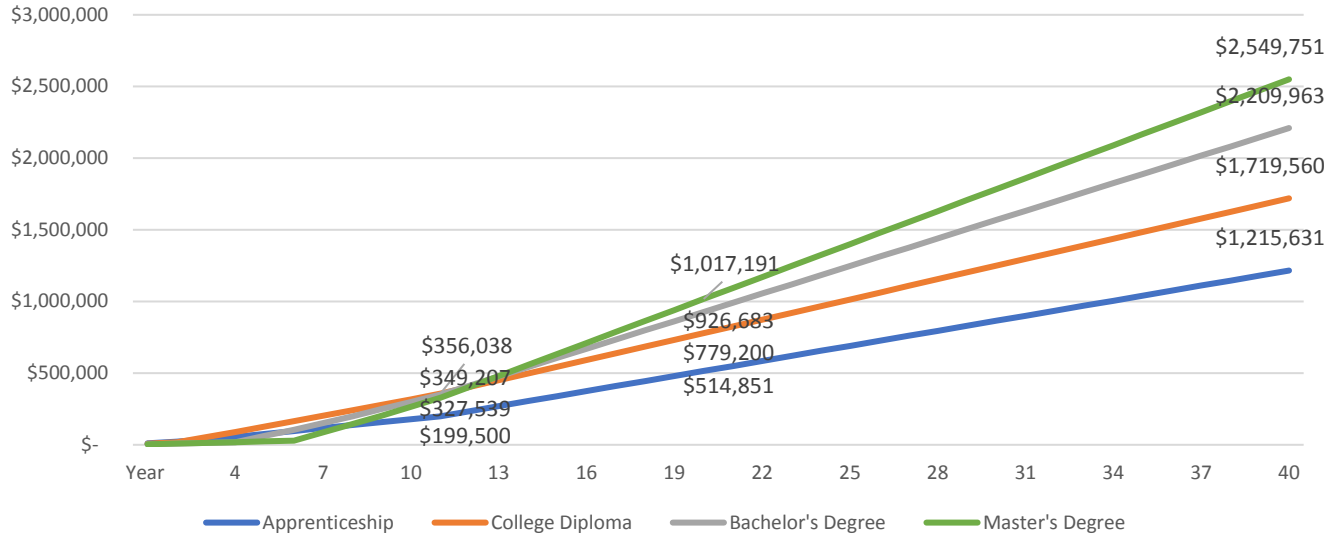
After extending the chart to 40 years, the trends change slightly. People with master's degrees accumulate 8% more net income than a journeyperson, 13% more than bachelor's degree holders, and 39% more than people with a college diploma.

Chart 5.11: Comparison of Cumulative Earnings in the Long-Term (Men only)



After extending the chart to 40 years, the trends for men change considerably. Men with master's degrees have 9% more net cumulative income than journeymen, 11% more than men with bachelor's degrees, and 26% more than men with a college diploma.

Chart 5.12: Comparison of Cumulative Earnings in the Long-Term (Women only)



Again, after extending the chart to 40 years, the trends for women change. Women with master's degrees accumulate 15% more net income than women with bachelor's degrees, 48% more than women with college diplomas, and 110% more than journeywomen.

6.0 Additional Considerations

Another topic of interest when discussing labour market outcomes is the relation of one's job to their studies/training (i.e. do people studying biology end up in science-related occupations). This information comes from the Statistics Canada Overview Report for the 2015 National Apprenticeship Survey (NAS)[4] in addition to datasets for the 2013 National Graduates Survey (NGS)[20] which are the most recent iterations of the respective surveys.

Charts 6.2, 6.3, and 6.4 come from the NGS which allows respondents to select "Closely related" or "Somewhat related" which have been combined into "Related" to allow for easy comparison with chart 6.1. Also, the NGS uses the title "College or CEGEP Diploma or Certificate (includes DEC general in Quebec)" whereas this report will use "College Diploma" for simplicity.

Chart 6.1: Relation of Studies to Job (Trade Certificate)

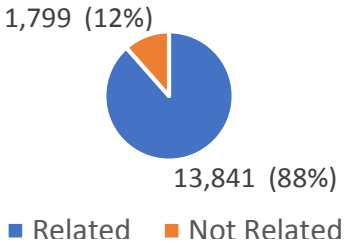


Chart 6.2: Relation of Studies to Job (College Diploma)

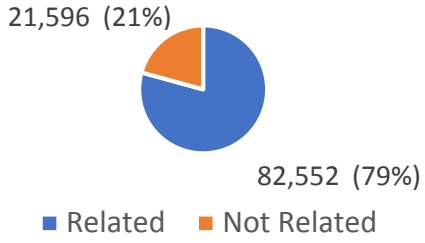


Chart 6.3: Relation of Studies to Job (Bachelor's Degree)

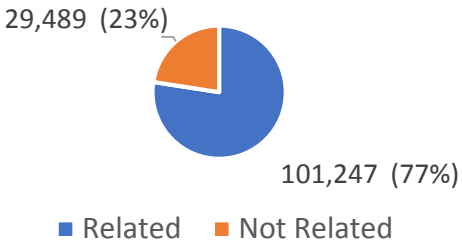
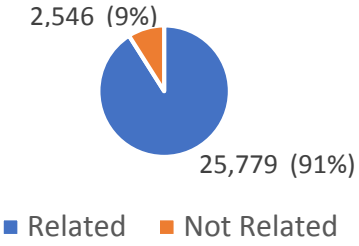


Chart 6.4: Relation of Studies to Job (Master's Degree)



[20] "2013 National Graduates Survey (Class of 2009/2010) Data on College, Baccalaureate and Masters' Graduates." Open Government Portal. Accessed July 18, 2019. https://open.canada.ca/data/en/dataset/010e34e2-e269-46ba-95e9-e780e485c41f.

Firstly, note that the sample size of charts 6.1 (15,640) and 6.4 (28,325) are much smaller than charts 6.2 (104,148) and 6.3 (130,736). This is simply because there are fewer Canadians learning skilled trades or earning a master's degree than are attending college or university bachelor's programs. With that said, we can still compare the percentages of students in each pathway who do, or do not, find a job that is related to their studies. Similar percentages of graduates with a college diploma or a university bachelor's degree report being able to find a job related to their studies at 79% and 77% respectively. However, 88% of respondents with trade certificates and 91% of people with master's degrees say that their current job is related to their education.

Next, we look at some data about postsecondary student debt levels. Data for apprentices is limited, but from the NAS, we find that 11,657 (78%) apprentices took a loan while 3,247 (22%) did not take a loan. Note that this is the percentage of apprentices who took a loan at some point during their apprenticeship and not necessarily the percentage of apprentices with outstanding loan balances at the time of certification. In January 2015, the Government of Canada began disbursing the Canada Apprenticeship Loan (CAL) to help apprentices complete their training and to encourage more Canadians to consider a career in the skilled trades. In 2015, disbursements totaled $58.8 million with an average disbursement amount of $3,845[21].

We can't directly compare these percentages with data for college and university students from the 2013 NGS[22] since it looks exclusively at debt levels at the time of graduation. However, the following table emphasizes the enormous amounts of debt that college and university students undertake. Refer to appendix 8.17.

Table 6.5: Graduates who Owed Money for Education to Any Source by Level of Study

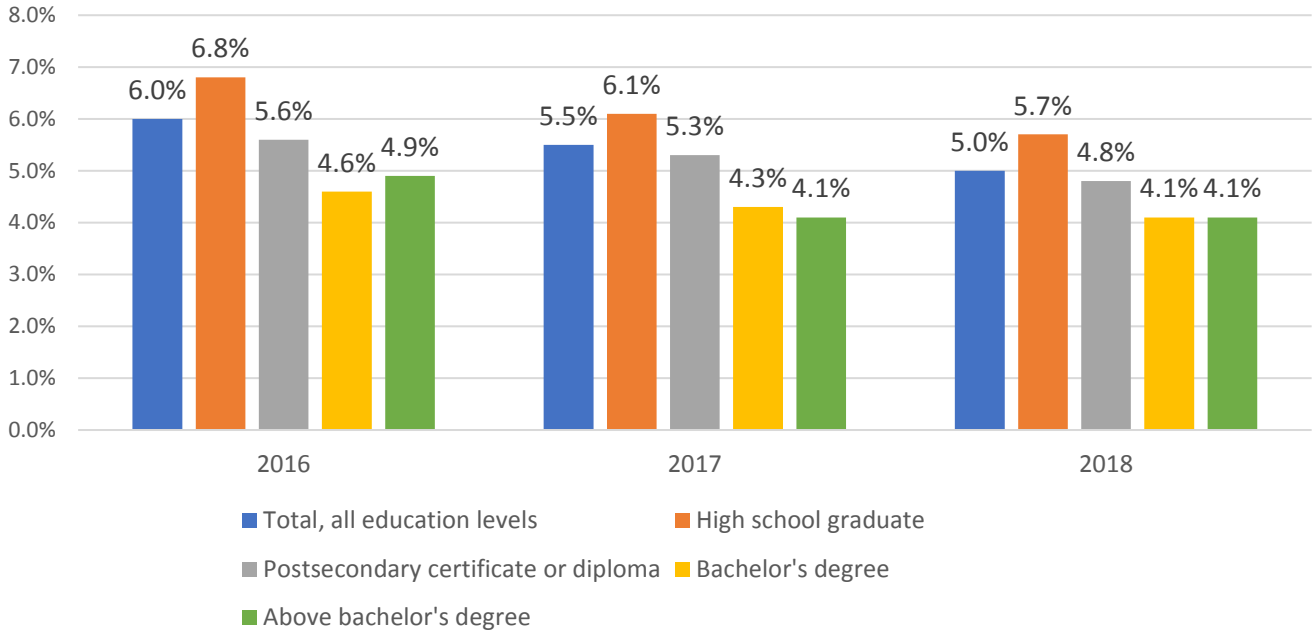
	Master's Degree	Bachelor's Degree	College
% of Graduates who Owed Debt at Graduation	44%	50%	43%
% of Graduates with Debt over $25,000 at Graduation	41%	41%	16%
Average Debt Owed at Graduation	$26,700	$26,300	$14,900

[21] Social Development Canada. "Evaluation of the Canada Apprentice Loan - Phase 1 - Summary." Canada.ca. October 13, 2017. Accessed August 14, 2019. https://www.canada.ca/en/employment-social-development/corporate/reports/evaluations/canada-apprentice-loan/summary.html.

[22] "National Graduates Survey, Profile of Graduates Who Owed Money to Government Student Loans at Graduation, by Province and Level of Study." Open Government Portal. Accessed July 18, 2019. https://open.canada.ca/data/en/dataset/c5a819e1-c577-449b-87a8-d35ccace6fa0.

Another important consideration is whether students/apprentices are able to find work after completing their studies. The following chart examines unemployment rates of Canadians over 25 years of age by highest educational attainment[23]. Here, "Postsecondary certificate or diploma" includes trade certificates, so we will not be able to make 4 distinct comparisons. However, regardless of the reference year, people with bachelor's degrees or above have lower rates of unemployment than people with a college diploma or a trade certificate.

Chart 6.6: Unemployment Rates by Educational Attainment



[23] Statistics Canada. Table 14-10-0020-01 Unemployment rate, participation rate and employment rate by educational attainment, annual

7.0 Conclusion:

In summary:

- Short-term (11 years), net cumulative income, values rounded to nearest $1,000:

Gender	Apprenticeship	College Diploma	Bachelor's Degree	Master's Degree
Total	**$677,000**	$400,000	$377,000	**$351,000**
Male	**$711,000**	$484,000	$422,000	**$393,000**
Female	**$200,000**	**$356,000**	$349,000	$328,000

- Long-term (40 years), net cumulative income, values rounded to nearest $1,000:

Gender	Apprenticeship	College Diploma	Bachelor's Degree	Master's Degree
Total	$2,532,000	**$1,961,000**	$2,405,000	**$2,724,000**
Male	$2,707,000	**$2,347,000**	$2,652,000	**$2,954,000**
Female	**$1,216,000**	$1,720,000	$2,210,000	**$2,550,000**

Now, we'll look at these values as percentages, relative to the largest value by gender (i.e. men with college diplomas accumulate 68% of a journeyman's cumulative income in the short-term).

- Short-term:

Gender	Apprenticeship	College Diploma	Bachelor's Degree	Master's Degree
Total	**100%**	59%	56%	**52%**
Male	**100%**	68%	59%	**55%**
Female	**56%**	**100%**	98%	92%

- Long-term:

Gender	Apprenticeship	College Diploma	Bachelor's Degree	Master's Degree
Total	93%	**72%**	88%	**100%**
Male	92%	**79%**	90%	**100%**
Female	**48%**	67%	87%	**100%**

As you can see, apprenticeships provide the most net cumulative income in the short-term for men, while college diplomas provide the most for women. In the long-term however, both men and women accumulate more net income with a master's degree than the other education pathways. From the percentage tables, we see an interesting point that male apprentices earn slightly more than men with bachelor's degrees even in the long-term. Similarly, for both the short and long-term, female apprentices earn much less than other pathways. Female apprenticeship earnings are driven mainly by the "Hairstylist" trade, which accounts for 78% of women from the data, but has remarkably low median employment incomes at all time periods.

In the calculations, none of the educational pathways accumulate debt under our assumptions. This is in part because we assumed college and university students work while studying and over the summer. Also, we've only considered educational expenses but if we were to include costs of living, it's likely that the average postsecondary student would be in debt.

In section 6.0, we saw that over 40% of college and university students are in debt at graduation with a significant portion of those students owing more than $25,000. Because of this fact, we need to keep in mind that all these students would not only have to pay back the loan amount but also any accrued interest which would significantly lower their cumulative net income and perhaps affect the comparison results from the previous section.

The apprenticeship pathway offers another interesting advantage over college and university pathways which is the ability to invest greater amounts of money much earlier. As mentioned previously, the median employment income of apprentices at the time of certification is $57,930 while the median employment income of a bachelor's degree 2 years after graduation is $46,200. So, apprentices earn about 25% more than bachelor's degree graduates and they earn it 2 years earlier. In addition to not having to pay off student debt, apprentices should be able to invest significantly more money much earlier on, which could translate to greater earnings in the long term than even some master's degree holders.

One final note to consider is that as time continues and if trends remain constant, it's quite possible that the incremental value of a master's degree will decline just as the value of a bachelor's degree has declined over the last few decades. With more and more employers requiring a master's education, more people obtain their master's degree and it is already becoming much less of an elite qualification than it was even just a decade ago.

The purpose of this report is not to investigate female vs. male earnings, nor to suggest that one pathway is better than another, but instead to explore education and employment outcomes from a different perspective. There are so many options for postsecondary education and any combination can lead to a happy, successful career. It is our hope that this report serves as the starting point for new ideas and conversations about the realities of different postsecondary pathways that are available to Canadians.

8.0 Appendix:

Appendix 8.1: Median Employment Incomes in Select Trades

	2012									
	Canada									
	Both sexes									
Selected trades	Cohort size	Median age at certification	Tax-Filers	Median employment income (4 years before certification)	Median employment income (2 years before certification)	Median employment income (at year of certification)	Median employment income (2 years after certification)	Median employment income (4 years after certification)	Progression of median employment income (2 years after certification)	Progression of median employment income (4 years after certification)
	Number		Percent	Dollars					Percent	
Refrigeration and Air Conditioning Mechanic [7313]	640	29	84.4	38740	53330	69540	83290	85370	19.8	22.8
Construction Electrician [7241]	5,370	28	82.9	34400	43780	62920	81650	76960	29.8	22.3
Industrial Mechanic (Millwright) [7311]	1,090	30	83.5	52900	60060	78640	97430	93340	23.9	18.7
Truck and Transport Mechanic [7321]	700	27	80	38580	43950	58330	75210	75970	28.9	30.2
Plumber [7251]	1,960	28	79.1	35930	42850	55790	72250	70620	29.5	26.6
Heavy Duty Equipment Technician [7312]	920	27	81.5	51140	61920	89420	107140	96950	19.8	8.4
Steamfitter - Pipefitter [7252]	740	30	81.1	55210	62380	85990	102110	96320	18.7	12
Automotive Service Technician [7321]	1,770	26	76.8	25990	32200	41720	56020	58460	34.3	40.1
Sheet Metal Worker [7233]	760	28	82.9	36460	44230	57930	69160	71760	19.4	23.9
Carpenter [7271]	3,750	27	86.4	29500	38420	49650	55180	55520	11.1	11.8
Industrial Electrician [7242]	250	32	88	58090	69400	82890	93720	93010	13.1	12.2
Cook [6322]	790	27	72.2	19000	25050	30890	35760	35880	15.8	16.2
Welder [7237]	1,330	27	76.7	37630	43910	65170	80160	65400	23	0.4
Hairstylist [6341]	2,320	24	74.1	10480	13230	19980	20680	20780	3.5	4

Appendix 8.2: Weighted Median Employment Incomes in Select Trades

Selected trades	Cohort size	Proportion	Weighted Median employment income (4 years before certification)	Weighted Median employment income (2 years before certification)	Weighted Median employment income (at year of certification)	Weighted Median employment income (2 years after certification)	Weighted Median employment income (4 years after certification)
	Number	Percentage	Dollars				
Refrigeration and Air Conditioning Mechanic [7313]	640	3%	38740	53330	69540	83290	85370
Construction Electrician [7241]	5370	24%	34400	43780	62920	81650	76960
Industrial Mechanic (Millwright) [7311]	1090	5%	52900	60060	78640	97430	93340
Truck and Transport Mechanic [7321]	700	3%	38580	43950	58330	75210	75970
Plumber [7251]	1960	9%	35930	42850	55790	72250	70620
Heavy Duty Equipment Technician [7312]	920	4%	51140	61920	89420	107140	96950
Steamfitter - Pipefitter [7252]	740	3%	55210	62380	85990	102110	96320
Automotive Service Technician [7321]	1770	8%	25990	32200	41720	56020	58460
Sheet Metal Worker [7233]	760	3%	36460	44230	57930	69160	71760
Carpenter [7271]	3750	17%	29500	38420	49650	55180	55520
Industrial Electrician [7242]	250	1%	58090	69400	82890	93720	93010
Cook [6322]	790	4%	19000	25050	30890	35760	35880
Welder [7237]	1330	6%	37630	43910	65170	80160	65400
Hairstylist [6341]	2320	10%	10480	13230	19980	20680	20780
	22390		**34400**	**43780**	**57930**	**72250**	**70620**

Appendix 8.3: Financial Incentives and Government Grants

Government Incentives/Grants for Apprentices	Description
Employment Insurance	Obtain EI while in trade school (except first 2 weeks of first course)
Travel Allowance	Up to $125/week to get to trade school
Loans for Tools	Interest free loan for equipment payable 1 year after completion of apprenticeship ($300/$400/$400/$800 for service/industrial/construction/motive power trades)
Apprenticeship Incentive Grant (AIG)	Taxable grant of $1000 per year/level for a maximum of $2000 per person
Apprenticeship Incentive Grant for Women (AIG-W)	Taxable cash grant of $3000 per year/level up to a maximum of $6,000 per person
Apprenticeship Completion Grant (ACG)	One-time, taxable cash grant of $2000 per person

Appendix 8.4: Median Employment Income of Postsecondary Graduates

		Canada (map)5		
		Total, sex		
		15 to 34 years		
		Canadian students		
		Graduates reporting employment income 6		
		Number of graduates 7 8	Median employment income two years after graduation 7 9	Median employment income five years after graduation 7 9
Educational qualification10	Field of study11	2011	2011	2011
		Number	2016 constant dollars	
Career, technical or professional training diploma	Total, field of study	18,770	40,300	44,000
	Education	865	31,500	32,100
	Visual and performing arts, and communications technologies	1,270	29,900	35,100
	Humanities	75	31,700	37,300
	Social and behavioral sciences and law	1,665	34,000	35,100
	Business, management and public administration	4,180	36,300	40,600
	Physical and life sciences and technologies	200	40,400	43,400
	Mathematics, computer and information sciences	690	40,000	47,600
	Architecture, engineering, and related technologies	3,595	53,300	61,100
	Agriculture, natural resources and conservation	525	38,400	42,900
	Health and related fields	4,675	46,000	46,300
	Personal, protective and transportation services	1,030	38,800	48,000
	Other instructional programs	..	..	..
Undergraduate degree 12	Total, field of study	65,225	46,200	55,100
	Education	10,370	42,400	50,000
	Visual and performing arts, and communications technologies	2,715	27,300	34,100
	Humanities	4,020	33,400	42,700
	Social and behavioral sciences and law	10,650	37,500	46,700
	Business, management and public administration	16,110	47,800	59,300
	Physical and life sciences and technologies	2,780	41,800	49,800
	Mathematics, computer and information sciences	1,515	55,400	68,700
	Architecture, engineering, and related technologies	6,695	64,500	74,800
	Agriculture, natural resources and conservation	1,020	48,000	55,000
	Health and related fields	8,545	64,300	67,200
	Personal, protective and transportation services	360	42,300	54,700
	Other instructional programs	445	39,900	44,400
Master's degree	Total, field of study	14,580	61,400	69,400
	Education	1,280	65,300	75,900
	Visual and performing arts, and communications technologies	300	30,400	37,900
	Humanities	530	37,400	45,400
	Social and behavioral sciences and law	1,955	54,600	62,600
	Business, management and public administration	4,160	69,900	81,500
	Physical and life sciences and technologies	785	53,100	59,500
	Mathematics, computer and information sciences	680	55,300	65,100
	Architecture, engineering, and related technologies	1,810	63,800	73,800
	Agriculture, natural resources and conservation	465	53,500	60,200
	Health and related fields	2,500	65,700	67,700
	Personal, protective and transportation services	40	74,000	89,600
	Other instructional programs	75	54,300	67,000

Appendix 8.5: Canadian and International Tuition Fees by Level of Study

Geography	Level of study	2014 / 2015	2015 / 2016	2016 / 2017	2017 / 2018	2018 / 2019
		Dollars				
Canada	**Canadian undergraduate**	**5,998**	**6,201**	**6,375**	**6,618**	**6,838**
	Canadian graduate	6,295	6,537	6,784	6,920	7,086
	International undergraduate	20,593	22,346	23,677	25,549	27,159
	International graduate	13,909	14,520	15,422	16,326	16,497
Newfoundland and Labrador	Canadian undergraduate	2,660	2,759	2,752	2,821	2,885
	Canadian graduate	2,474	2,475	2,752	2,776	2,776
	International undergraduate	8,942	9,360	9,321	9,241	12,035
	International graduate	2,822	2,810	3,174	3,179	4,087
Prince Edward Island	Canadian undergraduate	5,849	6,130	6,310	6,485	6,614
	Canadian graduate	4,845	4,887	5,122	4,918	4,879
	International undergraduate	21,628	22,146	21,897	21,184	21,525
	International graduate	11,041	10,586	11,218	11,779	11,905
Nova Scotia	Canadian undergraduate	6,483	6,834	7,322	7,718	8,153
	Canadian graduate	8,182	8,439	8,617	8,955	9,245
	International undergraduate	14,136	14,705	15,747	16,717	17,662
	International graduate	16,482	16,601	17,662	18,348	18,907
New Brunswick	Canadian undergraduate	6,298	6,379	6,714	6,908	7,108
	Canadian graduate	5,759	5,737	5,953	6,089	6,229
	International undergraduate	13,212	13,125	13,669	13,872	14,290
	International graduate	10,368	10,432	10,975	11,245	11,593
Quebec	Canadian undergraduate	2,740	2,797	2,817	2,880	2,961
	Canadian graduate	2,820	2,850	2,904	2,976	3,060
	International undergraduate	18,348	20,269	20,576	21,182	21,857
	International graduate	14,051	14,330	14,555	14,956	15,392
Ontario	**Canadian undergraduate**	**7,562**	**7,865**	**8,154**	**8,519**	**8,838**
	Canadian graduate	8,759	9,175	9,719	9,785	10,028
	International undergraduate	25,392	27,627	29,921	32,380	34,961
	International graduate	18,816	19,928	21,263	22,226	21,686
Manitoba	Canadian undergraduate	3,857	4,013	4,099	4,227	4,501
	Canadian graduate	4,468	4,594	4,651	4,780	5,093
	International undergraduate	12,995	14,385	14,550	14,616	15,582
	International graduate	8,877	10,032	10,149	10,315	10,995
Saskatchewan	Canadian undergraduate	6,693	6,978	7,042	7,257	7,522
	Canadian graduate	3,758	3,788	3,864	3,527	3,725
	International undergraduate	17,371	18,096	18,671	19,176	20,211
	International graduate	5,212	5,513	5,807	5,615	6,032
Alberta	Canadian undergraduate	5,738	5,739	5,742	5,736	5,744
	Canadian graduate	5,715	5,615	5,655	5,745	5,745
	International undergraduate	19,826	20,412	20,601	21,043	21,548
	International graduate	9,748	8,993	9,127	11,655	11,804
British Columbia	Canadian undergraduate	5,201	5,397	5,523	5,669	5,782
	Canadian graduate	7,648	8,262	8,250	8,557	8,728
	International undergraduate	18,950	20,485	21,761	24,261	25,472
	International graduate	11,869	12,877	14,824	16,186	16,988

Appendix 8.6: Tuitions and Fees of Select Colleges in Canada

Seneca College	
https://www.senecacollege.ca/registrar/fee-details/1819.BUI.html	
Tuition per year	$1,510
Additional Fees	$528
Books (year 1)	$1,301
George Brown College	
https://www.georgebrown.ca/how_much_will_college_cost.aspx	
Tuition per year	$3,689 to $20,937
Additional Fees	$775
Materials/Supplies	$1 to $5,385
Centennial College	
https://www.centennialcollege.ca/admissions/tuition-and-fees/tuition-information/	
Tuition per year	$3,024
Ancillary Fees	$1,088
Algonquin College	
https://www.algonquincollege.com/future-students/estimated-costs/	
Tuition and Fees	$2,900
Incidental Fees, Books, and Supplies	$1,200

Appendix 8.7: Weighted Median Employment Incomes for Selected Trades (Men only)

	2012						
	Canada (map)						
	Males						
Selected trades	Cohort size	Proportion	Median employment income (4 years before certification)	Median employment income (2 years before certification)	Median employment income (at year of certification)	Median employment income (2 years after certification)	Median employment income (4 years after certification)
	Number	Percent	Dollars				
Refrigeration and Air Conditioning Mechanic [7313]	630	3%	$ 39,050	$ 53,340	$ 69,570	$ 83,260	$ 85,280
Construction Electrician [7241]	5,230	27%	$ 34,390	$ 43,810	$ 62,940	$ 81,680	$ 77,110
Industrial Mechanic (Millwright) [7311]	1,080	5%	$ 52,940	$ 59,920	$ 78,570	$ 97,410	$ 93,350
Truck and Transport Mechanic [7321]	690	4%	$ 38,490	$ 43,820	$ 58,330	$ 75,550	$ 76,060
Plumber [7251]	1,940	10%	$ 36,060	$ 42,940	$ 55,870	$ 72,490	$ 71,080
Heavy Duty Equipment Technician [7312]	910	5%	$ 51,380	$ 62,170	$ 89,730	$ 107,460	$ 97,150
Steamfitter - Pipefitter [7252]	710	4%	$ 56,280	$ 62,490	$ 86,870	$ 102,230	$ 97,220
Automotive Service Technician [7321]	1,740	9%	$ 26,080	$ 32,300	$ 41,860	$ 56,560	$ 58,460
Sheet Metal Worker [7233]	750	4%	$ 36,470	$ 44,210	$ 57,900	$ 69,170	$ 71,890
Carpenter [7271]	3,700	19%	$ 29,500	$ 38,490	$ 49,770	$ 55,360	$ 55,790
Industrial Electrician [7242]	250	1%	$ 58,090	$ 68,930	$ 82,770	$ 93,720	$ 92,970
Cook [6322]	560	3%	$ 21,310	$ 26,320	$ 32,410	$ 37,030	$ 38,460
Welder [7237]	1,260	6%	$ 38,020	$ 44,500	$ 65,690	$ 81,220	$ 66,930
Hairstylist [6341]	200	1%	$ 13,490	$ 14,280	$ 22,550	$ 22,510	$ 25,000
	19650		**34390**	**43810**	**62940**	**81220**	**71890**

Appendix 8.8: Weighted Median Employment Incomes for Selected Trades (Women only)

	2012						
	Canada (map)						
	Females						
Selected trades	Cohort size	Proportion	Median employment income (4 years before certification)	Median employment income (2 years before certification)	Median employment income (at year of certification)	Median employment income (2 years after certification)	Median employment income (4 years after certification)
	Number		Dollars				
Refrigeration and Air Conditioning Mechanic [7313]	x	x	x	x	x	x	x
Construction Electrician [7241]	140	5%	$ 34,620	$ 40,240	$ 62,570	$ 78,910	$ 63,860
Industrial Mechanic (Millwright) [7311]	20	1%	$ 46,620	$ 75,100	$ 84,690	$ 104,850	$ 86,550
Truck and Transport Mechanic [7321]	x	x	x	x	x	x	x
Plumber [7251]	30	1%	$ 30,880	$ 38,550	$ 29,170	$ 49,270	$ 23,550
Heavy Duty Equipment Technician [7312]	x	x	x	x	x	x	x
Steamfitter - Pipefitter [7252]	30	1%	$ 46,490	$ 57,920	$ 83,500	$ 94,420	$ 73,480
Automotive Service Technician [7321]	30	1%	$ 20,280	$ 28,750	$ 37,040	$ 43,760	$ 49,770
Sheet Metal Worker [7233]	x	x	x	x	x	x	x
Carpenter [7271]	60	2%	$ 28,570	$ 35,150	$ 39,000	$ 41,850	$ 40,910
Industrial Electrician [7242]	x	x	x	x	x	x	x
Cook [6322]	230	8%	$ 15,370	$ 22,720	$ 28,770	$ 33,190	$ 31,760
Welder [7237]	70	3%	$ 28,270	$ 36,340	$ 56,600	$ 63,940	$ 36,670
Hairstylist [6341]	2,120	78%	$ 10,260	$ 13,150	$ 19,910	$ 20,570	$ 20,600
	2730		**10260**	**13150**	**19910**	**20570**	**20600**

Appendix 8.9: Median Employment Income of Postsecondary Women

Educational qualification10	Field of study11	Number of graduates 7 8	Median employment income two years after graduation 7 9	Median employment income five years after graduation 7 9
		2011	2011	2011
		Number	2016 constant dollars	
Career, technical or professional training certificate	Total, field of study	6,595	30,300	32,100
	Education	325	24,400	23,900
	Visual and performing arts, and communications technologies	185	24,800	33,200
	Humanities	25	18,900	35,200
	Social and behavioral sciences and law	670	28,200	30,600
	Business, management and public administration	1,405	31,400	33,100
	Physical and life sciences and technologies	5	x	x
	Mathematics, computer and information sciences	75	34,200	36,000
	Architecture, engineering, and related technologies	295	29,100	31,200
	Agriculture, natural resources and conservation	95	25,500	23,600
	Health and related fields	2,905	34,300	35,400
	Personal, protective and transportation services	610	22,800	25,600
	Other instructional programs	..	..	..
Career, technical or professional training diploma	Total, field of study	11,355	36,800	38,200
	Education	790	30,800	31,100
	Visual and performing arts, and communications technologies	830	29,000	33,400
	Humanities	45	26,400	29,600
	Social and behavioral sciences and law	1,360	32,700	32,600
	Business, management and public administration	2,800	34,200	37,100
	Physical and life sciences and technologies	110	38,900	39,500
	Mathematics, computer and information sciences	200	37,500	41,600
	Architecture, engineering, and related technologies	610	47,400	48,300
	Agriculture, natural resources and conservation	210	30,900	27,900
	Health and related fields	4,015	44,900	44,700
	Personal, protective and transportation services	385	32,300	34,100
	Other instructional programs	..	..	..
Undergraduate degree 12	Total, field of study	39,250	43,600	50,000
	Education	8,050	41,300	46,400
	Visual and performing arts, and communications technologies	1,835	27,200	32,300
	Humanities	2,545	32,500	40,400
	Social and behavioral sciences and law	6,905	36,400	43,500
	Business, management and public administration	8,585	46,500	54,600
	Physical and life sciences and technologies	1,540	39,900	46,000
	Mathematics, computer and information sciences	285	54,700	63,700
	Architecture, engineering, and related technologies	1,275	61,800	66,900
	Agriculture, natural resources and conservation	520	45,300	48,300
	Health and related fields	7,240	65,400	67,200
	Personal, protective and transportation services	175	40,700	51,100
	Other instructional programs	295	39,100	40,700
Master's degree	Total, field of study	8,975	57,900	62,900
	Education	1,020	60,800	70,400
	Visual and performing arts, and communications technologies	200	30,800	36,100
	Humanities	335	36,700	43,400
	Social and behavioral sciences and law	1,350	53,500	59,500
	Business, management and public administration	2,140	63,700	70,400
	Physical and life sciences and technologies	470	50,500	54,000
	Mathematics, computer and information sciences	395	51,700	61,000
	Architecture, engineering, and related technologies	595	56,700	60,900
	Agriculture, natural resources and conservation	290	50,000	53,700
	Health and related fields	2,110	65,300	65,600
	Personal, protective and transportation services	15	x	x
	Other instructional programs	50	51,500	59,200

Appendix 8.10: Median Employment Income of Postsecondary Men

Educational qualification10	Field of study11	Number of graduates 7 8	Median employment income two years after graduation 7 9	Median employment income five years after graduation 7 9
		2011	2011	2011
		Number	2016 constant dollars	
Career, technical or professional training certificate	Total, field of study	5,195	42,100	49,300
	Education	25	33,400	34,500
	Visual and performing arts, and communications technologies	160	22,300	33,300
	Humanities	10	x	x
	Social and behavioral sciences and law	35	35,400	38,100
	Business, management and public administration	200	41,700	44,700
	Physical and life sciences and technologies	0	x	x
	Mathematics, computer and information sciences	135	48,200	55,900
	Architecture, engineering, and related technologies	3,135	41,700	48,800
	Agriculture, natural resources and conservation	105	46,300	51,300
	Health and related fields	510	47,900	53,100
	Personal, protective and transportation services	880	42,300	51,100
	Other instructional programs	..	..	..
Career, technical or professional training diploma	Total, field of study	7,415	46,400	54,700
	Education	75	36,400	41,900
	Visual and performing arts, and communications technologies	440	32,200	38,900
	Humanities	30	41,900	46,800
	Social and behavioral sciences and law	305	43,000	49,100
	Business, management and public administration	1,380	40,200	48,000
	Physical and life sciences and technologies	90	41,400	47,600
	Mathematics, computer and information sciences	490	41,500	49,600
	Architecture, engineering, and related technologies	2,985	54,600	63,200
	Agriculture, natural resources and conservation	315	43,300	50,000
	Health and related fields	660	52,800	57,500
	Personal, protective and transportation services	645	42,100	55,900
	Other instructional programs	..	..	..
Undergraduate degree 12	Total, field of study	25,975	50,100	63,200
	Education	2,320	46,300	59,300
	Visual and performing arts, and communications technologies	880	27,900	38,600
	Humanities	1,475	35,300	46,900
	Social and behavioral sciences and law	3,745	40,200	52,700
	Business, management and public administration	7,525	49,300	65,300
	Physical and life sciences and technologies	1,240	44,800	55,900
	Mathematics, computer and information sciences	1,230	55,500	70,000
	Architecture, engineering, and related technologies	5,420	65,000	76,500
	Agriculture, natural resources and conservation	500	51,900	59,900
	Health and related fields	1,305	54,500	67,000
	Personal, protective and transportation services	185	43,500	58,600
	Other instructional programs	150	43,300	53,500
Master's degree	Total, field of study	5,605	67,900	80,500
	Education	260	81,600	90,200
	Visual and performing arts, and communications technologies	100	28,900	40,800
	Humanities	195	39,000	48,300
	Social and behavioral sciences and law	605	57,200	69,800
	Business, management and public administration	2,020	78,900	96,600
	Physical and life sciences and technologies	315	55,300	65,300
	Mathematics, computer and information sciences	285	64,600	73,000
	Architecture, engineering, and related technologies	1,215	67,700	78,500
	Agriculture, natural resources and conservation	175	57,900	69,200
	Health and related fields	390	69,200	78,600
	Personal, protective and transportation services	15	x	x
	Other instructional programs	25	67,600	83,900

Appendix 8.11: Median Annual Earnings of Canadians aged 25 to 64 by Education Level

Employment income statistics (7)	Highest certificate, diploma or degree (11)						
	Secondary (high) school diploma or equivalency certificateFootnote 2	Apprenticeship or trades certificate or diploma	Trades certificate or diploma other than Certificate of Apprenticeship or Certificate of QualificationFootnote 3	Certificate of Apprenticeship or Certificate of QualificationFootnote 4	College, CEGEP or other non-university certificate or diploma	Bachelor's degree	University certificate, diploma or degree above bachelor levelFootnote 5
Total - Employment income statisticsFootnote6	1,958,965	954,475	511,535	442,940	2,128,855	1,909,190	920,550
With employment income	1,906,535	930,930	499,855	431,080	2,087,370	1,870,565	892,930
Median employment income ($)	46,492	51,405	43,936	63,952	53,798	69,911	81,822
Average employment income ($)	54,348	59,945	50,473	70,928	62,456	83,889	101,741
With wages, salaries and commissions	1,784,795	864,855	462,330	402,530	1,979,605	1,790,025	845,995
Median wages, salaries and commissions ($)	47,599	53,254	45,263	66,085	54,825	70,673	82,042
Average wages, salaries and commissions ($)	55,679	62,037	52,122	73,424	63,715	84,107	100,352

Appendix 8.12: Median Annual Earnings of Male Canadians aged 25 to 64 by Educational Level

Employment income statistics (7)	Highest certificate, diploma or degree (11)						
	Secondary (high) school diploma or equivalency certificateFootnote 2	Apprenticeship or trades certificate or diploma	Trades certificate or diploma other than Certificate of Apprenticeship or Certificate of QualificationFootnote 3	Certificate of Apprenticeship or Certificate of QualificationFootnote 4	College, CEGEP or other non-university certificate or diploma	Bachelor's degree	University certificate, diploma or degree above bachelor levelFootnote 5
Total - Employment income statisticsFootnote6	1,141,220	708,550	322,890	385,655	1,048,410	945,215	482,950
With employment income	1,105,945	690,195	314,950	375,250	1,023,400	920,355	465,715
Median employment income ($)	51,828	59,913	51,230	68,840	64,244	76,916	88,328
Average employment income ($)	60,654	67,579	57,881	75,718	73,372	98,342	117,549
With wages, salaries and commissions	1,024,365	648,370	294,530	353,840	966,050	870,965	438,295
Median wages, salaries and commissions ($)	53,323	61,410	52,520	70,568	65,703	77,952	88,744
Average wages, salaries and commissions ($)	62,478	69,502	59,423	77,891	75,126	98,860	116,334

Appendix 8.13: Median Annual Earnings of Female Canadians aged 25 to 64 by Educational Level

Employment income statistics (7)	Highest certificate, diploma or degree (11)						
	Secondary (high) school diploma or equivalency certificateFootnote 2	Apprenticeship or trades certificate or diploma	Trades certificate or diploma other than Certificate of Apprenticeship or Certificate of QualificationFootnote 3	Certificate of Apprenticeship or Certificate of QualificationFootnote 4	College, CEGEP or other non-university certificate or diploma	Bachelor's degree	University certificate, diploma or degree above bachelor levelFootnote 5
Total - Employment income statisticsFootnote6	817,745	245,930	188,645	57,280	1,080,450	963,975	437,605
With employment income	800,590	240,740	184,905	55,835	1,063,965	950,205	427,215
Median employment income ($)	40,959	35,739	35,900	35,039	47,018	64,164	76,628
Average employment income ($)	45,636	38,058	37,854	38,734	51,957	69,891	84,507
With wages, salaries and commissions	760,425	216,490	167,795	48,690	1,013,555	919,065	407,700
Median wages, salaries and commissions ($)	41,726	37,153	37,170	37,072	47,750	64,764	76,642
Average wages, salaries and commissions ($)	46,519	39,678	39,306	40,960	52,838	70,127	83,170

Appendix 8.14: Net and Cumulative Income of the Four Pathways (Total)

Apprenticeship	School/Training				Workforce						
	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10	Year 11
Earnings	$39,090	$43,780	$ 50,855	$ 57,930	$ 65,090	$ 72,250	$ 71,435	$ 70,620	$ 70,620	$ 70,620	$ 70,620
CoT Registration	$ 60	$ 60	$ 60	$ 60	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Trade School	$ 600	$ 600	$ 600	$ 600	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Tools	$ 500	$ 500	$ 500	$ 500	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Additional Fees	$ 200	$ 200	$ 200	$ 200	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Certificate of Qual.	$ -	$ -	$ -	$ 150	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Net Earnings	$37,730	$42,420	$ 49,495	$ 56,420	$ 65,090	$ 72,250	$ 71,435	$ 70,620	$ 70,620	$ 70,620	$ 70,620
Cumulative Earnings	$37,730	$80,150	$129,645	$186,065	$251,155	$323,405	$394,840	$465,460	$536,080	$606,700	$677,320

College Diploma	School/Training		Workforce								
	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10	Year 11
Earnings	$11,985	$13,453	$ 40,200	$ 40,200	$ 41,433	$ 42,667	$ 43,900	$ 43,900	$ 43,900	$ 43,900	$ 43,900
Tuition	$ 2,400	$ 2,400	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Ancillary Fees	$ 800	$ 800	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Books/Supplies	$ 1,300	$ 1,300	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Net Earnings	$ 7,485	$ 8,953	$ 40,200	$ 40,200	$ 41,433	$ 42,667	$ 43,900	$ 43,900	$ 43,900	$ 43,900	$ 43,900
Cumulative Earnings	$ 7,485	$16,438	$ 56,638	$ 96,838	$138,272	$180,938	$224,838	$268,738	$312,638	$356,538	$400,438

Bachelor's Degree	School/Training				Workforce						
	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10	Year 11
Earnings	$11,985	$13,086	$ 13,086	$ 13,453	$ 46,000	$ 46,200	$ 49,167	$ 52,133	$ 55,100	$ 55,100	$ 55,100
Tuition	$ 6,201	$ 6,201	$ 6,201	$ 6,201	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Ancillary Fees	$ 800	$ 800	$ 800	$ 800	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Books/Supplies	$ 1,300	$ 1,300	$ 1,300	$ 1,300	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Net Income	$ 3,684	$ 4,785	$ 4,785	$ 5,152	$ 46,000	$ 46,200	$ 49,167	$ 52,133	$ 55,100	$ 55,100	$ 55,100
Cumulative Income	$ 3,684	$ 8,470	$ 13,255	$ 18,407	$ 64,407	$110,607	$159,773	$211,907	$267,007	$322,107	$377,207

Master's Degree	School/Training						Workforce				
	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10	Year 11
Earnings	$11,985	$13,086	$ 13,086	$ 13,453	$ 13,453	$ 13,453	$ 61,400	$ 61,400	$ 64,067	$ 66,733	$ 69,400
Tuition	$ 6,537	$ 6,537	$ 6,537	$ 6,537	$ 6,537	$ 6,537	$ -	$ -	$ -	$ -	$ -
Ancillary Fees	$ 800	$ 800	$ 800	$ 800	$ 800	$ 800	$ -	$ -	$ -	$ -	$ -
Books/Supplies	$ 1,300	$ 1,300	$ 1,300	$ 1,300	$ 1,300	$ 1,300	$ -	$ -	$ -	$ -	$ -
Net Income	$ 3,348	$ 4,449	$ 4,449	$ 4,816	$ 4,816	$ 4,816	$ 61,400	$ 61,400	$ 64,067	$ 66,733	$ 69,400
Cumulative Income	$ 3,348	$ 7,798	$ 12,247	$ 17,063	$ 21,879	$ 26,695	$ 88,095	$149,495	$213,561	$280,295	$349,695

** Current and future apprentices no longer pay College of Trades registration fees.

Appendix 8.15: Net and Cumulative Income of the Four Pathways (Men only)

Apprenticeship	School/Training				Workforce						
	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10	Year 11
Earnings	$39,100	$43,810	$ 53,375	$ 62,940	$ 72,080	$ 81,220	$ 76,555	$ 71,890	$ 71,890	$ 71,890	$ 71,890
CoT Registration	$ 60	$ 60	$ 60	$ 60	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Trade School	$ 600	$ 600	$ 600	$ 600	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Tools	$ 500	$ 500	$ 500	$ 500	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Additional Fees	$ 200	$ 200	$ 200	$ 200	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Certificate of Qual.	$ -	$ -	$ -	$ 150	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Net Earnings	$37,740	$42,450	$ 52,015	$ 61,430	$ 72,080	$ 81,220	$ 76,555	$ 71,890	$ 71,890	$ 71,890	$ 71,890
Cumulative Earnings	$37,740	$80,190	$132,205	$193,635	$265,715	$346,935	$423,490	$495,380	$567,270	$639,160	$711,050

College Diploma	School/Training		Workforce								
	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10	Year 11
Earnings	$11,985	$13,453	$ 46,400	$ 46,400	$ 49,167	$ 51,933	$ 54,700	$ 54,700	$ 54,700	$ 54,700	$ 54,700
Tuition	$ 2,400	$ 2,400	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Ancillary Fees	$ 800	$ 800	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Books/Supplies	$ 1,300	$ 1,300	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Net Earnings	$ 7,485	$ 8,953	$ 46,400	$ 46,400	$ 49,167	$ 51,933	$ 54,700	$ 54,700	$ 54,700	$ 54,700	$ 54,700
Cumulative Earnings	$ 7,485	$16,438	$ 62,838	$109,238	$158,405	$210,338	$265,038	$319,738	$374,438	$429,138	$483,838

Bachelor's Degree	School/Training				Workforce						
	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10	Year 11
Earnings	$11,985	$13,086	$ 13,086	$ 13,453	$ 50,100	$ 50,100	$ 54,467	$ 58,833	$ 63,200	$ 63,200	$ 63,200
Tuition	$ 6,201	$ 6,201	$ 6,201	$ 6,201	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Ancillary Fees	$ 800	$ 800	$ 800	$ 800	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Books/Supplies	$ 1,300	$ 1,300	$ 1,300	$ 1,300	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Net Income	$ 3,684	$ 4,785	$ 4,785	$ 5,152	$ 50,100	$ 50,100	$ 54,467	$ 58,833	$ 63,200	$ 63,200	$ 63,200
Cumulative Income	$ 3,684	$ 8,470	$ 13,255	$ 18,407	$ 68,507	$118,607	$173,073	$231,907	$295,107	$358,307	$421,507

Master's Degree	School/Training						Workforce				
	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10	Year 11
Earnings	$11,985	$13,086	$ 13,086	$ 13,453	$ 13,453	$ 13,453	$ 67,900	$ 67,900	$ 72,100	$ 76,300	$ 80,500
Tuition	$ 6,537	$ 6,537	$ 6,537	$ 6,537	$ 6,537	$ 6,537	$ -	$ -	$ -	$ -	$ -
Ancillary Fees	$ 800	$ 800	$ 800	$ 800	$ 800	$ 800	$ -	$ -	$ -	$ -	$ -
Books/Supplies	$ 1,300	$ 1,300	$ 1,300	$ 1,300	$ 1,300	$ 1,300	$ -	$ -	$ -	$ -	$ -
Net Income	$ 3,348	$ 4,449	$ 4,449	$ 4,816	$ 4,816	$ 4,816	$ 67,900	$ 67,900	$ 72,100	$ 76,300	$ 80,500
Cumulative Income	$ 3,348	$ 7,798	$ 12,247	$ 17,063	$ 21,879	$ 26,695	$ 94,595	$162,495	$234,595	$310,895	$391,395

** Current and future apprentices no longer pay College of Trades registration fees.

Appendix 8.16: Net and Cumulative Income of the Four Pathways (Women only)

Apprenticeship	School/Training				Workforce						
	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10	Year 11
Earnings	$11,705	$13,150	$ 16,530	$ 19,910	$ 20,240	$ 20,570	$ 20,585	$ 20,600	$ 20,600	$ 20,600	$ 20,600
CoT Registration	$ 60	$ 60	$ 60	$ 60	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Trade School	$ 600	$ 600	$ 600	$ 600	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Tools	$ 500	$ 500	$ 500	$ 500	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Additional Fees	$ 200	$ 200	$ 200	$ 200	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Certificate of Qual.	$ -	$ -	$ -	$ 150	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Net Earnings	$10,345	$11,790	$ 15,170	$ 18,400	$ 20,240	$ 20,570	$ 20,585	$ 20,600	$ 20,600	$ 20,600	$ 20,600
Cumulative Earnings	$10,345	$22,135	$ 37,305	$ 55,705	$ 75,945	$ 96,515	$117,100	$137,700	$158,300	$178,900	$199,500

College Diploma	School/Training		Workforce								
	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10	Year 11
Earnings	$11,985	$13,453	$ 36,800	$ 36,800	$ 37,267	$ 37,733	$ 38,200	$ 38,200	$ 38,200	$ 38,200	$ 38,200
Tuition	$ 2,400	$ 2,400	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Ancillary Fees	$ 800	$ 800	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Books/Supplies	$ 1,300	$ 1,300	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Net Earnings	$ 7,485	$ 8,953	$ 36,800	$ 36,800	$ 37,267	$ 37,733	$ 38,200	$ 38,200	$ 38,200	$ 38,200	$ 38,200
Cumulative Earnings	$ 7,485	$16,438	$ 53,238	$ 90,038	$127,305	$165,038	$203,238	$241,438	$279,638	$317,838	$356,038

Bachelor's Degree	School/Training				Workforce						
	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10	Year 11
Earnings	$11,985	$13,086	$ 13,086	$ 13,453	$ 43,600	$ 43,600	$ 45,733	$ 47,867	$ 50,000	$ 50,000	$ 50,000
Tuition	$ 6,201	$ 6,201	$ 6,201	$ 6,201	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Ancillary Fees	$ 800	$ 800	$ 800	$ 800	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Books/Supplies	$ 1,300	$ 1,300	$ 1,300	$ 1,300	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Net Income	$ 3,684	$ 4,785	$ 4,785	$ 5,152	$ 43,600	$ 43,600	$ 45,733	$ 47,867	$ 50,000	$ 50,000	$ 50,000
Cumulative Income	$ 3,684	$ 8,470	$ 13,255	$ 18,407	$ 62,007	$105,607	$151,340	$199,207	$249,207	$299,207	$349,207

Master's Degree	School/Training						Workforce				
	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10	Year 11
Earnings	$11,985	$13,086	$ 13,086	$ 13,453	$ 13,453	$ 13,453	$ 57,900	$ 57,900	$ 59,567	$ 61,233	$ 62,900
Tuition	$ 6,537	$ 6,537	$ 6,537	$ 6,537	$ 6,537	$ 6,537	$ -	$ -	$ -	$ -	$ -
Ancillary Fees	$ 800	$ 800	$ 800	$ 800	$ 800	$ 800	$ -	$ -	$ -	$ -	$ -
Books/Supplies	$ 1,300	$ 1,300	$ 1,300	$ 1,300	$ 1,300	$ 1,300	$ -	$ -	$ -	$ -	$ -
Net Income	$ 3,348	$ 4,449	$ 4,449	$ 4,816	$ 4,816	$ 4,816	$ 57,900	$ 57,900	$ 59,567	$ 61,233	$ 62,900
Cumulative Income	$ 3,348	$ 7,798	$ 12,247	$ 17,063	$ 21,879	$ 26,695	$ 84,595	$142,495	$202,061	$263,295	$326,195

** Current and future apprentices no longer pay College of Trades registration fees.

Appendix 8.17: College & Bachelor's Debt Levels

		Canada		
		Graduates who owed money for their education to any source (government or non-government)		
Level of study	Statistics	2000	2005	2010
College	**Percentage of graduates who owed debt to the source**	49%	45%	**43%**
	Percentage of graduates with large debt at graduation ($25,000 and over)	12%	14%	**16%**
	Average debt owed to the source at time of graduation	$ 12,700	$ 13,600	**$ 14,900**
	Percentage of graduates with debt who had paid it off at time of interview	20%	23%	36%
	Average debt remaining at time of interview for those who still owed	$ 10,600	$ 11,800	$ 12,300
Bachelor's	**Percentage of graduates who owed debt to the source**	53%	54%	**50%**
	Percentage of graduates with large debt at graduation ($25,000 and over)	33%	37%	**41%**
	Average debt owed to the source at time of graduation	$ 20,600	$ 22,800	**$ 26,300**
	Percentage of graduates with debt who had paid it off at time of interview	22%	28%	34%
	Average debt remaining at time of interview for those who still owed	$ 17,200	$ 20,400	$ 19,800
Master's	Percentage of graduates who owed debt to the source	46%	47%	44%
	Percentage of graduates with large debt at graduation ($25,000 and over)	30%	35%	41%
	Average debt owed to the source at time of graduation	$ 20,300	$ 22,900	$ 26,700
	Percentage of graduates with debt who had paid it off at time of interview	27%	32%	44%
	Average debt remaining at time of interview for those who still owed	$ 17,600	$ 19,500	$ 21,000
Doctorate	Percentage of graduates who owed debt to the source	45%	44%	42%
	Percentage of graduates with large debt at graduation ($25,000 and over)	36%	39%	49%
	Average debt owed to the source at time of graduation	$ 24,600	$ 25,900	$ 41,800
	Percentage of graduates with debt who had paid it off at time of interview	27%	30%	35%
	Average debt remaining at time of interview for those who still owed	$ 21,300	$ 22,700	$ 40,800