

Catalogue no. 81-595-M
ISSN 2563-6251
ISBN 978-0-660-45270-8

Education, learning and training: Research Paper Series

Educational pathways of individuals who discontinue their apprenticeship programs

by Hyeongsuk Jin, Sophia Su and Sophie Castel

Release date: September 27, 2022



How to obtain more information

For information about this product or the wide range of services and data available from Statistics Canada, visit our website, www.statcan.gc.ca.

You can also contact us by

Email at infostats@statcan.gc.ca

Telephone, from Monday to Friday, 8:30 a.m. to 4:30 p.m., at the following numbers:

- | | |
|---|----------------|
| • Statistical Information Service | 1-800-263-1136 |
| • National telecommunications device for the hearing impaired | 1-800-363-7629 |
| • Fax line | 1-514-283-9350 |

Standards of service to the public

Statistics Canada is committed to serving its clients in a prompt, reliable and courteous manner. To this end, Statistics Canada has developed standards of service that its employees observe. To obtain a copy of these service standards, please contact Statistics Canada toll-free at 1-800-263-1136. The service standards are also published on www.statcan.gc.ca under “Contact us” > “[Standards of service to the public](#)”.

Note of appreciation

Canada owes the success of its statistical system to a long-standing partnership between Statistics Canada, the citizens of Canada, its businesses, governments and other institutions. Accurate and timely statistical information could not be produced without their continued co-operation and goodwill.

Published by authority of the Minister responsible for Statistics Canada

© His Majesty the King in Right of Canada as represented by the Minister of Industry, 2022

All rights reserved. Use of this publication is governed by the Statistics Canada [Open Licence Agreement](#).

An [HTML version](#) is also available.

Cette publication est aussi disponible en français.

Educational pathways of individuals who discontinue their apprenticeship programs

by Hyeongsuk Jin, Sophia Su and Sophie Castel

Introduction

Completing apprenticeship training and becoming a journey person generally contributes positively to individuals' labour market outcomes.¹ For example, two years after certifying in the trades, journey persons had a median employment income of \$62,620 in 2019.² This compares with \$49,400 for individuals who completed an undergraduate degree.³

Many factors impact one's ability to complete an apprenticeship program.⁴ For instance, certification in the trades is tied to business cycles and the health of local labour markets as apprentices seek to maintain suitable employment to fulfill the requirements for on-the-job hours and technical training.

According to the 2015 National Apprenticeship Survey, the most commonly stated reasons for not completing an apprenticeship program were job instability, receiving a better job offer and financial constraints. This survey also showed that apprentices who dropped out of their programs experienced difficulties securing permanent employment with adequate benefits and were more likely to be self-employed (Frank & Jovic, 2017). In addition, those who discontinued had a lower median employment income compared with those who completed their training (Jin, Langevin, Lebel and Haan, 2020).⁵

Previous studies have focused on factors associated with certification in the trades and labour market outcomes; fewer studies have examined the educational pathways of those who discontinued their apprenticeship programs. Using data from the Education and Labour Market Longitudinal Platform (ELMLP), this study looks at apprentices who registered between 2008 and 2010 and discontinued their apprenticeship programs within six years of registration. Their future interactions with the Canadian postsecondary education system, up to 2020, are then profiled.

Male apprentices had lower discontinuation rates than female apprentices

Of those who started an apprenticeship program between 2008 and 2010, more than two in five (44%) discontinued their program within six years of registration. Over the same period, slightly fewer apprentices (40%) completed their program and certified in their trade. The percentages varied across trades and between men and women.⁶

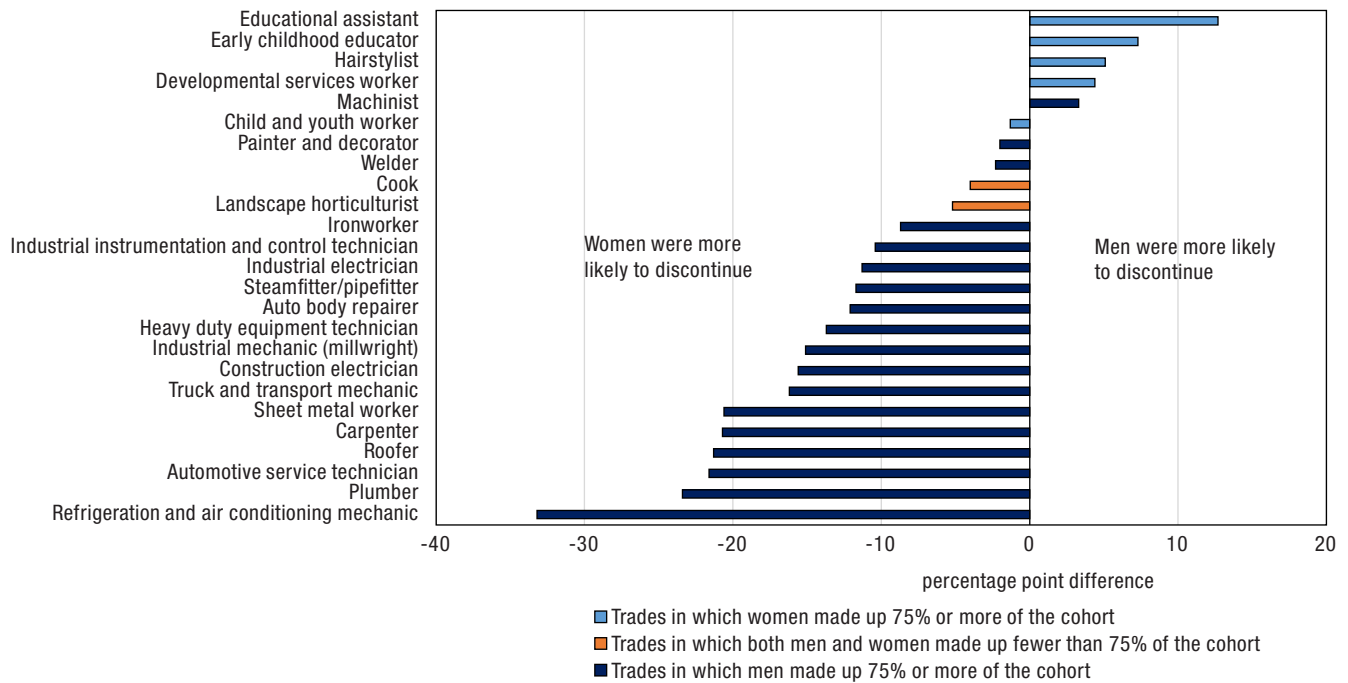
Male apprentices had lower discontinuation rates than female apprentices (43% versus 49%). This finding was observed for many trades, especially in programs where women have historically been underrepresented (Chart 1). This includes most construction-related trades, such as carpenters, electricians and welders.

Female apprentices made up the majority of registrations in a small number of trades. These included hairstylists, early childhood educators, educational assistants, developmental services workers, and child and youth workers. In these programs, women had discontinuation rates similar to, or lower than, their male counterparts.⁷

1. Journey persons are individuals who pass a qualification exam and receive their certificate of qualification from the apprenticeship authority. One can become a journey person through apprenticeship training or by taking the exam without becoming a registered apprentice. When a distinction is necessary, the latter cases are referred to as trade qualifiers.
2. Statistics Canada (2022a). Table 37-10-0194-01 Median employment income of journey persons who certify in selected trades, two and five years after certification, cross-sectional analysis.
3. Statistics Canada (2022b). Table 37-10-0122-01 Characteristics and median employment income of postsecondary graduates two years after graduation, by educational qualification and field of study (primary groupings).
4. For more information, see Jin, Langevin, Lebel and Haan (2020).
5. According to the study, the median employment income of discontinuers was about \$19,000 lower than that of certified journey persons at the end of the program duration.
6. For more information on certification rates in the trades, see Statistics Canada (2018); Statistics Canada (2021); Jin et al. (2020).
7. Statistics Canada (2018) noted that women in trades in which most cohort were men were more likely to discontinue than men, and that men in trades in which most cohort were women were more likely to discontinue than women.

Chart 1

Difference in discontinuation rates between men and women by selected trade, 2008 to 2010



Note: The chart shows 25 out of 30 selected trades, where there were enough apprentices for both men and women. See Table A1 in the appendix for more details.
Source: Registered Apprenticeship Information System, 2008 to 2020.

After discontinuing their apprenticeship programs, men were more likely to pursue another trade, while women were more likely to participate in another postsecondary program

The ELMLP was used to examine the educational pathways of those who began their apprenticeship program between 2008 and 2010 but discontinued their training within six years of registration (Chart 2). Among this group, 60% exited the postsecondary education system altogether by 2019.

The remaining 40% had three possible pathways: return to the program they discontinued, apprentice in another trade, or attend a college or university in Canada.⁸

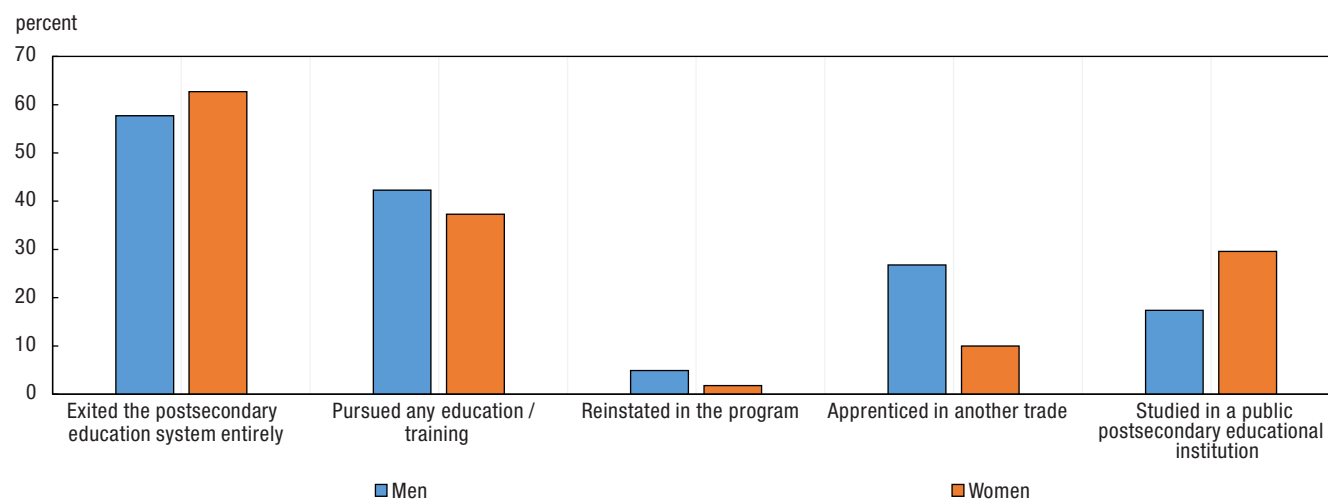
Few discontinuers (5% of men and 2% of women) returned to the program they discontinued. Although the differences were small, those who discontinued a Red Seal trade were generally more likely to return to their apprenticeship training than those in a non-Red Seal trade, for both men and women.

Men and women had different pathways after discontinuation. Men (27%) were more likely than women (10%) to apprentice in another trade. In contrast, women (30%) were more likely than men (17%) to pursue another postsecondary program at a public college or university.

8. These three pathways are not mutually exclusive. Some discontinuers could and did take two or all three of them.

Chart 2

Educational pathways of apprentices who discontinued their training within six years of initial registration, by sex



Source: Registered Apprenticeship Information System, 2008 to 2020.

Small numbers of discontinuers returned to their apprenticeship programs

In this study, discontinuers are defined based on their program status six years after registration. As a result, apprentices who discontinued their program but resumed their training before the sixth year are not considered discontinuers. This could partly explain the reason why few discontinuers returned to their program.⁹

This section examines apprentices who discontinued their training at any point and returned to it. By this alternative definition, about half of apprentices who started their training between 2008 and 2010 discontinued within six years of registration. Of those, 13.5% resumed the program they discontinued. While the discontinuation rates were similar for men (49%) and women (51%), men (15%) had higher return rates than their female counterparts (6%).

Table 1 Apprentices who discontinued at any point during their training and returned to the same program, by sex, Canada, registered from 2008 to 2010

Sex	Cohort size	By 6th year after registration		By 10th year after registration	
		Had ever discontinued	Had ever reinstated	Had ever discontinued	Had ever reinstated
	person	person	percent ¹	person	percent ¹
Both	246,340	120,365	13.7	137,000	15.6
Men	207,705	100,490	15.3	113,465	17.5
Women	38,635	19,875	6.0	23,540	6.6

¹ Percent of those who had ever discontinued

Source: Registered Apprenticeship Information System 2008 - 2020

9. Each year, Statistics Canada publishes longitudinal indicators on apprenticeship pathways (Statistics Canada, 2022c. Table 37-10-0193-01 Certification, continuation and discontinuation rates of newly registered apprentices within program duration, 1.5 times program duration and 2 times program duration). The indicators are defined using similar definitions.

Younger discontinuers were more likely to enrol in another postsecondary education or training program

After discontinuing their apprenticeship programs, those who pursued other postsecondary education tended to be younger than those who exited the postsecondary system entirely. For both men and women, those who attended a postsecondary institution were younger than the other discontinuers, as well as the general apprentice population. Those who went on to apprentice in another trade also tended to be younger than those who discontinued their initial apprenticeships.

When individuals registered for their trade—which they subsequently discontinued—their median ages were 23 for men and 25 for women. In comparison, men and women who attended a postsecondary institution after discontinuing their apprenticeship programs had a median age of 20, while those who studied another trade had median ages of 22 for men and 23 for women.

Of those who studied another trade after discontinuation, many apprenticed in a program related to the trade they discontinued

Discontinuing an apprenticeship program does not necessarily mean an individual has ceased pursuing employment in the skilled trades. After discontinuing a program, approximately one-quarter (26%) of men and 10% of women studied another trade.

Of the discontinuers who apprenticed in another trade, about half (44% of men and 57% of women) apprenticed in a program related to the trade they discontinued.¹⁰ This suggests that some discontinuers were switching to another closely related trade rather than leaving their career in the skilled trades altogether. They may be pursuing a career that is more aligned with their interests or that provides better employment outcomes, and some of the training and experience they acquired in the program they discontinued may have been transferred.

The percentage of discontinuers pursuing another apprenticeship program varied across trades. Perhaps because of a lack of related programs, discontinuers of service-related trades, such as hairstylists and cooks, were less likely to apprentice in another trade than those who discontinued from construction-related trades, for both sexes.

Of those who apprenticed in another trade, there were breaks when transferring between trades for about half (59% of men and 47% of women). That is to say, the date of discontinuation occurred before the date of registration for the new trade. However, significant proportions of discontinuers (41% of men and 53% of women) started another trade before discontinuing their initial apprenticeship program.

Among those who pursued another trade, about 45% of men and 30% of women went on to complete an apprenticeship program and certify in the skilled trades by 2020.

Women were more likely than men to attend a postsecondary institution after discontinuing their apprenticeship program

After discontinuing their apprenticeship training, some individuals attended a postsecondary institution, and female discontinuers were more likely to do so than their male counterparts.

By the 2018/2019 academic year, a little less than one in three women (30%) attended a postsecondary institution after discontinuing their apprenticeship, whereas this was the case for a little less than one in five men (17%).

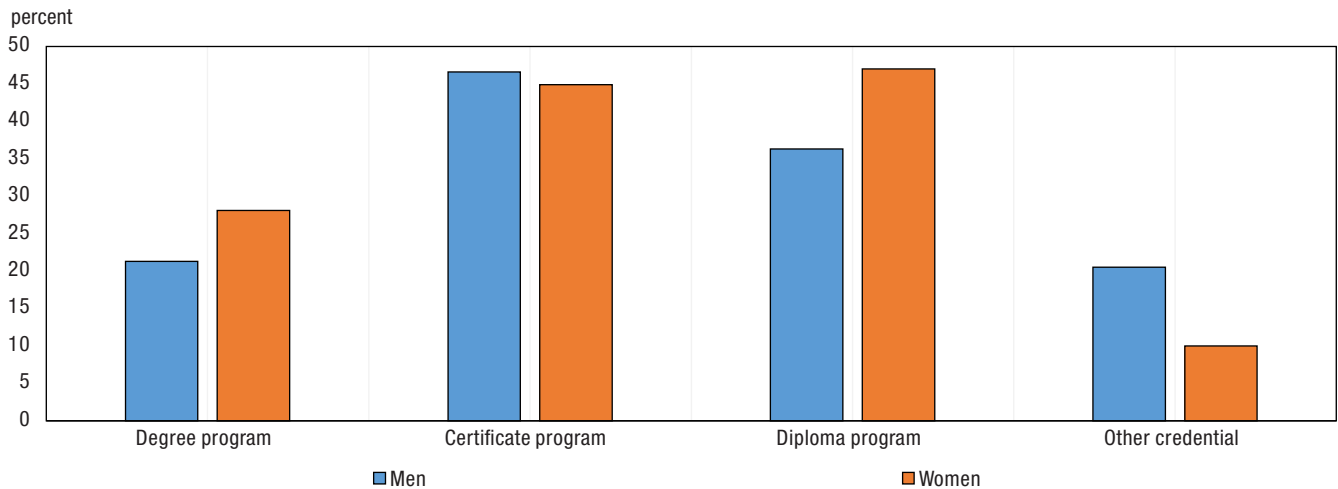
Of those who attended a postsecondary institution after discontinuation, 28% of women and 21% of men enrolled in a degree program. The remainder enrolled in a shorter certificate or diploma program. Slightly more women were

10. In this study, related trades are defined as trades that share the first three digits of their National Occupational Classification codes. See “Data sources and definitions” for more information.

in programs granting a diploma (47%) than in programs granting a certificate (45%), whereas men were more likely to study for a certificate (47%) than for a diploma (36%).

Chart 3

Pathways of individuals who attended a postsecondary institution after discontinuing their training within six years of initial registration, by sex



Source: Registered Apprenticeship Information System, 2008 to 2020; and Postsecondary Student Information System, 2009 to 2019.

Men and women enrolled in different fields of study after discontinuation. For women, health professions and related programs was the most common field, while liberal arts and sciences, general studies and humanities was the most common for men.

The most common field of study varied across trades, and some discontinuers appear to have studied in a field related to the trade they discontinued. For example, mechanic and repair technologies/technicians was the most common field of study for men who discontinued several trades, such as automotive service technician, welder, heavy-duty equipment technician and industrial mechanic (millwright). For female apprentices who discontinued early childhood educator and educational assistant trades, family and consumer sciences/human sciences was the most common field of study.¹¹

11. These non-Red Seal trades are available only in Ontario.

The majority of those who discontinued their apprenticeship programs did so within the first two years

Although this varied across programs with different durations, most discontinuers left their apprenticeship training early. Of those who eventually left their training without certificates within 10 years of the initial registration, more than half (55%) discontinued their program within the first two years. By the end of the fourth year, the most common program duration, three-quarters of discontinuers had already abandoned their programs. As expected, apprentices in programs with longer durations tended to stay longer in comparison with those in programs with shorter durations. Within the first two years, 85% of discontinuers in a one-year program had left, compared with 52% of those in four-year programs.

Table 2
Timing of discontinuation, by program duration and sex

	Program duration years	Apprentices persons	Discontinuers (by 10th year) persons	percent (of discontinuers)									
				1st year	2nd year	3rd year	4th year	5th year	6th year	7th year	8th year	9th year	10th year
Both sexes	All	246,340	122,925	25.7	54.5	67.0	74.7	82.9	87.6	93.9	97.0	99.2	100.0
	1	27,520	11,850	47.2	85.4	93.0	96.2	96.8	97.5	98.7	99.4	99.7	100.0
	2	25,025	11,570	27.6	52.9	64.6	71.7	80.7	85.2	93.3	96.8	99.3	100.0
	3	70,965	37,835	26.1	56.4	68.5	76.5	85.3	90.8	95.4	98.2	99.7	100.0
	4	100,950	52,580	22.2	51.3	65.4	73.2	81.1	85.7	92.8	96.3	98.8	100.0
	5	21,880	9,095	13.9	27.4	38.9	50.8	67.9	74.4	88.1	93.6	98.6	100.0
Men	All	207,705	100,385	26.6	56.9	69.4	76.9	84.2	88.3	94.3	97.2	99.2	100.0
	1	25,305	10,620	47.6	84.9	92.5	96.0	96.7	97.4	98.6	99.4	99.8	100.0
	2	12,050	6,100	33.8	59.0	70.7	77.2	84.6	88.4	95.2	97.9	99.4	100.0
	3	56,885	28,475	26.7	60.5	72.4	79.5	86.8	91.3	95.7	98.2	99.7	100.0
	4	92,035	46,375	23.2	53.5	68.0	75.8	82.8	87.0	93.4	96.6	98.8	100.0
	5	21,430	8,815	14.0	27.7	39.1	50.9	68.0	74.4	88.0	93.5	98.6	100.0
Women	All	38,635	22,540	21.7	44.0	56.0	64.8	77.0	84.3	92.2	96.4	99.3	100.0
	1	2,215	1,230	43.9	89.8	96.7	98.0	98.0	98.0	99.2	99.2	99.6	100.0
	2	12,975	5,475	20.6	46.1	57.8	65.5	76.3	81.6	91.1	95.5	99.1	100.0
	3	14,080	9,355	24.2	44.0	56.8	67.3	80.7	89.3	94.7	98.2	99.7	100.0
	4	8,915	6,205	14.8	34.2	46.2	54.3	68.5	76.6	88.1	93.8	98.9	100.0
	5	450	280	7.1	19.6	33.9	46.4	64.3	76.8	91.1	96.4	98.2	100.0

Sources: Registered Apprenticeship Information System, 2008 to 2020.

In this study, apprentices who discontinued their training within the first six years are considered discontinuers. Although this definition captures most (88%) of those who discontinued within 10 years of registration, some apprentices who eventually discontinued are not included in this study.

Conclusion

By the sixth year after the initial registration, two in five apprentices who started their training between 2008 and 2010 had discontinued their programs. This study examined their pathways in the public postsecondary education system after discontinuation. About 40% undertook further education, but the paths were different for men and women. Men were more likely to stay in the skilled trades by apprenticing another trade, whereas women were more likely to attend a postsecondary institution after discontinuing their program.

Some discontinuers appeared to be pursuing a related field rather than leaving a trade altogether. For instance, about half of those who started studying another trade did so in a related program. Similarly, some of those who attended a postsecondary institution after discontinuing their apprenticeship training studied in a field related to the trade they discontinued.

Data sources and definitions

Data sources

This study used data from Statistics Canada's Education and Labour Market Longitudinal Platform (ELMLP). The ELMLP was developed to enable anonymized information from the Registered Apprenticeship Information System (RAIS) and the Postsecondary Student Information System (PSIS) and tax data from the T1 Family File to be combined with information from other administrative datasets. This study uses RAIS records from 2008 to 2020 and PSIS records from the 2009/2010 academic year to the 2018/2019 academic year.

The RAIS provides information on individuals who registered for apprenticeship training and those who obtained a certification within a trade where apprenticeship training is being offered. Apprentices' progress over time can be followed to identify those who stopped registering without receiving a certificate; they are considered to have discontinued their program.

Analogous to the RAIS, the PSIS provides information on students who enrolled in or graduated from Canadian public universities and colleges. The PSIS includes a small number of records for programs that are offered at postsecondary institutions but are not considered a postsecondary education, such as General Education Development (GED) programs or language courses. These are excluded when searching for the postsecondary education experiences of individuals who discontinued an apprenticeship. The PSIS also includes records of technical training for apprenticeship programs if they are offered in a public postsecondary institution. Those records are also excluded from this study.

Definitions

Discontinuers are individuals who stopped registering for their apprenticeship training without receiving a certificate. In this study, apprentices who started training between 2008 and 2010 and did not register for training in the sixth year after the initial registration without receiving a certificate are discontinuers of interest. By this definition, apprentices who discontinued their program and subsequently re-registered before the sixth year are not considered discontinuers. Similarly, those who discontinued in the seventh year or later are not considered discontinuers. This is because there is not enough time to follow their post-discontinuation pathways.

The educational pathways of individuals after the year they discontinued are examined in the RAIS and the PSIS. Three possible pathways, not mutually exclusive, are considered.¹²

Some discontinuers returned to the program they discontinued in the seventh year after the initial registration or later. This is labelled as **reinstated**.

Apprenticeship programs in the RAIS are classified using the National Occupational Classification (NOC), augmented with three additional digits attached to the usual four-digit NOC codes (NOC+3). When discontinuers had a record in a trade that has a different NOC+3 code from the program they discontinued, they are considered to have **apprenticed another trade**. In these cases, the other trade's NOC code is compared with that of the trade they discontinued. In this study, **related trades** are those that have the same first three digits of the NOC code. For example, if an individual discontinued their plumber (NOC code 7251) apprenticeship and then apprenticed as a steamfitter/pipefitter (NOC code 7252), this would be considered a related trade because both occupations have NOC codes that start with 725. However, if they registered in a construction electrician (NOC code 7241) apprenticeship program, this would not be considered a related trade.

Individuals who had records in the PSIS after discontinuing their apprenticeship training are labelled as **studying at a postsecondary institution**. In the PSIS, the Classification of Instructional Programs (CIP) summarizes students' field of study.¹³ The CIP is a three-tiered hierarchical arrangement of programs with successive levels of disaggregation. The first two-digit series is used to tabulate discontinuers' **most common fields of study**. CIP Canada 2016 contains 49 series. [See Classification of Instructional Programs \(CIP\)](#) for more information on the CIP.

12. Some discontinuers could and did take multiple pathways. For example, they can study another trade and enrol in a postsecondary institution.

13. The cannabis primary groupings variant of CIP Canada 2016 is used.

References

Frank, K., & Jovic, E. (2017). *National Apprenticeship Survey Canada Overview Report 2015*. Ottawa: Statistics Canada.

Jin, H., Langevin, M., Lebel, A., & Haan, M. (2020, December 9). Factors associated with completing apprenticeship training in Canada. *Insights on Canadian Society*.

Statistics Canada. (2018, December 5). Pathways and earnings indicators for registered apprentices in Canada. *The Daily*.

Statistics Canada. (2022a). [Median employment income of journeypersons who certify in selected trades, two and five years after certification, cross-sectional analysis](https://www150.statcan.gc.ca/t1/tbl1/en/tv.action?pid=3710019401). Retrieved from Statistics Canada: www150.statcan.gc.ca/t1/tbl1/en/tv.action?pid=3710019401

Statistics Canada. (2022b). [Characteristics and median employment income of postsecondary graduates two years after graduation, by educational qualification and field of study \(primary groupings\)](https://www150.statcan.gc.ca/t1/tbl1/en/tv.action?pid=3710015601). Retrieved from Statistics Canada: www150.statcan.gc.ca/t1/tbl1/en/tv.action?pid=3710015601

Statistics Canada. (2022c). *Certification, continuation and discontinuation rates of newly registered apprentices within program duration, 1.5 times program duration and 2 times program duration*. Retrieved from Statistics Canada.

Appendix

Table A1

Number of apprentices who registered between 2008 and 2010, and percentage who certified, continued or discontinued, by trade and sex, Canada

Trade	Men				Women			
	Apprentice persons	Certified percent	Continuing training percent	Discontinued percent	Apprentice persons	Certified percent	Continuing training percent	Discontinued percent
All trades	207,705	40.1	17.2	42.7	38,635	36.6	14.2	49.2
All Red Seal trades	160,555	40.7	16.8	42.5	18,985	44.9	14.8	40.3
Top Red Seal Trades	134,495	41.9	17.2	40.9	16,995	46.3	15.2	38.5
Construction electrician	24,155	52.2	16.6	31.2	930	37.1	16.1	46.8
Carpenter	26,690	34.5	15.4	50.1	840	17.9	11.3	70.8
Automotive service technician	10,735	39.3	21.2	39.5	360	15.3	23.6	61.1
Hairstylist	1,080	50.0	17.6	32.4	10,300	59.2	13.5	27.3
Welder	7,280	41.7	11.7	46.6	450	33.3	17.8	48.9
Steamfitter/pipefitter	6,060	41.8	14.1	44.1	215	30.2	14.0	55.8
Plumber	9,675	46.5	15.7	37.8	245	28.6	10.2	61.2
Cook	3,775	27.3	23.0	49.7	2,030	24.4	21.9	53.7
Heavy duty equipment technician	5,090	43.1	14.3	42.6	80	25.0	18.7	56.3
Industrial mechanic (millwright)	4,900	49.4	15.7	34.9	120	33.3	16.7	50.0
Truck and transport mechanic	3,740	48.8	17.4	33.8	50	30.0	20.0	50.0
Industrial electrician	3,870	33.1	47.8	19.1	115	26.1	43.5	30.4
Sheet metal worker	3,995	40.9	16.5	42.6	95	26.3	10.5	63.2
Refrigeration and air conditioning mechanic	3,690	45.5	25.2	29.3	40	25.0	12.5	62.5
Ironworker	2,230	37.0	8.1	54.9	55	27.3	9.1	63.6
Machinist	2,115	36.4	20.3	43.3	75	40.0	20.0	40.0
Roofer	2,560	38.9	7.4	53.7	40	12.5	12.5	75.0
Industrial instrumentation and control technician	1,975	41.8	12.6	45.6	125	32.0	12.0	56.0
Bricklayer	2,800	29.1	23.0	47.9	25	20.0	x	x
Powerline technician	1,810	73.2	7.5	19.3	x	x	x	x
Painter and decorator	1,595	26.3	16.3	57.4	345	21.7	18.9	59.4
Crane operator	1,335	48.7	10.1	41.2	30	50.0	x	x
Landscape horticulturist	880	29.0	21.0	50.0	335	29.9	14.9	55.2
Agricultural equipment technician	725	44.1	11.8	44.1	x	x	x	x
Auto body repairer	1,730	26.9	18.5	54.6	75	20.0	13.3	66.7
Other Red Seal Trades	26,060	34.2	15.3	50.5	1,990	32.2	12.5	55.3
All non-Red Seal Trades	47,145	38.2	18.5	43.3	19,650	28.6	13.7	57.7
Selected non-Red Seal Trades	655	23.7	28.2	48.1	5,365	32.1	25.6	42.3
Child and youth worker	135	22.2	29.7	48.1	405	19.8	30.8	49.4
Developmental services worker	250	24.0	30.0	46.0	890	31.5	26.9	41.6
Early childhood educator	200	20.0	27.5	52.5	3,285	27.7	27.1	45.2
Educational assistant	55	27.3	18.2	54.5	395	39.2	19.0	41.8
Esthetician	x	x	x	x	390	75.6	11.6	12.8
Other non-Red Seal Trades	46,495	38.4	18.3	43.3	14,285	27.3	9.2	63.5

x Suppressed to meet the confidentiality requirements of the Statistics Act
Sources: Registered Apprenticeship Information System, 2008 to 2020.

Table A2
Educational pathways of apprentices who discontinued their training within six years of initial registration, by trade, men

Men	Discontinuer Persons	Pursued any education/training Percent	Reinstated in the program Percent	Apprenticed in another trade Percent	Studied in postsecondary educational institutions
					Percent
All trades	88,635	42.3	4.9	26.8	17.4
All Red Seal trades	68,210	41.4	5.8	26.1	15.7
Top Red Seal Trades	55,050	40.9	6.0	24.7	16.0
Construction electrician	7,545	44.4	7.0	23.9	20.1
Carpenter	13,370	37.3	7.6	17.2	18.1
Automotive service technician	4,235	42.4	4.6	26.2	17.5
Hairstylist	350	27.1	7.1	10.0	12.9
Welder	3,395	36.8	4.3	26.5	10.9
Steamfitter/pipefitter	2,670	38.0	6.0	27.0	9.0
Plumber	3,660	44.9	7.0	27.6	17.1
Cook	1,875	32.5	1.6	12.8	22.4
Heavy duty equipment technician	2,170	52.8	4.1	42.9	13.6
Industrial mechanic (millwright)	1,710	40.9	5.3	27.5	13.7
Truck and transport mechanic	1,265	46.2	6.3	35.6	11.1
Industrial electrician	740	56.1	2.0	45.9	16.9
Sheet metal worker	1,700	43.2	6.8	29.4	13.2
Refrigeration and air conditioning mechanic	1,080	50.0	6.5	35.6	16.7
Ironworker	1,225	45.3	5.7	37.6	8.2
Machinist	915	47.0	2.2	33.3	20.2
Roofer	1,375	33.1	7.3	21.1	9.8
Industrial instrumentation and control technician	900	38.9	5.0	24.4	14.4
Bricklayer	1,340	34.7	6.3	19.4	12.7
Powerline technician	350	47.1	5.7	35.7	12.9
Painter and decorator	915	31.7	7.7	15.8	10.4
Crane operator	550	35.5	5.5	28.2	5.5
Landscape horticulturist	440	35.2	1.1	17.0	23.9
Agricultural equipment technician	320	46.9	1.6	39.1	14.1
Auto body repairer	945	43.9	2.6	28.6	19.0
Other Red Seal Trades	13,160	43.7	5.1	31.7	14.4
All non-Red Seal Trades	20,425	45.3	1.8	29.3	23.2
Selected non-Red Seal Trades	315	27.0	1.6	7.9	22.2
Child and youth worker	65	30.8	x	7.7	23.1
Developmental services worker	115	13.0	x	4.3	8.7
Early childhood educator	105	33.3	x	9.5	23.8
Educational assistant	30	50.0	x	16.7	50.0
Esthetician	x	x	x	x	x
Other non-Red Seal Trades	20,110	45.5	1.8	29.7	23.2

x Suppressed to meet the confidentiality requirements of the Statistics Act

Sources: Registered Apprenticeship Information System, 2008 to 2020; Post-secondary Student Information System (PSIS) 2009 - 2019.

Table A3
Educational pathways of apprentices who discontinued their training within six years of initial registration, by trade, women

Women	Pursued any education/ training		Reinstated in the program	Apprenticed in another trade	Studied in postsecondary educational institutions
	Discontinuer Persons	Percent	Percent	Percent	Percent
All trades	18,990	37.3	1.8	10.0	29.6
All Red Seal trades	7,645	35.1	3.2	9.8	25.5
Top Red Seal Trades	6,545	33.9	3.3	8.6	25.1
Construction electrician	435	41.4	3.4	14.9	27.6
Carpenter	595	37.8	2.5	10.1	30.3
Automotive service technician	220	38.6	x	11.4	29.5
Hairstylist	2,815	30.2	4.6	3.9	23.6
Welder	220	31.8	2.3	13.6	20.5
Steamfitter/pipefitter	120	37.5	4.2	20.8	16.7
Plumber	150	40.0	x	20.0	26.7
Cook	1,090	33.0	1.4	6.4	28.4
Heavy duty equipment technician	45	44.4	x	22.2	22.2
Industrial mechanic (millwright)	60	50.0	x	25.0	33.3
Truck and transport mechanic	25	60.0	x	40.0	20.0
Industrial electrician	35	57.1	x	28.6	28.6
Sheet metal worker	60	25.0	x	8.3	16.7
Refrigeration and air conditioning mechanic	25	60.0	x	40.0	20.0
Ironworker	35	42.9	x	28.6	14.3
Machinist	30	33.3	x	16.7	16.7
Roofer	30	33.3	x	16.7	16.7
Industrial instrumentation and control technician	70	42.9	7.1	28.6	21.4
Bricklayer	x	x	x	x	x
Powerline technician	x	x	x	x	x
Painter and decorator	205	34.1	9.8	4.9	22.0
Crane operator	x	x	x	x	x
Landscape horticulturist	185	32.4	x	5.4	27.0
Agricultural equipment technician	x	x	x	x	x
Auto body repairer	50	40.0	x	20.0	30.0
Other Red Seal Trades	1,100	42.3	2.7	16.8	28.2
All non-Red Seal Trades	11,340	38.8	0.8	10.2	32.5
Selected non-Red Seal Trades	2,270	36.6	1.8	6.6	31.5
Child and youth worker	200	50.0	x	10.0	42.5
Developmental services worker	370	12.2	1.4	2.7	9.5
Early childhood educator	1,485	38.0	2.0	5.7	33.0
Educational assistant	165	63.6	x	18.2	54.5
Esthetician	50	40.0	x	10.0	30.0
Other non-Red Seal Trades	9,075	39.3	0.6	11.1	32.6

x Suppressed to meet the confidentiality requirements of the Statistics Act

Sources: Registered Apprenticeship Information System, 2008 to 2020; Post-secondary Student Information System (PSIS) 2009 - 2019.

Table A4
Pathways of discontinuers who attended a postsecondary institution after discontinuing their training within six years of initial registration, men

Men Unit	Discontinuers who pursued post-secondary education	Studied in a degree program	Studied in a certificate program	Studied a diploma program	Studied other credential
	Persons	Percent	Percent	Percent	Percent
All trades	15,420	21.3	46.6	36.3	20.5
All Red Seal trades	10,690	21.9	42.4	39.3	20.8
Top Red Seal Trades	8,800	22.5	41.3	40.6	18.7
Construction electrician	1,515	26.1	37.6	42.2	20.5
Carpenter	2,420	21.9	46.7	34.9	23.6
Automotive service technician	740	17.6	29.7	62.2	4.1
Hairstylist	45	33.3	22.2	55.6	x
Welder	370	23.0	43.2	43.2	10.8
Steamfitter/pipefitter	240	27.1	39.6	33.3	16.7
Plumber	625	19.2	46.4	33.6	24.0
Cook	420	32.1	33.3	54.8	2.4
Heavy duty equipment technician	295	11.9	57.6	32.2	15.3
Industrial mechanic (millwright)	235	21.3	48.9	38.3	8.5
Truck and transport mechanic	140	14.3	35.7	42.9	25.0
Industrial electrician	125	32.0	28.0	40.0	12.0
Sheet metal worker	225	22.2	35.6	42.2	22.2
Refrigeration and air conditioning mechanic	180	16.7	38.9	36.1	30.6
Ironworker	100	25.0	35.0	25.0	40.0
Machinist	185	18.9	45.9	48.6	5.4
Roofer	135	25.9	33.3	29.6	40.7
Industrial instrumentation and control technician	130	30.8	38.5	30.8	15.4
Bricklayer	170	23.5	41.2	41.2	32.4
Powerline technician	45	22.2	33.3	44.4	11.1
Painter and decorator	95	26.3	26.3	42.1	31.6
Crane operator	30	33.3	33.3	50.0	16.7
Landscape horticulturist	105	28.6	33.3	47.6	19.0
Agricultural equipment technician	45	33.3	33.3	55.6	11.1
Auto body repairer	180	11.1	55.6	36.1	16.7
Other Red Seal Trades	1,890	19.0	47.6	33.1	30.4
All non-Red Seal Trades	4,735	20.0	56.1	29.5	20.0
Selected non-Red Seal Trades	70	35.7	28.6	64.3	x
Child and youth worker	15	33.3	33.3	66.7	x
Developmental services worker	10	50.0	50.0	100.0	x
Early childhood educator	25	40.0	20.0	80.0	x
Educational assistant	15	33.3	33.3	66.7	x
Esthetician	x	x	x	x	x
Other non-Red Seal Trades	4,665	19.7	56.5	28.8	20.3

x Suppressed to meet the confidentiality requirements of the Statistics Act

Sources: Registered Apprenticeship Information System, 2008 to 2020; Post-secondary Student Information System, 2009 to 2019.

Table A5
Pathways of discontinuers who attended a postsecondary institution after discontinuing their training within six years of initial registration, women

Women Unit	Discontinuers who pursued post-secondary education		Studied in a degree program	Studied in a certificate program	Studied a diploma program	Studied other credential
	Persons	Percent	Percent	Percent	Percent	Percent
All trades	5,630	28.1	44.9	47.0	47.0	10.0
All Red Seal trades	1,950	28.7	41.0	47.7	47.7	11.0
Top Red Seal Trades	1,640	28.0	40.2	49.1	49.1	9.5
Construction electrician	120	37.5	41.7	41.7	41.7	12.5
Carpenter	180	19.4	47.2	38.9	38.9	25.0
Automotive service technician	65	30.8	30.8	61.5	61.5	x
Hairstylist	665	28.6	38.3	52.6	52.6	4.5
Welder	45	33.3	55.6	44.4	44.4	x
Steamfitter/pipefitter	20	25.0	50.0	25.0	25.0	x
Plumber	40	25.0	50.0	25.0	25.0	12.5
Cook	310	27.4	35.5	58.1	58.1	3.2
Heavy duty equipment technician	10	50.0	50.0	50.0	50.0	x
Industrial mechanic (millwright)	20	x	50.0	25.0	25.0	x
Truck and transport mechanic	5	x	x	x	x	x
Industrial electrician	10	50.0	50.0	50.0	50.0	x
Sheet metal worker	10	50.0	50.0	50.0	50.0	x
Refrigeration and air conditioning mechanic	5	x	x	x	x	x
Ironworker	5	x	x	x	x	x
Machinist	5	x	x	x	x	x
Roofer	5	x	x	x	x	x
Industrial instrumentation and control technician	15	33.3	33.3	33.3	33.3	33.3
Bricklayer	x	x	x	x	x	x
Powerline technician	x	x	x	x	x	x
Painter and decorator	45	22.2	11.1	33.3	33.3	44.4
Crane operator	x	x	x	x	x	x
Landscape horticulturist	50	40.0	50.0	40.0	40.0	20.0
Agricultural equipment technician	x	x	x	x	x	x
Auto body repairer	15	33.3	33.3	33.3	33.3	x
Other Red Seal Trades	310	32.3	45.2	40.3	40.3	19.4
All non-Red Seal Trades	3,680	27.7	47.0	46.6	46.6	9.5
Selected non-Red Seal Trades	715	25.9	23.1	74.8	74.8	1.4
Child and youth worker	85	29.4	23.5	82.4	82.4	x
Developmental services worker	35	28.6	28.6	71.4	71.4	x
Early childhood educator	490	23.5	23.5	76.5	76.5	1.0
Educational assistant	90	27.8	11.1	72.2	72.2	x
Esthetician	15	66.7	33.3	x	x	x
Other non-Red Seal Trades	2,960	28.2	52.9	39.9	39.9	11.5

x Suppressed to meet the confidentiality requirements of the Statistics Act

Sources: Registered Apprenticeship Information System, 2008 to 2020; Post-secondary Student Information System, 2009 to 2019.

Table A6
Age of apprentices at registration

Unit		Age at registration						
		Apprentices persons	Median years	20 or younger percent	21 - 25 percent	26 - 35 percent	36 - 45 percent	46 or older percent
Men	All apprentices	207,705	25	26.8	26.8	26.7	11.8	7.9
Men	All discontinuers	88,635	25	29.0	24.7	26.5	12.0	7.9
Men	Discontinuers who enrolled in a post-secondary school	15,420	20	52.2	24.3	16.6	5.1	1.9
Men	Discontinuers who studied another trade	23,765	23	37.1	26.2	23.1	8.9	4.7
Women	All apprentices	38,635	24	30.3	25.5	21.5	12.7	9.8
Women	All discontinuers	18,990	23	34.4	24.5	20.9	11.5	8.8
Women	Discontinuers who enrolled in a post-secondary school	5,630	20	53.4	25.2	13.9	5.2	2.4
Women	Discontinuers who studied another trade	1,905	22	38.8	25.7	19.4	9.7	6.3

Sources: Registered Apprenticeship Information System, 2008 to 2020; Post-secondary Student Information System, 2009 to 2019.