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Trends in the Trades: Registered Apprenticeship Registrations, Completions and Certification, 1991 to 2007



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Trends in the Trades: Registered Apprenticeship Registrations, Completions and Certification, 1991 to 2007

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This article draws on the latest data from Statistics Canada's <u>Registered Apprenticeship Information System (RAIS)</u> to examine trends in apprenticeship training in Canada over the 1991 to 2007 period. Information is provided for trends in the total number of registrations and completions and certification, by major trade group, and by sex and age. References to total registrations include the still-registered apprentices from the previous year plus newly-registered apprentices from the current year.

The large number of registered apprenticeship trades across Canada can be grouped into seven major trade groups, consisting of building construction trades; electrical, electronics and related trades; food and services trades; industrial and related mechanical trades; metal fabricating trades; motor vehicle and heavy equipment trades; and other trades.

The composition of most of the major trade groups has changed very little over time, with the exception of the 'other trades' group, which has expanded over the years to include a variety of newly-established registered apprenticeship programs. Examples of these are conference and event planner, information technology support associate and motion picture and theatre – grip.

An overview of apprenticeship training in Canada

Registered apprenticeship training is well-established in Canada. All provinces and territories require, as part of the training, periods of in-class technical and on-the-job training over the designated length of the apprenticeship program. In most provinces and territories, the in-class and on-the-job training are taken together each year of the program, but in separate sessions during the year. Only in Quebec is all the technical in-class training completed prior to beginning the required period of on-the-job training.

The length of apprenticeship training in each trade depends on the province or territory and, in most cases, is two to five periods in length (either years or levels depending on the province and territory). However, the actual elapsed time taken by individuals to complete their apprenticeship training can be considerably longer. The in-class technical training over these years is anywhere from 4 to 12 weeks each year, again depending on the jurisdiction, and can be taken in various methods of full-time block release, modular, part-time evening or weekend courses. Upon completion of the in-class and on-the-job training, the apprentice is required to write an examination and, if successful, is given a Certificate of Apprenticeship and a Certificate of Qualification, allowing them to become a certified Journeyperson. A certified Journeyperson is recognized as a qualified and skilled person in a trade and is entitled to the wages and benefits associated with that trade. Only a journeyperson is allowed to train and act as a mentor to a registered apprentice.

Becoming a certified Journeyperson is not restricted only to persons completing apprenticeship training. A Certificate of Qualification in many trades may be granted to individuals referred to as trade qualifiers or `challengers.' These are individuals who have the experience and knowledge in a trade who can write (`challenge') the examination and if successful, receive their certificate.

In order to become a registered apprentice, most provinces and territories require the individual to be a minimum age of 16 and, again depending on the jurisdiction and trade, to have successfully completed grade 12 or have an equivalent amount of work experience and related education. The prospective apprentice must then find an employer who is willing to provide the required training and who employs qualified journeypersons to train and mentor the apprentice. The apprentices and the employer sign an agreement that outlines the terms of the apprenticeship; this contract is registered with and administered by the apprenticeship branch of the respective province or territory.

Registered apprenticeship training in a trade can be either compulsory or voluntary, depending on the regulations of each province or territory. If a compulsory trade, work is restricted to individuals who must be either a journeyperson with a Certificate of Qualification or a registered apprentice receiving training. In voluntary trades, persons working in the trade are not required to be a licensed journeyperson or a registered apprentice; however, the trade is regulated by the province or territory and formal apprenticeship training is available.

Certain trades across Canada have been recognized as Interprovincial Standards Red Seal trades. This group of trades was established to provide mobility for journeypersons who have obtained a Red Seal endorsement on their certificate of qualification, allowing them to work in any province or territory that recognizes these trades, without having to re-write their examinations. In 1991, there were 35 Red Seal trades; this number increased to 49 in 2007.

Trends in the total number of registered apprentices, by major trade group

After decreasing in the early to mid-1990s, the total number of registered apprentices increased steadily between 1997 and 2007. Fluctuations in apprenticeship numbers tend to follow the economic cycle, where periods of decline or growth in the business sector are reflected in the total

number of registered apprentices.

In 1991, the total number of registered apprentices had reached a peak, at 192,945, after a period of growth. However, following the economic down-turn in the early 1990s, the number of registered apprentices declined to a low of 163,370 by 1995. With the economic turnaround beginning in the mid 1990s, the number of registrations began to increase steadily, with a record number of 358,555 registrations in 2007, over twice the number 12 years earlier.

In 2007, the largest major trade group was the building construction group, with 80,205 or 22% of the registered apprentices (Chart 1).

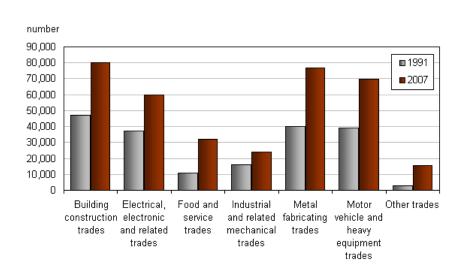


Chart 1 Registered apprenticeship registrations, by major trade group, 1991 and 2007

Source: Statistics Canada, Registered Apprenticeship Information System.

During the early period of recovery after the recession, from 1996 to 1998, the motor vehicle and heavy equipment major trade group was the predominant group, reaching a total of 38,595 registrations in 1998. By 2002, the largest major trade group was the metal fabricating trade group, with slightly more than 50,000 registrations. The electrical and electronics trade group has consistently remained the fourth largest throughout the 1991 to 2007 period, with almost 60,000 registered apprentices in 2007. The number of registered apprentices in the food and services trade group almost tripled over the study period, rising from 11,045 in 1991 to reach 32,100 in 2007, making it larger than the industrial and related mechanical group. The 'other trades' group had the highest rate of growth of all the major trade groups, increasing more than five-fold, from 2,740 in 1991 to 15,615 in 2007. As noted previously, one of the main reasons for this increase is the addition of new trades to this group over time.

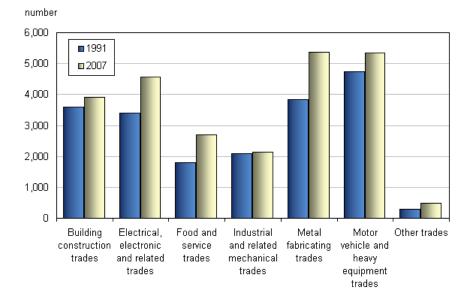
A large portion of the total number of registered apprentices consists of apprentices who continue their training from year to year. In addition, newly-registered apprentices are added each year. One reason why the motor vehicle and heavy equipment major trade group became the largest group in the recovery period following the recession was the larger number of new registrations it was receiving each year compared to other major trade groups. Between 1999 and 2001 and again in 2006 and 2007, the metal fabricating group had the largest number of new registrations. Recent large numbers of new registrations in the building and construction trade group have contributed to that group becoming, once again since 2003, the largest major trade group.

Completions by major trade group

Completions in apprenticeship training have followed a similar pattern to that observed for the total number of registrations – the number of completions experienced a decline during the mid 1990s, decreasing from 19,725 in 1991 to 16,075 in 1996. Recovery in the number of completions was relatively slow, however, with the 1991 level not being regained until 2005, at 20,555 completions, and rising since then to reach 24,495 in 2007.

The metal fabricating and motor vehicle and heavy equipment trade groups have consistently had the largest number of completions since 1991, reaching 5,355 and 5,340, respectively, in 2007 and each accounting for close to 22% of the total number of completions in that year (Chart 2). In 2007, the electrical and electronics trade group was the third largest group with 4,580 completions, followed by building construction at 3,915 completions.

Chart 2 Registered apprenticeship completions, by major trade group, 1991 and 2007



Source: Statistics Canada, Registered Apprenticeship Information System.

Between 1991 and 2007, the food and services trade group moved ahead of the industrial and related mechanical group, with 2,705 completions in 2007, representing 11% of total completions in 2007 compared to 9% in 1991. In contrast, the industrial and related mechanical group saw a decrease in its overall share from just over 10% in 1991 to 9% in 2007.

Completions by gender

In 2007, out of the total 24,495 completions, females accounted for 2,780 or 11%. This proportion has been more or less steady since the mid-1990s but has increased from 1991 when it was 6%.

In most of the major trade groups in 2007, the proportion of females was quite low, at between 1% and 2% of completions. However, females account for very large shares of completions in two major trade groups – in the food and services and 'other trades' groups, at 79% and 62%, respectively. In 2007, the food and services trade group alone accounted for 2,140 female completions, with the hairstylist/hairstyling program in this group having 1,865 completions. Overall, about two thirds (67%) of total female completers came from the hairstylist/hairstyling program.

Completions by age group

In 2007, 32% of total completions were within the 25 to 29 age group, which is a decrease from 1992 when it was at 38%. This decrease was countered by increases in the shares of both younger completers (ages 20 to 24) and older completers (ages 40 years or more).

In 1992, 20 to 24 year-olds accounted for 23% of all completions; this share increased to 26% of completers in 2007. Increases also occurred among those aged 40 years old or more, who accounted for 14% of completers in 2007 compared to 7% in 1992.

In the food and services trade group, over 50% of completers in 2007 were age 20 to 24. In contrast, 20 to 24 year-olds accounted for only a small share of completers in the 'other trades,' at 11%, whereas the largest share of completers were aged 40 years or more (38%). This placed the 'other trades' group well ahead of the other major trades groups in terms of the share of completers age 40 years or more. For example, the major trade group with the second-highest share of older completers in 2007 was the industrial and related mechanical group, at about 20%.

In most of the remaining major trade groups, 25 to 29 year-olds accounted for the largest share of completers in 2007. Some of these had close to or over one third of their completions in this age group, such as the building construction group and the metal fabricating group, both at about 32%, and the electrical and electronics trade group, at 36%.

Certification

As noted earlier, certificates designating "journeyperson" may be granted to both apprenticeship completers and trade qualifiers or `challengers.' Between 1991 and 2007, over 530,000 certificates were granted, with 58% of those going to apprenticeship completers.

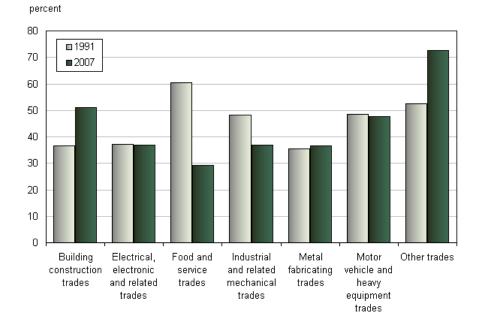
In addition, many trades have become designated as Interprovincial Standard Red Seal trades, which permit those who hold such a certification to work in any province or territory that recognizes Red Seal certification without having to re-certify. Of the total number of certificates granted between 1991 and 2007, 42% had Red Seal endorsements, while the majority (58%) were non-Red Seal. Just slightly over half (52%) of the non-Red Seal certificates were earned by trade qualifiers, while a majority (73%) of the Red Seal endorsements were granted to those who had completed an apprenticeship training program.

Certificates by major trade group

In 2007, the largest number of certificates granted were in the motor vehicle and heavy equipment trade group, at 24%, followed by the metal fabricating group and the building construction group, both at about 20%. The metal fabricating group had the largest proportion of certificates designated as Red Seal, at 54%. In the motor vehicle and heavy equipment group, 55% of the certificates granted were non-Red Seal, while this was the case for about three-quarters of the certificates granted in the building construction group. In both 1991 and 2007, all certificates granted in the 'other trades' group were non-Red Seal.

In most of the major trade groups, the majority of certificates granted in 2007 were to individuals who had completed a program of apprenticeship – 71% in the food and services group and 63% in both the electrical and electronics and industrial and related trade groups. In contrast, most of the certificates granted in the 'other trades' group were to trade qualifiers, at 73%. In the case of the building construction group, slightly more than half were granted to trade qualifiers (Chart 3).

Chart 3 Proportion of certificates granted to trade qualifiers, by major trade group, 1991 and 2007



Source: Statistics Canada, Registered Apprenticeship Information System.

A notable change occurred between 1991 and 2007 in the share of trade qualifiers who earned certificates with a Red Seal endorsement. In 1991, in all the major trade groups, over 80% of the certificates granted to trade qualifiers were non-Red Seal certificates. However, in 2007, this was the case only for the building construction group, in which 88% of the certificates granted to trade qualifier certificates were non-Red Seal. In contrast, in the electrical and electronics and industrial and related trade groups, a majority of the certificates granted to trade qualifiers, at 73% and 62% respectively, were now with a Red Seal endorsement.

Certification and women

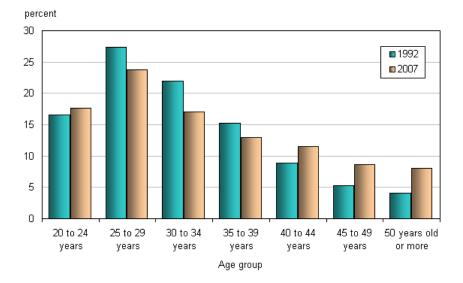
In 2007, out of the total 42,867 certificates granted to both apprentices and trade qualifiers, 8.5% were obtained by females. This is very similar to 1991 when 9% of the certificates granted were to females. Out of the total certificates earned by females in 2007, about three quarters were granted to individuals who had completed an apprenticeship program, with the remainder going to trade qualifiers. This is a change from the situation in 1991, when the share of certificates accounted for by trade qualifiers was much higher, at 62%.

The food and services group accounted for the vast majority of certificates granted to females, at 78%. This was followed by the 'other trades' group, at 9%, and the metal fabricating group, at 4%. The certificates granted to females in the food and services group were mostly obtained by apprenticeship completers, at 75%; this share was 88% in the 'other trades' group. The metal fabricating group had the largest proportion of certificates granted to females granted to females going to trade qualifiers, at 40%.

Certification by age group²

Between 1992 and 2007, a shift occurred in the age distribution of those earning apprenticeship certificates, with a larger share of certificates going to individuals aged 40 years or more (Chart 4). In both years, 25 to 29 year-olds accounted for the largest proportion of certificates granted. However, while 30 to 34 year-olds accounted for 22% of certificates granted in 1992, this share fell to 17% in 2007, similar to the share accounted for by 20 to 24 year-olds. The largest change occurred among individuals aged 40 or more, who saw their share of certificates granted rise from 18% in 1992 to 28% in 2007.

Chart 4 Proportion of certificates granted, by age group, 1992 and 2007



Source: Statistics Canada, Registered Apprenticeship Information System.

In both 1992 and 2007, the share of certificates accounted for by trade qualifiers compared to apprenticeship completers increased with age. In 2007, in the 20 to 24 age group, 84% of the certificates granted were to apprenticeship completers; this decreased to 76% in the 25 to 29 age group and to 60% in the 30 to 34 age group. Beginning with the 35 to 39 age group, over half of the certificates were obtained by trade qualifiers, at 55%; this share continued to increase with age, reaching 82% for individuals aged 50 years or more.

The food and services trade group had the largest share of younger completers compared to the other major trade groups – 42% were age 20 to 24 and another 25% were age 25 to 29. The metal fabricating group ranked second, with 48% of certificates granted to individuals between the ages of 20 and 29. In contrast, only 17% of certificates were granted to 20 to 29 year-olds in the 'other trades' group in 2007, whereas individuals aged 40 or more accounted for 56%. This was followed by the building construction trade group where 37% of certificates were granted to individuals aged 40 or more.

Conclusion

The apprenticeship training system is well-established in Canada, providing a formal means by which individuals can gain valuable skills in a wide variety of trades. But more than that, it also provides the mechanisms by which the skills learned are recognized through a formal system of certification and the granting of the professional designation of journeypersons. The apprenticeship system is dynamic both in the sense that new trades are added to the apprenticeship system over time and in terms of its responsiveness to emerging needs. One example of this is the Interprovincial Standard Red Seal program that is designed to address issues of mobility within the country without requiring those who hold certificates of gualification to re-certify before they can work in another province or territory.

Tracking trends in apprenticeship registrations, completions and certification over the 1991 to 2007 period shows a system that is responsive to change. Following the recession of the early 1990s and the period of slow growth through the mid-1990s, registrations in apprenticeship programs showed strong growth through to 2007. This was especially the case for the building construction, metal fabricating and motor vehicle and heavy equipment major trade groups. Continuing to track trends in apprenticeship programs in 2008 and 2009 will indicate the extent to which the economic shock in 2008 had an impact on these trends.

Another change that is evident is the increase in the share of certificates granted to individuals over the age of 40. Their share grew between 1992 and 2007 at the same time that the share of certificates granted to trade qualifiers also increased. This too is an indicator of a system that is responsive to changing needs, one that is able to recognize and certify skills acquired by individuals who did not necessarily complete a formal apprenticeship program but who nevertheless demonstrate that they have the skills required to meet certification standards.

Notes

- 1. An increase in the female completions, between 1992 and 1993, was the result of consolidation and program design changes by Ontario in the hairstyling/hairdressing program.
- 2. Because of the large number of 'not reported' age in 1991 (5,394 out of the total 19,724), 1992 will be used as the starting year for the analysis of trends in completion by age.
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