

Skills Beyond School

OECD Review of Post-Secondary Vocational Education and Training

Background Report from Canada

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**Consolidated Country Background Report in preparation for the OECD's
commentary on Vocational Education and Training in Canada**

[This report was prepared as input to the OECD Review of Post-Secondary Vocational Education and Training, Skills Beyond School, by the federal Department of Employment and Social Development Canada, with contributions from the Council of Ministers of Education, Canada, and the provinces of Manitoba, New Brunswick, Nova Scotia, and Prince Edward Island. The document was prepared in response to guidelines the OECD provided to all countries. The opinions expressed are not necessarily those of the national authorities, the OECD or its member countries. Further information about the OECD review is available at: www.oecd.org/education/vet]

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PURPOSE

The federal Department of Employment and Social Development Canada (ESDC) prepared this report with contributions from the Council of Ministers of Education, Canada (CMEC), and the provinces of Manitoba, New Brunswick, Nova Scotia, and Prince Edward Island, as an input to the OECD Review of Post-secondary Vocational Education and Training, *Skills Beyond School* Project.

INTRODUCTION

Vocational education and training (VET) is increasingly becoming a focus of policy discussions in Canada and around the world, particularly as it relates to the delivery of post-secondary education (PSE) and as a means of meeting the skills needs of the economy. VET can be described as a program or a series of courses providing specialized instruction in a skill or a trade at the post-secondary level. The instructional program is intended to lead the student directly to a career based on that skill or trade.

At the post-secondary level, VET is primarily delivered through apprenticeships and college programs. Apprenticeship programs typically combine training in the workplace with a course of study at a post-secondary institution (or in some cases, high school or a training facility) in a specific trade. VET programming is occupationally specific, vocationally or technically oriented, and is delivered in publicly funded colleges, institutes, polytechnics, and private career colleges.

VET in Canada is an accessible form of skills development that is generally responsive to the labour market. This is reflected in high college attainment and good labour market outcomes for VET graduates. Access to VET in Canada is promoted by the large number of educational institutions that are located across Canada in rural and remote areas, as well as in small and large urban centres. This enables groups that are traditionally underrepresented in PSE to participate in VET. Moreover, both federal and provincial/territorial orders of government provide financial supports that promote equitable access to PSE, including VET. This means groups that are traditionally underrepresented in PSE are typically well represented in VET.

A key factor drawing students to VET is the strong connection it has to the labour market. Employers work closely with government and educational institutions to ensure that VET graduates have the skills required to succeed in the workforce. The essential role that employers play in the VET system is well recognized and their participation is encouraged through tax credits to support employee training and the hiring of apprentices.

Canada, like other countries in the OECD, is facing challenges in developing the VET graduates needed to meet the requirements of the labour market. An aging workforce, evolving skills needs, technological change, the development of natural resources, and regional labour market issues amplify the pressures on VET systems to become even more accessible, efficient, and responsive. These challenges, as well as the barriers that exist to VET program enrolment and completion, are common and both orders of government are working to address them.

RESPONSIBILITY FOR EDUCATION IN CANADA

Education is an area of provincial and territorial jurisdiction. While Canada's VET systems share many common characteristics, the development and delivery of VET differs among Canada's 13 jurisdictions. Additionally, regional differentiation has allowed VET to respond to local education and labour market needs, and to the broader needs of the Canadian economy.

The Council of Ministers of Education, Canada provides a forum for provincial and territorial education ministers to discuss matters of common concern, and explore ways to cooperate, share information, and coordinate international education activities. The need for skilled labour was on the first CMEC agenda in 1967 and it remains an important concern.

While there is no federal ministry of education, the Government of Canada has a responsibility for ensuring that a well-functioning labour market and skilled labour force support the national economy. *The Department of Employment and Social Development Act* outlines the federal government's role and duties related to "human resources and skills development with a view to improving the standard of living and quality of life of all Canadians by promoting a highly skilled and mobile workforce and an efficient and inclusive labour market." The Government of Canada achieves these objectives through transfers to provinces and territories, tax measures, grants, student financial assistance, and direct program spending in support of VET. Federal investments in VET, many of which are highlighted in the Government of Canada's *Economic Action Plan 2013* and *2014*, emphasize measures that enhance the labour market participation of the unemployed and groups that are underrepresented in the Canadian labour market (e.g., persons with disabilities, Aboriginal peoples, older workers, and youth).

Both orders of government work together and with stakeholders to advance key areas of VET. A good example of this collaboration is the development of the Red Seal Program, a nationally recognized certification of excellence for tradespeople that facilitates interprovincial mobility.

DELIVERY OF VET

Apprenticeship

Apprenticeship training is a key component of VET in Canada. It prepares individuals for work in a broad variety of trade professions.

An apprenticeship is an agreement between a person who wants to acquire a skillset (the apprentice) and an employer who needs a skilled worker. Sponsoring employers agree to register their apprentice with the provincial or territorial apprenticeship authority and to provide on-the-job training under the supervision of a certified journeyperson. A journeyperson is an individual who is recognized to have mastered all elements of a given trade and is certified to train and act as a mentor for apprentices. In return, the apprentice works at a lower wage than the firm would pay a journeyperson. Certified journeypersons or other qualified trades workers provide the on-the-job training required by apprentices.

With input from employers and unions, provincial and territorial apprenticeship authorities develop the competencies that an apprentice must learn and the overall model for training. Apprenticeships combine on-the-job experience with technical classroom training. In general, 80% of the training is in the workplace. The remainder takes place in a training institution—typically a college or union training centre—and is done in four- to twelve-week blocks or through day-release training. After completing both classroom and on-the-job training, apprentices can receive journeyperson certification or a certificate of qualification. Depending on the trade, apprenticeship programs typically last from two to five years.

In order to become a registered apprentice, most provinces and territories require the individual to be a minimum age of 16 and, depending on the jurisdiction and trade, to have successfully completed Grade 12 or have an equivalent amount of work experience and related education.¹ While apprenticeships generally begin their training after the completion of secondary school, all jurisdictions expose younger students to the trades through pre-apprenticeship programs and VET instruction at the secondary level.

Governance and Quality Assurance

The provinces and territories regulate apprenticeships. Canada's apprenticeship systems have developed in response to the geography, industrial structure, demographics, and unique labour market needs of each jurisdiction.

¹ K. Skof (2007). *Trends in the Trades: Registered Apprenticeship Registrations, Completions and Certification, 1991 to 2007*. Statistics Canada, <http://www.statcan.gc.ca/pub/81-004-x/2009006/article/11127-eng.htm>

Despite their individual features, apprenticeship systems in Canada tend to align with one of three models:

- **Collaborative approach:** In Manitoba, Prince Edward Island, Alberta, and Saskatchewan, the provincial government sets the legislative and administrative framework for the delivery of apprenticeship training and certification. An industry board sets the standards for training and certification in various programs and is accountable to the government of the province.
- **Trades sector-led approach:** Ontario recently passed legislation moving governance and decision-making from the government to the trades sector through the new Ontario College of Trades and Apprenticeships. Similarly, in British Columbia, the Industry Training Authority (ITA) was established to oversee the province's industry training and apprenticeship system. The ITA develops policy, performance standards, training programs, and assessment tools. It provides services for employers, training participants, and those who wish to pursue certification based on existing skills.
- **Government-led approach:** In other provinces, the government directly oversees apprenticeship training. This is the case in New Brunswick, where a legislated act dictates the role of the Apprenticeship and Occupational Certification Branch of the Department of Post-Secondary Education, Training and Labour. In Québec, the government, as well as industry commissions, oversee apprenticeships, but the government is responsible for legislation governing the commissions.

Red Seal Program

The Interprovincial Standards Red Seal Program is a collaboration between the federal and provincial/territorial governments to foster labour mobility and provide an inter-jurisdictional standard of excellence in the trades.² This program reflects a half-century of successful federal-provincial/territorial partnership, in close collaboration with industry, to develop common occupational standards and examinations for the Red Seal trades. The Red Seal was created in the 1950s, and the first Red Seal qualification was issued in 1959. As an industry-driven program, the Red Seal Program is Canada's standard of excellence for the skilled trades.

Through the Red Seal Program, apprentices who have completed their training—as well as trade qualifiers (i.e., tradespersons who meet required jurisdictional criteria without completion of an apprenticeship program)—are able to obtain an endorsement of their provincial or territorial certificates of qualification by completing an interprovincial Red Seal examination. A Red Seal endorsement on a provincial/territorial certificate of qualification is automatically recognized across jurisdictions, fostering interprovincial mobility for apprentices. Eligibility to write an examination is determined by each provincial/territorial apprenticeship authority. The examinations are given exclusively in

² For more information on the Red Seal Program, see: <http://www.red-seal.ca>

a multiple-choice format and are available in both official languages. Plans are underway for the development of practical examinations.

At the end of 2010, there were over 276,000 registered Red Seal apprentices, and 30,588 Red Seal endorsements were issued. To date, 57 trades are included in the Red Seal Program (see Annex A); as of 2012, almost 80% of registered apprentices are pursuing a Red Seal trade.³ The list of Red Seal trades continues to evolve as numbers and national applicability warrant. The top ten most popular Red Seal trades include⁴:

- Carpenter
- Construction electrician
- Automotive service technician
- Plumber
- Hairstylist
- Steamfitter/pipefitter
- Cook
- Welder
- Industrial electrician
- Industrial mechanic (millwright)

Trades that are not currently designated under the Red Seal Program tend to be smaller in scope, and are frequently not apprenticeable in all jurisdictions (e.g., locksmith, gardener, security alarm installer).

In order to hire a Red Seal apprentice, employers are commonly required to have a sufficient number of certified journeypersons to meet journeyperson-to-apprentice ratios set by the province or territory. Provinces and territories mandate minimum journeyperson-to-apprentice ratios to maximize learning, supervision, and support for apprentices, and to promote workplace safety. Set ratios vary by province/territory and by trade, and not all trades or all jurisdictions require them.⁵

Governance and Quality Assurance

The Red Seal Program is managed and delivered by the Canadian Council of Directors of Apprenticeship (CCDA), which is made up of the apprenticeship authorities from each province and territory and representatives from the Government of Canada. The Government of Canada is represented by ESDC, which provides national secretariat and strategic support to the CCDA for the management and delivery of the program and largely funds its day-to-day operations.

³ Employment and Social Development Canada (2013). *Apprenticeship - Fact Sheet*, <http://www.aiacanada.com/uploads/2014/enews/gr/Apprenticeship%20-%20fact%20sheet%20%28November%2020%202013%29.pdf>

⁴ Statistics Canada (2014). *Table 3 - Registered apprenticeship training: Registrations in the top 10 Red Seal trades*, <http://www.statcan.gc.ca/daily-quotidien/140611/t140611b003-eng.htm>

⁵ Full information on journeyperson-to-apprentice ratios can be found in the Ellis Chart, www.ellischart.ca

The CCDA has several functions. It:

- Promotes, through federal-provincial/territorial collaboration, greater consistency of provincial and territorial apprenticeship training, processes, and certification requirements by developing and maintaining interprovincial standards of qualification for the Red Seal trades.
- Facilitates collaboration with industry to build a skilled trades labour force, and to facilitate the mobility of this labour force in Canada, by means of a system of common interprovincial competency standards.
- Enables its members to engage in research and evidence-based analysis in support of the CCDA's mandate, objectives, and strategic directions, as well as the objectives and strategic directions of the members' respective apprenticeship and trade certification systems and programs.
- Works with the Forum of Labour Market Ministers to ensure that the regulated trades meet the requirements of Chapter 7 of the Agreement on Internal Trade, which outlines the Red Seal Program as a well-established means of creating common interprovincial standards for the trades.
- Develops a series of National Occupational Analyses (NOA). A NOA is developed for each Red Seal trade and identifies all the tasks performed in that trade. As a source document, it is used to develop the Interprovincial Program Guides, which contains common in-school technical training outcomes. An NOA is used as a base document for the development of interprovincial standard examinations. Provinces and territories are encouraged to use the NOA for curriculum development.

CCDA also develops strategic priorities for the Red Seal program.⁶ Current priorities include:

- Enhancing Red Seal standards and assessments.
- Promoting the harmonization of inter-jurisdictional processes and requirements for skilled trades training, certification, and standards.
- Increasing awareness of the Red Seal as a competitive advantage and an assurance of quality.
- Increasing the engagement and participation of partners and stakeholders in the Red Seal Program.

Colleges and Union Training Centres

A variety of public and private post-secondary institutions provide VET. They include publicly funded colleges, polytechnics, institutes, private career colleges, union training centres, and, in Québec, the *Collèges d'enseignement général et professionnel* (CEGEP) system.

⁶ For more information on the strategic priorities for the Red Seal program, see: http://www.red-seal.ca/images/strategic_directions_EN.html

Publicly funded colleges, institutes, and polytechnics

Publicly funded colleges, institutes, and polytechnics are institutions that traditionally provide programs that are practically oriented, occupationally specific, and mainly designed for participants to acquire the skills and knowledge needed for employment in a particular occupation or trade. VET is typically offered through one-year certificate programs, two-year technician diploma programs, and apprenticeship block training. It also includes three-year technologist advanced diploma credentials and four-year degrees.

Canada's public college systems were developed during the early 1960s and 1970s. Today, the majority of funding for public colleges and polytechnics comes from provinces and territories in the form of grants. The federal government also provides funding through transfers to provinces and territories (e.g., the Canada Social Transfer, Labour Market Agreements, Labour Market Development Agreements), as well as through research funding and funding for student financial assistance programs. Tuition fees make up a smaller proportion of overall revenues at public colleges than at universities.

Polytechnics are typically large institutions that differentiate themselves based on their ability to grant bachelor-level degrees in some areas and their focus on applied research for industry. However, many large colleges grant degrees and conduct applied research without adopting the "polytechnic" designation.

Collèges d'enseignement général et professionnel

The Québec education system differs from other Canadian jurisdictions in that students finish secondary schooling after Grade 11, compared to Grade 12 elsewhere. After completing high school, students in Québec typically enter a CEGEP, where they can pursue either a two-year pre-university program or a three-year technical training program that is primarily vocational in nature. Students typically pay no tuition fees.

Completion of either stream leads to a *diplôme d'études collégiales*, which allows admission into a university program. Both streams contain a general education component, the equivalent of twelfth year of secondary school; the second year of the pre-university stream is equivalent to the first year of a bachelor's degree. As a result, most Québec university undergraduate programs last three—rather than four—years. Since the final year of college technical training is also equivalent to the first year of a bachelor's degree programme, various Québec universities have entered into agreements with CEGEPs to recognize courses from the CEGEP technical stream for university credit.

Private career colleges

A large number of private career colleges also provide VET programming. These privately owned educational institutions offer programs similar to those provided by publicly funded colleges. However, compared to public colleges, programs at private

career colleges are typically shorter in duration, have compressed scheduling, are traditionally offered on a continuous-entry basis or an intake cycle, and receive little or no direct public operating funding.

Some private colleges offer two- and three-year programs, particularly in the health sciences and computer programming fields, but the majority of training programs are one year or less in duration and are designed to lead directly to an entry-level position in a particular field of work. The rapid response of private career colleges to training needs serves to enhance labour market flexibility and helps address labour market shortages.

It is estimated that there are at least 1,300 private career colleges in Canada.⁷ They are typically much smaller than publicly funded colleges, with an average of 140–170 students in a given year. A 2007 survey of Canadian career college students found that about 150,000 students attended a private career and vocational college in Canada over the course of the year, with some provinces having a greater concentration of students than others.⁸

Union training centres

Unions play a key role in the apprenticeship system. Unions or their umbrella groups, such as building and construction trade councils, often work with employers to develop training models and other working conditions for apprentices. These arrangements are frequently negotiated into collective agreements. Collaboration between union and employers allows unions to operate training facilities where experienced union members teach apprentices the skills needed to succeed in a given trade. The level of union engagement in the apprenticeship system varies across jurisdictions and is often influenced by the unionization rate in key industries.

Governance and Quality Assurance

Mechanisms for maintaining quality are becoming increasingly important given the increasing mobility of learners, the rising number of institutions that have degree-granting status, and the growing use of information technology. Jurisdictions are addressing the issue of post-secondary quality in a number of ways.

Maintenance of post-secondary program quality is primarily the responsibility of individual institutions, which operate within legislative and policy frameworks established by their respective provincial or territorial governments. There are also a number of pan-Canadian organizations that promote quality and the maintenance of

⁷ The Canadian Information Centre for International Credentials, <http://www.cicic.ca/869/Do-an-advanced-search-in-the-Directory-of-Educational-Institutions-in-Canada/index.canada>

⁸ “Survey of Canadian Career College Students, Phase I: Institutional Survey.” Human Resources and Social Development Canada and The Canada Millennium Scholarship Foundation. Prepared by: R.A. Malatest & Associates Ltd. (2007),

http://www.cirst.uqam.ca/Portals/0/docs/FondationBM/080331_Phase_I_Institutional_Survey_EN.pdf.pdf.

high academic standards in post-secondary programs. Among these organizations is Colleges and Institutes Canada (CICan), which requires that its members deliver post-secondary programs that meet the academic standards set by the appropriate jurisdictional authorities.

Each jurisdiction has its own quality-assurance regime for PSE. For example, the Ontario Qualifications Framework covers all post-secondary diplomas, certificates, and degree programs offered in Ontario.⁹ As part of their quality assurance mandate, some jurisdictions maintain key performance indicators that define and evaluate performance. They measure progress toward meeting broad goals, such as college graduation rates, transitions to the labour market, and student debt.

Many of Canada's regulated professions have professional groups—associations or professional colleges—that conduct accreditation reviews of the post-secondary programs related to their professions. These professional groups review reports provided by the institutions, and they may also conduct on-site visits in accordance with the policies and procedures established by the professions. In nursing, for example, provinces have a college of nurses that sets the standard and approves curricula for college programs.¹⁰

New program approval at publicly funded colleges and polytechnics requires a complex assessment that forms part of the quality assurance process. The approval of new programs can be carried out internally by the institution or by using external review bodies. New programs also require approval by the provincial or territorial ministry or department of advanced education. In New Brunswick, program advisory committees with external representation from industry develop new program proposals and conduct internal reviews of existing programs. Proposals for new programs and significant program changes are reviewed by the college management team according to guidelines set out by the ministry or department.

Private career colleges are regulated differently than public institutions. They must be registered or licensed under provincial or territorial legislation. Registered or licensed institutions are monitored by government primarily for consumer protection purposes. Criteria may include educational inputs, such as demonstration that faculty have appropriate credentials, training, and field experience.

The Minister of ESDC has the authority to certify private educational institutions that provide courses specifically designed to build occupational skills. The purpose of certification is to allow students who attend courses at these educational institutions to qualify for federal tuition tax credits. Eligibility criteria for certification are established by

⁹ For more information on the Ontario Qualifications Framework, see:

<http://www.tcu.gov.on.ca/pepg/programs/oqf/>

¹⁰ For more information on the College of Licensed Practical Nurses of BC, see:

<https://www.clpnbc.org/Practice-Support-Learning.aspx>

the Minister of ESDC and delegated to the Canada Student Loans Directorate. Eligibility criteria may change to reflect occupational skill requirements. Certification of an educational institution is subject to review and is valid for a period of up to five fiscal years.

The Role of Employers in VET

Publicly funded colleges, private career colleges, and polytechnics incorporate workplace-training opportunities into their programs in collaboration with industry. Although the delivery models differ by institution, these experiential approaches support the outcomes of VET programs:

- Co-operative education provides training that familiarizes students with the workplace. Many colleges across Canada offer programs with mandatory or optional co-op programs.
- Professional in-service training is required of students in order to graduate from certain programs (e.g., early childhood education, dental hygiene). This type of employment is usually unpaid and is carried out on an alternating basis with the academic program.
- Other forms of experiential learning are being built into an increasing number of college programs. Students may be required to complete a summer work experience in a work environment related to their studies or they may spend one or two days a week in the workplace over the course of their studies. Students can also gain experiential learning through the applied research opportunities generated by college and employer collaboration.

In addition to formal work-integrated learning opportunities, many students gain valuable workplace skills and experience through employment that is not directly linked to their studies. At the college level, 49% of students work at a job while participating in a program of study.¹¹ Although this is not officially recognized as a form of workplace training, students' experiences in the workplace can directly contribute to their training. Studies show that Canadian students are increasingly in search of jobs that complement their education and training.

Both private and public colleges engage extensively with employers. For instance, Program Advisory Committees (PACs) are a group of community and business leaders from outside the institution that advises academic administration and teachers on the skills requirements and hiring prospects in an occupation linked to the instructional program. This advice helps keep programs up-to-date and responsive to changing economic needs. It also helps graduates find jobs and enables local firms to hire people with job-ready skills.

¹¹ K. Marshall (2010). *Employment patterns of postsecondary students*. Statistics Canada, <http://www.statcan.gc.ca/pub/75-001-x/2010109/article/11341-eng.htm>

PACs play a key role in deciding whether to establish new programs. Typically, publicly funded colleges and polytechnics respond to requests for a new program by convening a committee of potential employers and asking them about occupational trends and the content of a possible program. They also often discuss the cancellation of an existing program with PACs before making a final decision. Moreover, PACs monitor and support existing programs, and assist with curriculum development, internships for students, acquisition of technology and equipment, and student placement in local industries.

Employers are also increasingly contributing to the development of VET and innovation skills in Canada through applied research partnerships with publicly funded colleges and polytechnics. Collaborative applied research projects benefit firms that lack in-house research and development capacity by enabling them to develop and improve products and processes; prototype, simulate, and validate new technologies; commercialize innovative technologies; train employees; and gain access to research and innovation funding. Publicly funded colleges and polytechnics play a lead role in strengthening regional capacity to innovate by helping businesses and community organizations compete more effectively through new and improved products, processes, and services.

According to a March 2014 report published by Colleges and Institutes Canada, colleges and polytechnics collaborated with 5,444 business partners in 2012–13 in projects that involved \$72 million in private funding, 2,298 faculty, and 29,356 students.¹²

Colleges and polytechnics extend the reach of Canada's innovation system by providing accessible technical support to a growing number of local firms. Educational providers also benefit from these partnerships, as faculty gain knowledge of current business practices that can enhance curricula and students hone their innovation skills and make contacts with employers.

In recognition of the value of college and polytechnic applied research, the Government of Canada has increased public support to these activities in recent years. According to Colleges and Institutes Canada's 2014 report, federal funding for college and polytechnic applied research rose from \$27.0 million in 2008–09 to \$71.4 million in 2012–13, making the federal government the second largest external funding source for applied research in 2012–13 after the private sector. The Government of Canada's support for applied research is provided through the Tri Council College and Community Innovation program (\$35.6 million in 2012–13), the Canadian Foundation for Innovation's College-Industry Innovation Fund (\$5.1 million), the National Research

¹² Colleges and Institutes Canada (2014). *College and Institute Applied Research 2012-2013 Innovation for Small Businesses and communities: Environmental Scan*, <http://www4.accc.ca/xp/index.php/en/advocacy/appliedresearch/2012-13report>

Council's Industrial Research Assistance Program (\$3.2 million), and regional development agency support (\$22.1 million).¹³

The Tri-Council's College and Community Innovation (CCI) program, launched in 2008, is administered by the Natural Sciences and Engineering Research Council (NSERC) in partnership with the Social Sciences and Humanities Research Council and the Canadian Institutes of Health Research. The CCI program aims to increase innovation at the community and regional levels by enabling Canadian colleges to increase their capacity to work with local companies, particularly small- and medium-sized enterprises (SMEs). Now providing \$50 million in annual funding as of 2013–14, the CCI program supports applied research and collaborations that facilitate commercialization of new products, as well as technology transfer, and the adaptation and adoption of new technologies in the business community.

As a lead agency for the CCI program, NSERC is a primary source of funding for college and institute applied research. An important indicator of applied research capacity is the number of institutions that have acquired eligibility to receive NSERC grants. As of January 2014, 103 colleges and institutes were eligible, up from 52 in 2008–09. A 2013 evaluation of the CCI program found that, in general, business-related outcomes were being achieved, with positive impacts on research and development capacity, annual revenues, and the number of new customers.¹⁴ A series of case studies also provided examples of SMEs seeing commercial impacts attributable to collaborative research and development partnerships, including the development of new products, processes, and technologies.

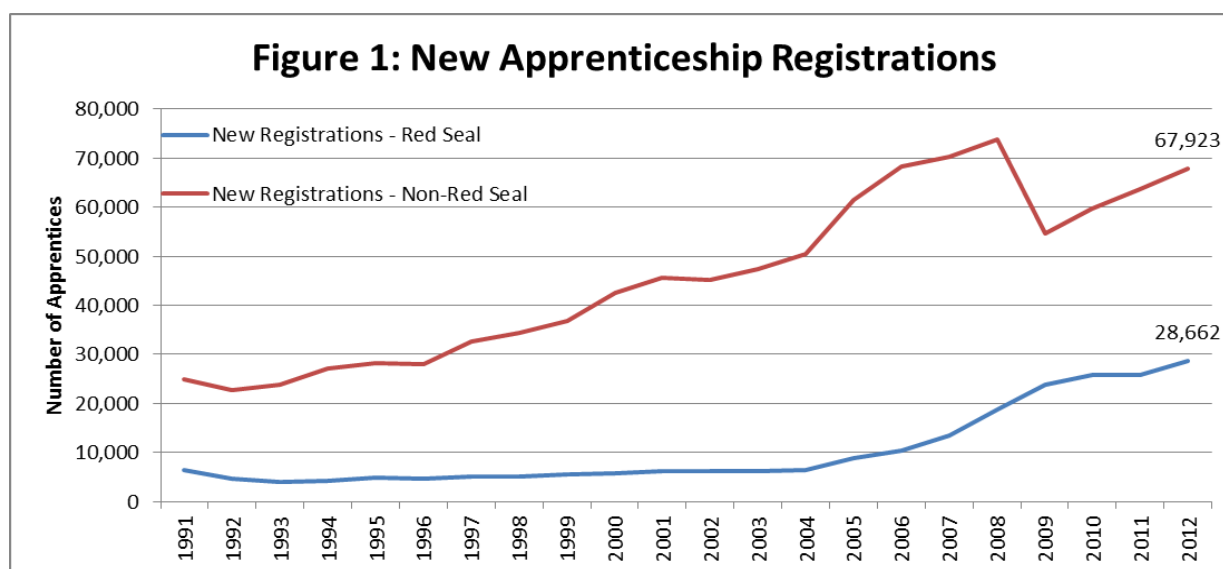
¹³ Ibid.

¹⁴ Goss Gilroy Inc. (2013). *Evaluation of the College and Community Innovation (CCI) Program - Final Report* (prepared for Natural Sciences and Engineering Research Council), http://www.nserc-crsng.gc.ca/doc/Reports-Rapports/Evaluations/CCI_Evaluation_Report_eng.pdf

ACCESS, PERSISTENCE, AND COMPLETION WITHIN VET

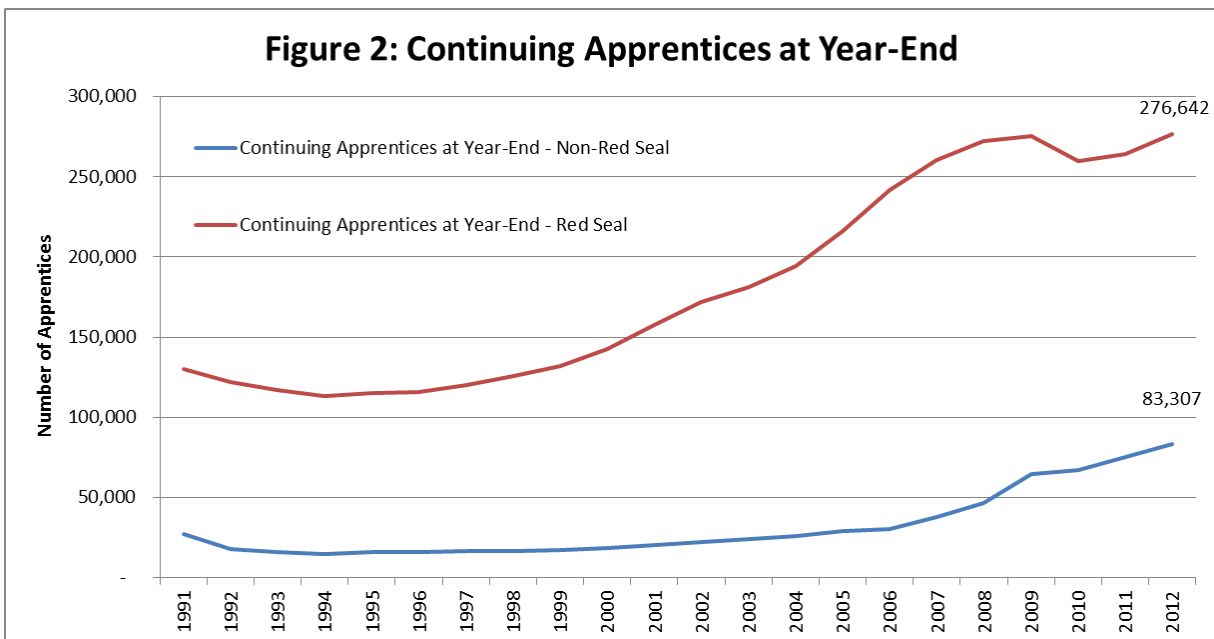
Apprenticeship Enrolments

As Figure 1 illustrates, following a decline during the 2008–09 recession, the number of new apprenticeship registrations surpassed its pre-recession levels in 2012, largely due to new registrations in non-Red Seal trades. Apprenticeship enrolments tend to be procyclical: Many new skilled trades jobs have been created in the construction, oil sands, and other natural resources sectors of the Canadian economy since the end of the recession. In light of the recent drop in oil prices, the demand for apprentices may be adversely impacted.



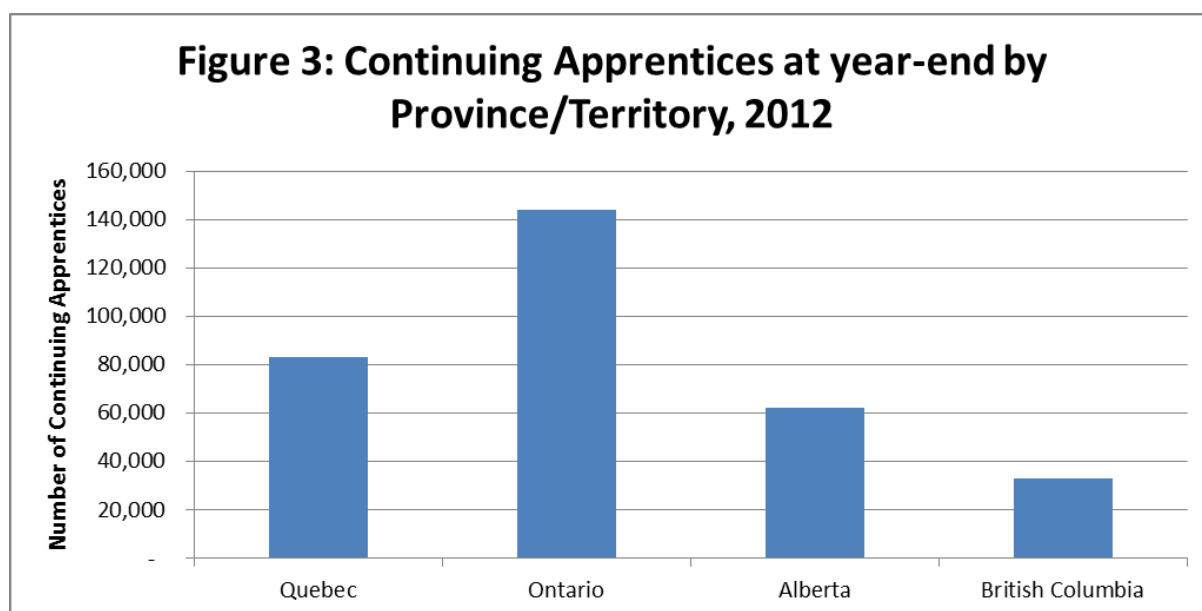
Source: RAIS, 2012.

Overall, the total number of registered apprentices has more than doubled since 1991.¹⁵

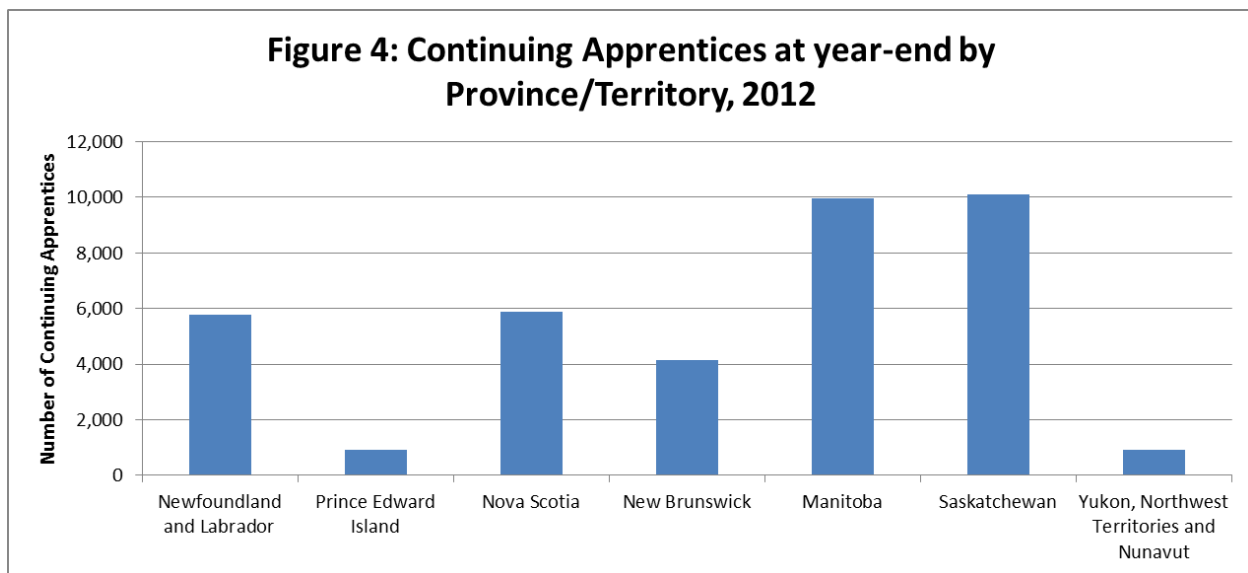


Source: RAIS, 2012.

Among provinces and territories, four provinces—Ontario, Québec, Alberta, and British Columbia—account for approximately 90% of continuing apprentices.



¹⁵ Registered Apprenticeship Information System (RAIS), 2012. Internal numbers.



Source: Statistics Canada, CANSIM table 477-0053.

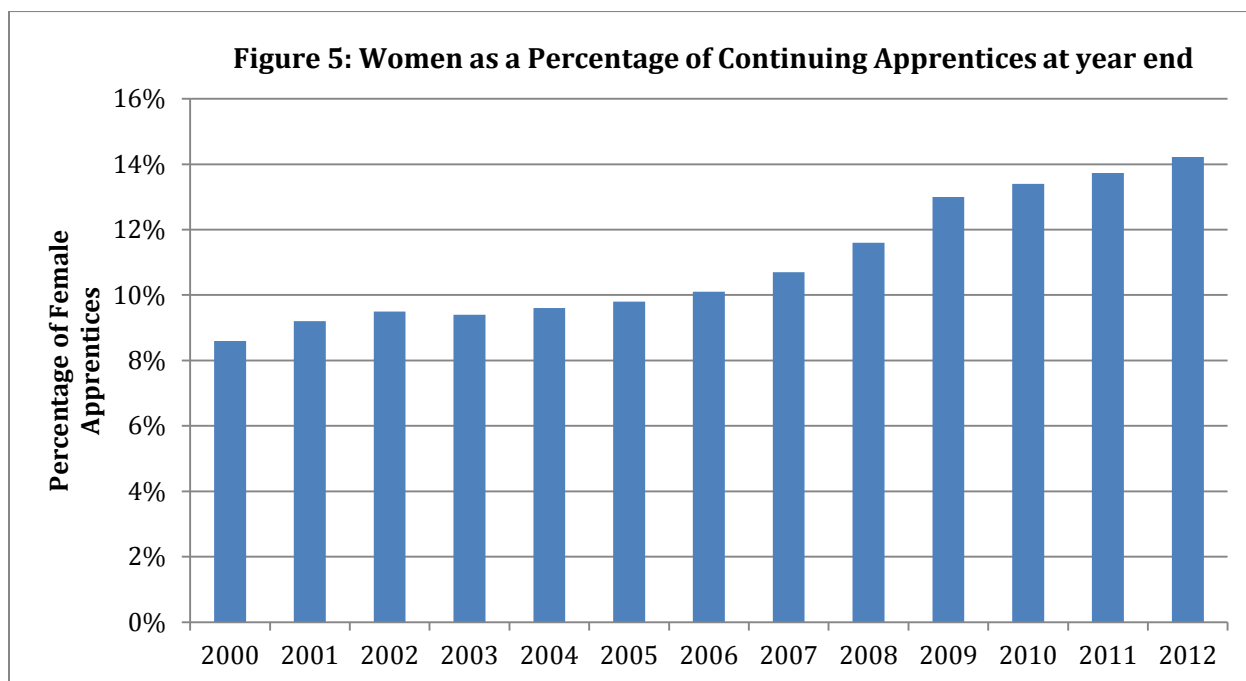
Most registered apprentices are between 20 and 34 years of age; only one-third were under the age of 25 in 2012.¹⁶ The average apprentice is older than the average college or university student in Canada.

Apprenticeship registrations heavily favour men. In 2012, there were 63,240 female apprentices, who accounted for 14.2% of all registered apprentices.¹⁷ However, while numbers remain small, female enrolment is increasing in a number of Red Seal trades. From 2011 to 2012, the Red Seal trades with the strongest growth in female enrolment in percentage terms were: Industrial mechanic (+91%), steamfitter/pipefitter (+85%), welder (+68%), and the plumber trade in the construction trades (+67%).¹⁸

¹⁶ Ibid.

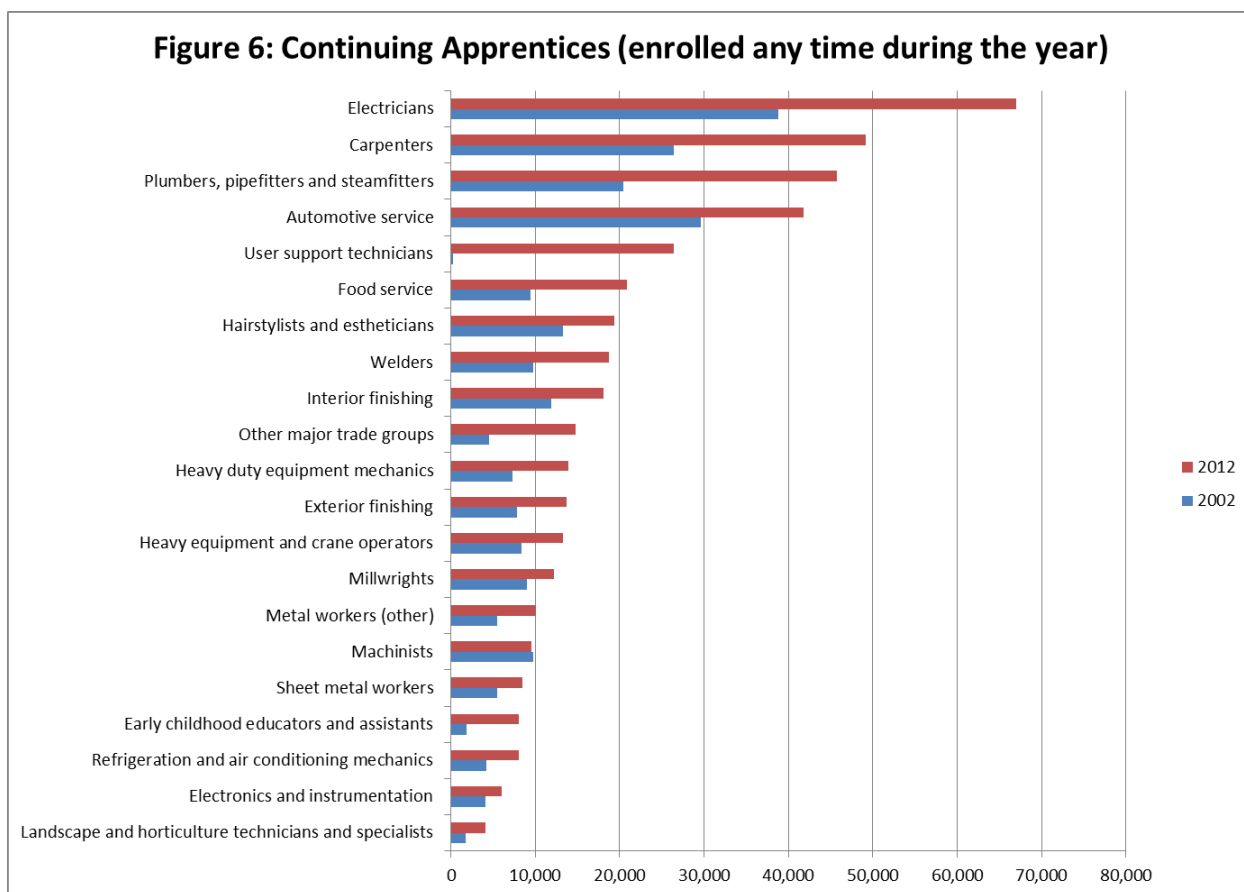
¹⁷ Ibid.

¹⁸ Ibid.



Source: Statistics Canada, CANSIM table 477-0053.

As Figure 6 illustrates, most registered apprentices chose electrical; carpentry; plumbing, pipefitting and steamfitting; and automotive service. Enrolment growth varies across trades: Certain trades such as carpentry and plumbing have more than doubled their number of registrants over the past ten years, while others have grown more slowly. The trade that has grown the most between 2002 and 2012 is user support technicians, which has seen a surge in registrations from 200 to over 20,000 apprentices.



Sources: Statistics Canada, CANSIM table 477-0053.

Apprenticeship Completion

While apprenticeship completions have generally been increasing faster than new registrations in recent years, they were little changed from 2011 to 2012.¹⁹ This recent, faster growth in completions was in part due to the increase in new registrations from 2003 to 2008. However, it is too early to tell how this recent increase in completions will affect the overall completion rate, which has remained at about 50% for a significant period of time.²⁰ In part, non-completion is a reflection of the length of time that it takes apprentices to complete their program. They require, on average, five years to complete a four-year apprenticeship program in Canada.²¹ Some apprentices, especially those in non-compulsory trades, may simply continue working in their field without completing their apprenticeship.²² However, completers fare better in the labour

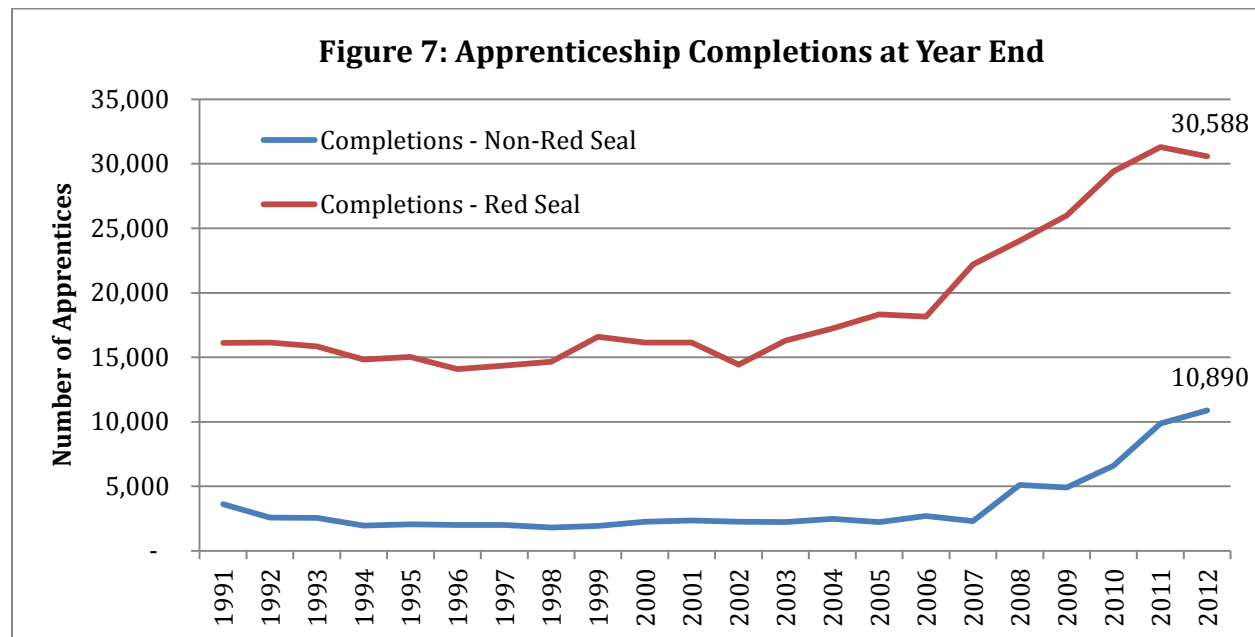
¹⁹ Ibid.

²⁰ L. Desjardins (2007). *Completion and discontinuation rates of registered apprentices: Does program duration matter?* Statistics Canada, <http://www.statcan.gc.ca/pub/81-004-x/2010002/article/11253-eng.htm#b>

²¹ Ibid.

²² C. Laporte & R. E. Mueller (2011). *The Completion Behaviour of Registered Apprentices: Who Continues, Who Quits, and Who Completes Programs?*, <http://www.statcan.gc.ca/pub/11f0019m/11f0019m2011333-eng.pdf>

market. For example, median wages for completers were \$27 per hour in 2007, compared to \$20 per hour for discontinuers.²³



Source: RAIS, 2012.

While completing an apprenticeship program is one way to obtain a trade credential, Canadian jurisdictions also recognize individuals who have acquired skills through extensive practical work experience. A trade qualifier is an individual who has not completed an apprenticeship program, but has acquired enough practical work experience to challenge the certification examination administered by the provincial or territorial authorities responsible for certifying trades workers. Many of these trade qualifiers are already actively working in the trades, while others are foreign nationals seeking to have their credentials recognized in Canada. In 2013, 4,709 trade qualifiers earned a Red Seal credential.²⁴ By comparison, 16,466 apprentices earned a Red Seal credential.²⁵

Field of study

The majority of certifications are awarded within the Red Seal trades, primarily in the electrician; plumbing, pipefitting and steamfitting; automotive services; and carpentry trades.²⁶ While Red Seal apprenticeships represent the majority of certifications, non-

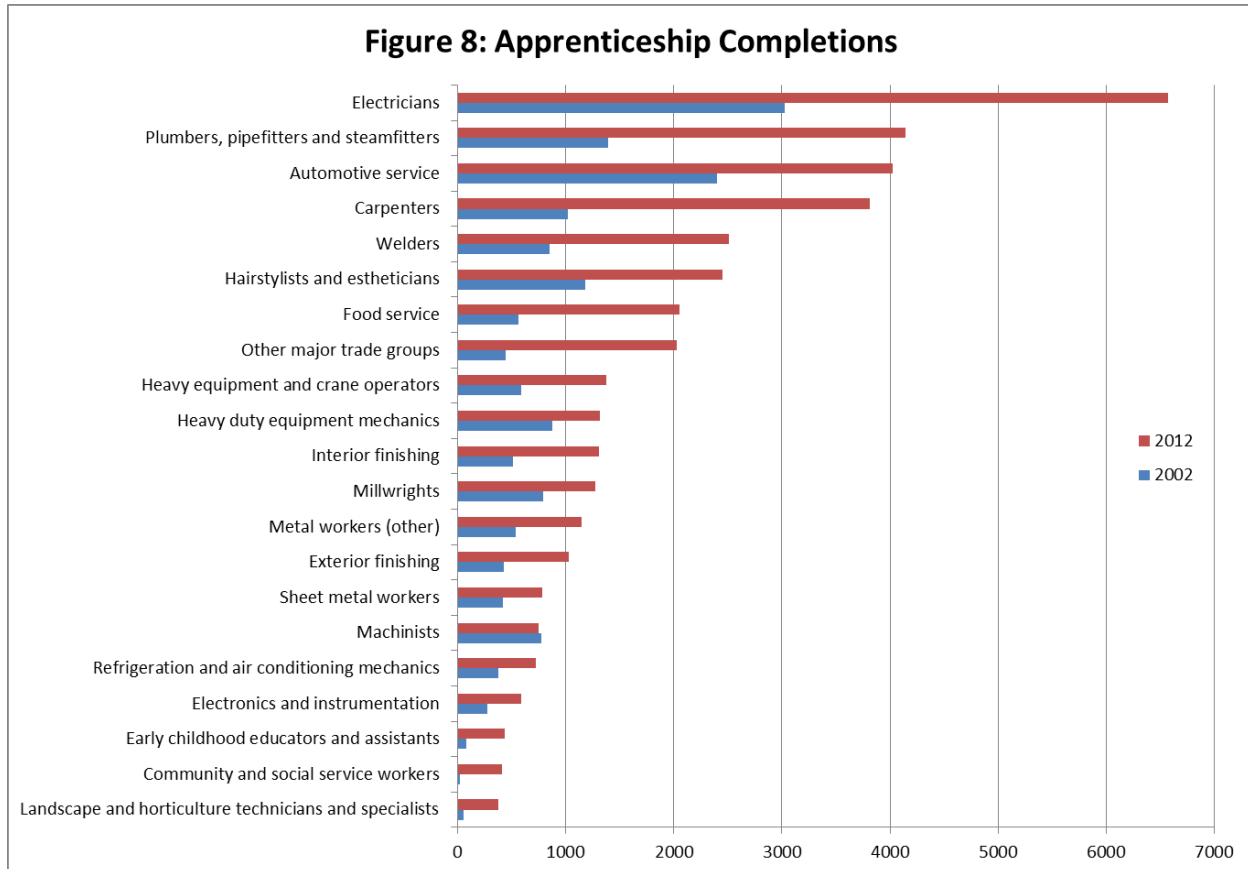
²³ Ibid.

²⁴ Canadian Council of Directors of Apprenticeship (2013). *Red Seal Annual Report*, http://www.red-seal.ca/others/2013ccd.1_1r@-eng.jsp

²⁵ Ibid.

²⁶ Statistics Canada (2012). *CANSIM table 477-0055: Registered apprenticeship training, certificates, by age groups, sex, major trade groups, apprentice or trade qualifier indicator and Red Seal or non-Red Seal indicator, annual (number)*, <http://www5.statcan.gc.ca/cansim/pick-choisir?lang=eng&p2=33&id=4770055>.

Red Seal trades have grown significantly in the last ten years. This may be attributed to the fact that many professions, such as child and youth care workers and occupations related to theatre and motion pictures, have recently become apprenticeable.



Source: Statistics Canada, CANSIM table 477-0055.

Barriers to Apprenticeship Enrolment and Completion

Information, perceptions, and attitudes

Only a small percentage of each high school graduating cohort enters an apprenticeship. According to a joint Canadian Apprenticeship Forum (CAF) and Skills Canada (SC) study conducted in 2005, just 22% of high school students say that they have considered a career in skilled trades over the course of the past year.²⁷

One barrier to entry in an apprenticeship is a lack of information. Many high school students do not receive information about trades or exposure to trades. When high school students are exploring potential career paths, trades or apprenticeship options are often downplayed, and university-based career choices are promoted. According to

²⁷ Canadian Apprenticeship Forum (2005). *Skilled Trades and Apprenticeship Awareness and Perception Study*, http://chatt.hdsb.ca/~templetonj/FOV1-000C0C4D/Awareness_Perception_Study_Highlights_Eng.pdf.

CAF/SC, only 14% of students indicate that their guidance counsellors recommended the skilled trades as a career option.²⁸

Student hesitancy about the trades is linked to concerns about labour market outcomes, including wages and the availability of trades jobs. These concerns endure despite evidence that trades jobs are in demand. Many young people are not aware of the specialized skills and training acquired in VET programs, nor are they aware that these programs lead to desirable, well-paying jobs.

In addition, there is a common perception among youth that the trades professions are not as prestigious as other occupations. According to CAF/SC, only 47% of youth say tradespersons are respected in society. Many youth believe that apprenticeship is a pathway for less academically inclined students, seeing university as their primary option—58% of youth and 53% of parents say university is their first choice for higher education, as opposed to college or apprenticeship in skilled trades.²⁹

Finding an employer to train apprentices

Because work with an employer is a crucial part of apprenticeship, entry and completion are impeded if a would-be apprentice cannot find an employer with whom to train. According to a CAF survey of eligible employers, only 19% hired an apprentice.³⁰ However, CAF data show that the average number of apprentices per employer increased from 2006 to 2011, rising from an average of 2.9 apprentices per employer in 2006 to 5 apprentices per employer in 2011. Significant increases were observed in the construction sector, rising from 4.2 apprentices per employer in 2006 to 9 in 2011, and in the manufacturing and mining sector, rising from 1.7 in 2006 to 7 in 2011. Over that same time period, the number of apprentices per 100 journeypersons increased in nearly all sectors, rising from 45 per 100 in 2006 to 68 per 100 in 2011.³¹

The CAF study also found the top three reasons for not taking on an apprentice were lack of work (24%); fear of poaching (22%); and cost or time constraints (13%).³² While the majority of apprentices are able to find a firm and journeyperson to work with, many are unable to do so in a timely manner. An estimated 37% of apprentices enrolled at public and private training providers took between four and 24 months to find a sponsor, with an average search period of seven months.³³

²⁸ Ibid.

²⁹ Ibid.

³⁰ Canadian Apprenticeship Forum (2011). *Employers and Apprenticeship in Canada*, http://en.copian.ca/library/research/caf/employers_apprentice/employers_apprentice.pdf

³¹ Ibid.

³² Ibid.

³³ Canadian Apprenticeship Forum (2010). *The challenge to finding an employer-sponsor*, <http://caf-fca.org/wp-content/uploads/2014/08/Challenge-of-Finding-an-Employer-Sponsor1.pdf>

Other barriers facing apprentices

According to the 2007 National Apprenticeship Survey, the main reasons why apprentices discontinue their program are work-related, following the choice of “other”, which accounted for 30% of respondents.³⁴ Top responses included: Not enough work or income (16%); received a better job offer (10%); disliked work or working conditions (8%); and wanted to change jobs or career, lost interest, or became self-employed (8%).

A recent CAF study provides further perspectives to apprenticeship completion. Based on the results of discussion groups, most apprenticeship stakeholders participating in the discussion agreed that respondents to the NAS 2007 survey who indicated “other” for discontinuing their apprenticeship did so because they were unable or reluctant to provide the actual reason. This report found wide-ranging reasons for discontinuation, including employer-specific factors related to labour market and workplace conditions; apprentice-specific factors related to personal barriers and experience; and system-based conditions and barriers.

The study found that apprentices may avoid providing direct reasons for stopping their programs that they may perceive to be embarrassing such as exam anxiety and weaknesses in math and reading. From the employer’s perspective, some employers are reluctant to take on apprentices whom they believe lack the necessary essential skills, such as numeracy and literacy.³⁵ If low levels of literacy and numeracy lead to apprentices being unable to successfully complete training, obtain certification, or perform effectively on the job, then both apprentices and employers are affected. However, research by CAF also demonstrates that employers are beginning to recognize the need to create opportunities to ensure that all employees, including apprentices, have the necessary workplace skills to adapt to workplace change and participate actively in apprenticeship and workplace training. Employers observe that low productivity, poor safety records and high error rates may be due to an underlying literacy and essentials skills issue in the workforce.

Supports to Encourage Apprenticeship Enrolment and Completion

Provincial and territorial governments and the Government of Canada provide a variety of supports to encourage apprenticeship enrolment and completion that address the needs of both apprentices and employers.

Supports to encourage youth exposure to the trades

Provinces and territories play a key role in encouraging youth to participate in VET. For example, Nova Scotia’s Workit Youth Apprenticeship Initiative supports community-

³⁴ M. Ménard, C. Chan, and M. Walker, (2007). *Canada Overview Report*, <http://www.statcan.gc.ca/pub/81-598-x/81-598-x2008001-eng.pdf>.

³⁵ Canadian Apprenticeship Forum (2011). *Raising Awareness of Essential Skills with Employers Who Hire Apprentices*, <http://www.caf-fca.org/document.php?id=18>.

based learning options in the public school system.³⁶ These include co-operative education placements and the Options and Opportunities program, both of which allow youth aged 16–19 the opportunity to explore one of Nova Scotia’s designated trades.³⁷ Youth who participate in these programs are eligible to receive apprenticeship credit leading to future apprenticeship certification.

Manitoba’s Technical Vocational Education (TVE) initiatives develop ways to provide youth and adults with effective career pathways that address current and future labour market needs.³⁸ Specific initiatives under the TVE umbrella include: Improving the image of vocational careers; enhancing awareness of vocational training opportunities; ensuring that programming is relevant to labour market needs; programming articulation between the secondary and postsecondary levels; strategies to ensure teacher currency; and increased funding for equipment upgrade.

The Government of Canada provides funding support to the Skills/Compétences Canada National Competition.³⁹ This annual multi-trade and technology competition promotes the skilled trades by bringing together approximately 500 young people from across Canada to compete in more than 40 trade and technology areas. Other Skills Canada activities, such as in-school presentations and conferences for young women, help to inform youth about career opportunities in the skilled trades and technology.

Economic Action Plan 2013 announced that the Government of Canada will promote education in high-demand fields, such as the skilled trades. As part of this effort, the Government will provide more information on the job prospects and benefits of working in various occupations, and will develop new outreach efforts to promote careers in such high-demand fields as science, technology, engineering, mathematics, and the skilled trades. By raising awareness of the importance of making informed education and career choices among youth and their influencers—parents and guidance counselors—more youth will have skills aligned to employers’ needs.

Financial supports for apprentices

Federal, provincial, and territorial supports help address financial challenges associated with apprenticeship. The Government of Canada provides the Apprenticeship Incentive Grant (AIG), which is a taxable cash grant for apprentices who complete the first and/or second level of their apprenticeship program in a designated Red Seal trade.⁴⁰ The maximum funding available through this grant is \$2,000 per person (\$1,000 per year).

³⁶ For more information on the Nova Scotia’s Workit Youth Apprenticeship Initiative, see: <http://workitns.ca/>

³⁷ For more information on the Options and Opportunities program, see: <http://www.ednet.ns.ca/O2/>

³⁸ For more information on the Manitoba’s Technical Vocational Education initiatives, see: <http://www.edu.gov.mb.ca/tve/index.html>

³⁹ For more information on Skills/Compétences Canada, see: <http://www.skillsCanada.com/>

⁴⁰ For more information on the Apprenticeship Incentive Grant, see: <http://www.serviceCanada.gc.ca/eng/goc/apprenticeship/incentivegrant/program.shtml>

Since program inception, more than 320,000 AIGs have been issued.⁴¹ Some provincial and territorial governments offer similar supports to apprentices in non-Red Seal trades. In Budget 2009, the Government of Canada announced the Apprenticeship Completion Grant (ACG), which builds on the AIG.⁴² The ACG is a taxable cash grant of \$2,000 for eligible apprentices who successfully complete their apprenticeship training and receive their journeyperson certification in a designated Red Seal trade. Since program inception, more than 107,000 ACGs have been issued to apprentices by the Government of Canada.⁴³ Provincial and territorial governments offer similar completion grants to apprentices in non-Red Seal trades. For example, Nova Scotia offers the Provincial Apprenticeship Progression Award, as well as the Provincial Apprentice Completion Award.

Apprentices have access to financial supports through the Employment Insurance (EI) Program. Part I of the EI program provides temporary financial assistance to workers who have lost their jobs through no fault of their own while they look for work or upgrade their skills. A portion of Part I income support goes to apprentices during their periods of in-school training. In 2012–13, there were 51,540 new EI claims for apprentices attending full-time in-class technical training across Canada, with a total of \$185.6 million in income benefits paid to claimants.⁴⁴

Part II of EI is called Employment Benefits and Support Measures (EBSMs). EBSMs are labour market programs and services established to help individuals prepare for, obtain, and maintain employment. EI Part II is delivered by provinces and territories, with \$1.95 billion in funding from the Government of Canada through Labour Market Development Agreements (LMDAs).⁴⁵ Provinces and territories can assist EI-eligible apprentices with tuition and other education related costs through EI Part II. Prince Edward Island (PEI), for example, fully subsidizes the tuition of apprentices who are enrolled in block training and are eligible for EI through the Canada/PEI LMDA. Provinces such as New Brunswick provide apprentices with subsidized tuition; apprentices pay just \$400 out of the \$2,500 required for their training.

As part of *Economic Action Plan 2014*, the Government of Canada announced its intention to create the Canada Apprentice Loan by expanding the Canada Student

⁴¹ “Apprenticeship Completion Grants.” Government of Canada, <http://actionplan.gc.ca/en/initiative/apprenticeship-completion-grants>

⁴² For more information on the ACG, see:

<http://www.servicecanada.gc.ca/eng/goc/apprenticeship/completiongrant/program.shtml>

⁴³ “Apprenticeship Completion Grants.” Government of Canada, <http://actionplan.gc.ca/en/initiative/apprenticeship-completion-grants>

⁴⁴ Employment and Social Development Canada (2013). *EI Monitoring and Assessment Report 2012/13*, <http://www.esdc.gc.ca/en/reports/ei/monitoring2013/index.page>

⁴⁵ For more information on LMDAs, see

http://www.esdc.gc.ca/eng/jobs/training_agreements/lmda/index.shtml

Loans Program to provide apprentices registered in Red Seal trades with access to over \$100 million in interest-free loans each year.⁴⁶

Both orders of government also offer a range of tax-based measures to support apprentices. The Tradesperson's Tools Deduction reduces the financial burden on apprentices and employed tradespeople.⁴⁷ It provides tradespersons with an annual deduction of up to \$500 to help mitigate the costs of eligible tools required to do their job. More than 25,000 tradespersons claimed the tools deduction in 2010. Provinces such as Manitoba and Nova Scotia also provide tax incentives to assist with the purchase of tools.

The Apprenticeship Mechanic's Tool Deduction provides another deduction for the eligible tools acquired for use in employment as an apprentice mechanic.⁴⁸

The Government of Canada provides a Tuition Tax Credit for all professional, occupational and trade examination fees in cases where an examination is required to obtain a professional status or a certification or licence in a trade. Eligible credentials must be recognized by federal or provincial statute, and must be those that allow the individual to practice the profession or trade within Canada. Tax incentives are also provided by provincial and territorial governments. British Columbia offers training credits, completion credits, and enhanced credits for First Nations people and persons with disabilities.

Supports encouraging employers to train apprentices

Recognizing that employers play a key role in the apprenticeship process, both orders of government provide incentives to encourage employer participation. In 2006, the Government of Canada introduced the Apprenticeship Job Creation Tax Credit, a non-refundable tax credit equal to 10% of the salaries and wages paid to eligible apprentices for the first two years of an apprenticeship training program in a designated Red Seal trade.⁴⁹ The maximum credit to an employer is \$2,000 per year per eligible apprentice.

A number of provincial and territorial governments also provide tax incentives for employers to hire an apprentice.

- In Manitoba, employers receive a tax credit of up to \$3,000 when hiring an early-level apprentice.
- In Prince Edward Island, wages paid to apprentices and trainees are generally exempt from payroll tax.

⁴⁶ For more information on the Canada Apprentice Loan, see:

<http://www.actionplan.gc.ca/en/initiative/canada-apprentice-loan>

⁴⁷ For more information on the Tradesperson's Tools Deduction, see: <http://www.cra-arc.gc.ca/tx/ndvdl/tpcs/ncm-tx/rtrn/cmpltng/ddctns/Ins206-236/229/trds/menu-eng.html>

⁴⁸ For more information on the Apprenticeship Mechanic's Tool Deduction, see:

<http://www.cra-arc.gc.ca/trades/>

⁴⁹ For more information on the Apprenticeship Job Creation Tax Credit, see:

<http://www.cra-arc.gc.ca/tx/ndvdl/tpcs/ncm-tx/rtrn/cmpltng/ddctns/Ins409-485/412/jctc-eng.html>

- Nova Scotia's START Program, managed by the Nova Scotia Apprenticeship Agency, encourages employers to hire Nova Scotia residents requiring work experience and to register and employ apprentices.
- Ontario offers an Apprenticeship Training Tax Credit, which is based on salaries and wages paid to an apprentice. The maximum credit for each apprentice is \$10,000 per year, and the maximum credit over the first 48-month period of the apprenticeship is \$40,000. Eligible apprentices must be registered in a qualifying skilled trade.
- In British Columbia, employers who hire non-Red Seal apprentices in the first two years of their apprenticeship program or employers who hire any apprentice in the third or fourth year of their apprenticeship program can apply for a refundable income tax credit worth up to 10% of the wages paid to the apprentice.
- Manitoba, New Brunswick, and the Yukon have implemented policies to support the hiring and training of apprentices through public procurement.

In view of labour shortages in the skilled trades, the Government of Canada's *Economic Action Plan 2013* recognizes the importance of hiring and training apprentices across the country. The *Economic Action Plan 2013* announced that the Government of Canada will change its approach to procurement by introducing measures to support the use of apprentices in federal construction and maintenance contracts. In addition, the Government of Canada will ensure that funds transferred to provinces and territories through the Investment in Affordable Housing support the use of apprentices. As part of the New Building Canada Plan for infrastructure, the Government will encourage provinces, territories, and municipalities to support the use of apprentices in infrastructure projects that receive federal funding.

Economic Action Plan 2013 also announced the creation of the Canada Job Grant, which directly connects skills training with employers and jobs for Canadians.⁵⁰

Literacy and essential skills supports

Both orders of government provide supports to encourage individuals in VET to improve their literacy and essential skills. Through the Office of Literacy and Essential Skills (OLES) of ESDC, the Government of Canada invests in projects that promote skills upgrading in and for the workplace. Given that employment and training programs are predominantly delivered through provincial/territorial governments, non-profit organizations, unions, and private firms, OLES supports these entities to integrate literacy and essential skills interventions into their programming, services, and policies. In 2013, ESDC shifted from a funding model in which a portion of the literacy and essential skills budget was allocated to core funding to a more competitive project-based funding structure to enhance transparency and level the playing field for all stakeholders.

⁵⁰ See p. 37 for more information on Labour Market Agreements.

Through OLES and the Trades and Apprenticeship Division, ESDC and the Canadian Council of Directors of Apprenticeship are working collaboratively to support the integration of essential skills into apprenticeship systems. This work includes building knowledge and enhancing capacity of intermediaries such as educators, trainers, advisors, and employment counsellors to integrate essential skills into their training programs and practices in order to increase completion and certification of skilled trade workers.

OLES is providing funding to Frontier College to develop a model with construction trades unions and industry employers to increase the supply of workers with the necessary skills and credentials to meet the demands of the construction industry. The project aims to demonstrate how literacy and essential skills training can lead to increased registration, retention, completion and certification, and on-the-job success of workers in the skilled trades.

Provincial and territorial governments recognize the importance of essential skills at all levels of PSE, and support multiple initiatives addressing essential skills development.

For example, Manitoba's Apprenticeship-Workplace Essential Skills Training Centre (A-WEST) is a drop-in centre that offers free training and tutoring in the essential skills needed for specific trades.⁵¹ This service is particularly beneficial in helping immigrants identify gaps in their training and obtain recognition for their existing skills. I-WEST (Immigrants WEST) offers focused essential skills solutions for immigrants.

In New Brunswick, the Collège communautaire du Nouveau Brunswick and the Apprenticeship and Occupational Certification Branch are currently undertaking pilots in which workplace essential skills (WES) training is provided as a precursor to pre-employment training. The goal of the project is to determine if WES training can better prepare adults for pre-employment training.

Canada also participates in international assessments of essential skills. Recent successes include federal-provincial/territorial cooperation in large-scale international surveys such as the OECD's Programme for International Assessment of Adult Competencies, a survey of adult skills in the areas of literacy, numeracy, and problem-solving in a technology-rich environment.

Creating opportunities for apprentices to better meet the demand for skilled tradespersons

The Government of Canada is committed to continuing to work with provinces and territories to strengthen apprenticeship systems, effectively support apprentices, and encourage a future supply of certified skilled tradespeople.

⁵¹ For more information on the Manitoba Apprenticeship-Workplace Essentials Skills Centre, see: http://www.wem.mb.ca/west_centre.aspx

The *Economic Action Plan 2013* recognizes that Canada faces a growing shortage of skilled tradespeople and proposes measures to create opportunities for apprentices. To further reduce barriers to accreditation in the skilled trades, the *Economic Action Plan 2013* announced that the Government of Canada will reallocate \$4 million over three years to work with provinces and territories to harmonize requirements for apprentices and to examine the use of practical tests as a method of assessment in targeted skilled trades. This work will ensure that more apprentices complete their training and will also encourage mobility.

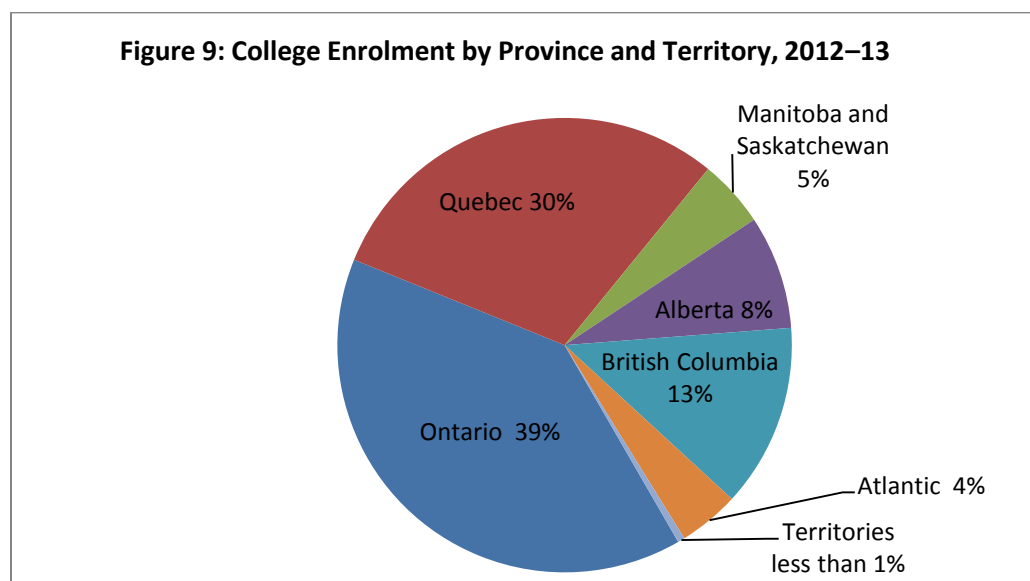
As part of the harmonization process, the Government of Canada and the Council of Atlantic Premiers have committed to harmonizing requirements in 10 trades across the Atlantic provinces. As a result, Canadians apprenticing in these 10 trades will have access to consistent training, certification, and standards, leading to more job opportunities and greater mobility while helping address skills shortages in this region.

To further advance harmonization, the Canadian Council of Directors of Apprenticeship has established a task force to identify and analyze variations in apprenticeship programs across Canada. The work of the task force will end in 2015 and is designed to:

- Identify key differences in training and certification requirements, as well as in scope of trade. This includes, for example: Number of on-the-job hours required, number of in-class training hours required, and variations in the sequencing of content for apprenticeship technical training, which can make it difficult for apprentices to continue their training in other jurisdictions;
- Examine the rationale for the differences;
- Identify any other barriers;
- Develop recommendations and action plans; and
- Engage national stakeholders in review of recommendations and the action plan, seeking input on implementation. This will be complemented by the engagement of the provinces and territories in their own jurisdictions.

College Enrolment⁵²

According to data in the Post-secondary Student Information System (PSIS), enrolment at publicly funded colleges and polytechnics has steadily increased in Canada over the past decade. PSIS data indicate that close to 740,000 students were enrolled in post-secondary programs at publicly funded colleges and polytechnics in 2012–13.⁵³ Figure 9 shows this enrolment by province/territory. College enrolments are higher than PSIS data suggest, as PSIS excludes apprenticeship enrolments and enrolment data for some institutions is not yet recorded in the system.

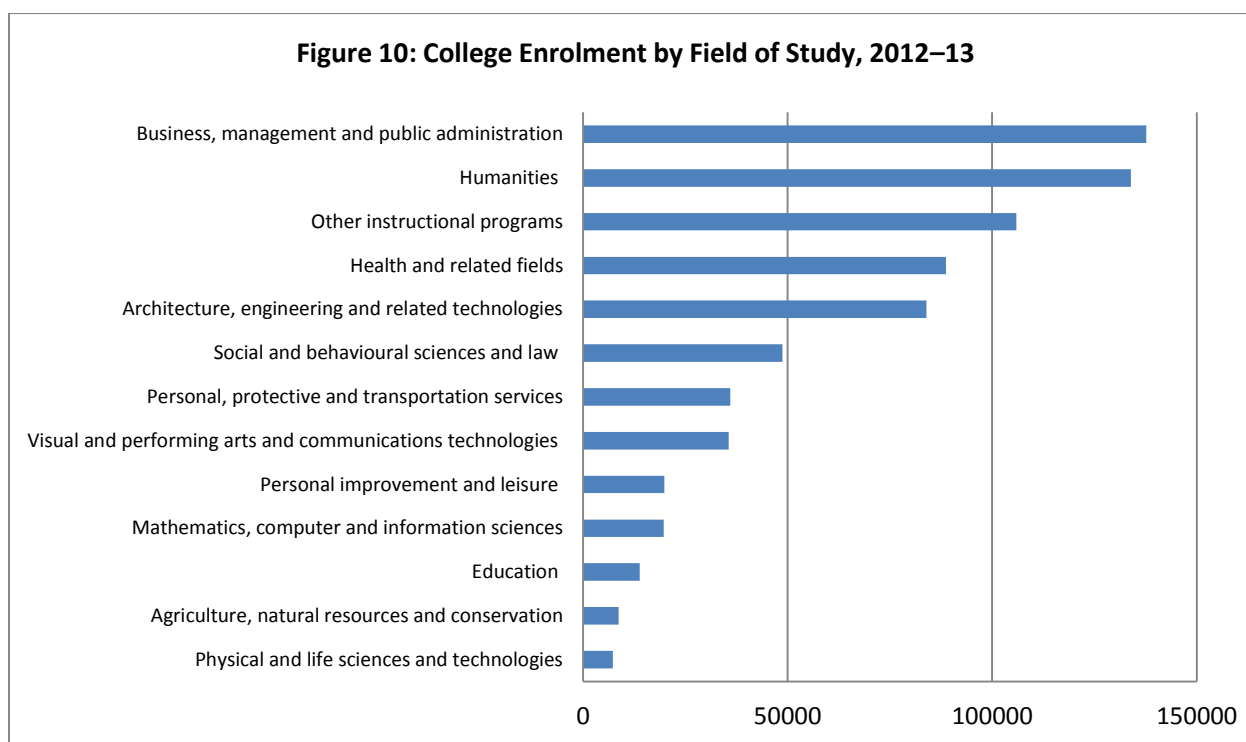


Source: Statistics Canada, CANSIM table 477-0019.

Figure 10 shows the most popular fields of study at the college level, which includes business, management, and public administration; the humanities (concentrated at Québec's CEGEPs); health and related fields; and architecture, engineering, and related technologies.

⁵² In the following three sections, the term “college” refers only to publicly funded colleges, institutes, and polytechnics. There is no reliable source of aggregate data on students studying in private career colleges in Canada.

⁵³ CANSIM table 477-0019.



Source: Statistics Canada, CANSIM table 477-0019.

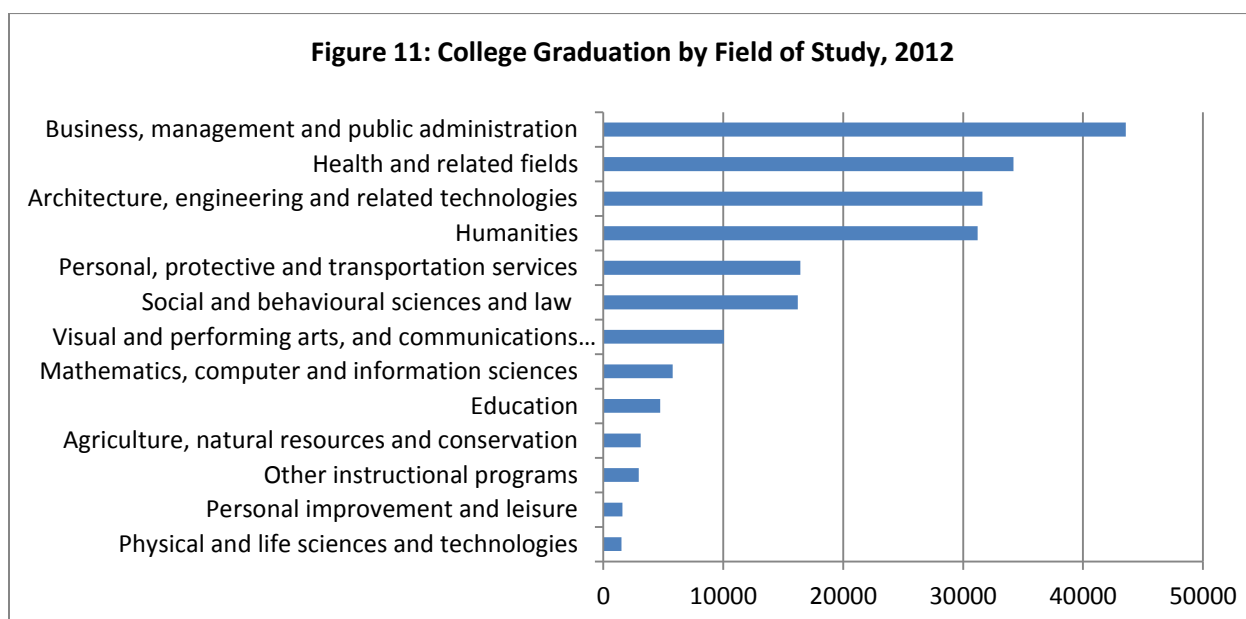
In 2010, the median age of college students at the time of graduation was 24 years old, and the average age was 28 years old.⁵⁴ The average age increased by two years since 2005. This may be related to the increase in students delaying entry to post-secondary education from high school and an increase in mature students participating in training at the college level. It may also be due to the fact that a somewhat higher proportion (47%) of college graduates in 2010 compared to 2005 (45%) had previously participation in post-secondary education.⁵⁵

College Completion

College completion has also risen over the last decade. In 2012, over 200,000 students graduated from college programs in Canada. The majority of graduates from college programs came from business, management, and public administration; health and related fields; architecture, engineering, and related technologies; and humanities fields of study.

⁵⁴ S.J. Ferguson and S. Wang, National Graduate Survey (2014). *Graduating in Canada: Profile, Labour Market Outcomes and Student Debt of the Class of 2009–2010*. Statistics Canada, <http://www.statcan.gc.ca/pub/81-595-m/81-595-m2014101-eng.htm>.

⁵⁵ Ibid.



Source: Statistics Canada, CANSIM table 477-0020.

While the number of graduates from colleges continues to rise, not all students complete their programs. A study done using the Youth in Transition indicated that Canada had a non-completion rate of 24% at the college level and 22% in other non-university PSE institutes (which includes technical institutes, trade/vocational schools, private training institute or business schools, or any other school above high school).⁵⁶ Despite the college non-completion rate, Canada continues to have the highest college attainment rate in the OECD.⁵⁷

Completion or graduation rates are an important indication of the effectiveness of college education. Compared to those who do not complete them, students who complete their college programs enjoy improved prospects for employment and income. Colleges measure the graduation rate for each program and explore ways to improve completion. At a more aggregate level, they often publish completion rates for program clusters as a key performance indicator.

Barriers to College Enrolment and Completion

Preparation for the college environment

Gaps in foundational numeracy and mathematics skills may result in barriers for students who want to pursue college programs. High schools and colleges are working together to ensure that high school education equips students to enrol in the college program of their choice.

⁵⁶ D. Shaienks and T. Gluszynski (2009). *Education and Labour Market Transitions in Young Adulthood*. Statistics Canada, <http://www.statcan.gc.ca/pub/81-595-m/81-595-m2009075-eng.pdf>

⁵⁷ OECD *Education at a Glance* (2014). http://www.keepeek.com/Digital-Asset-Management/oecd/education/education-at-a-glance-2014_eag-2014-en#page7

Non-traditional learners face barriers to participation in PSE, including VET programs. Adults returning to education after having spent some time in the workplace may need to review the material they learned in high school. In addition, there are still many individuals who did not receive an adequate high school education but hold a high school diploma. This gap has a disproportionate effect on certain groups, such as Aboriginal peoples, who have a high rate of high school non-completion—often because there is limited access to high schools in rural and remote communities.

The mandate of colleges and polytechnics to help a wide range of students prepare for secure, well-paid employment creates a number of challenges with respect to completion. Students who get job offers before they graduate or who decide to go to university may leave college early. Students with unclear career goals may change their minds while studying, temporarily leave school, and enter the labour market before switching to a more suitable academic program. The focus of colleges on access also means that students may initially lack the academic preparation or the personal resources required to complete their programs.

Misperceptions about college education

Because publicly funded colleges, polytechnics, and career colleges enrol students from various backgrounds and academic abilities, there is a perception that they offer a less “prestigious” form of education. In reality, the skills sets taught at college are very much in demand in the labour market. In its 2014 *Economic Survey of Canada*, the OECD found that college and apprenticeship programs will play a key role in alleviating skills shortages in the economy.⁵⁸

Other barriers facing college students

A recent study conducted by the Higher Education Quality Council of Ontario asked students who were voluntarily leaving select Toronto colleges why they chose to leave their program.⁵⁹ Students cited:

- Family, personal, and/or health issues (17% of leavers);
- Financial considerations (13%);
- Change in academic interests or plans (11%);
- Loss of interest in, or dissatisfaction with, the program (10%);
- Employment (9%); and
- Academic issues (8%).

⁵⁸ OECD (2014). http://www.oecd.org/eco/surveys/Overview%20CANADA_2014.pdf

⁵⁹ T.S. Lopez-Rabson and U. McCloy (2013). *Understanding Student Attrition in the Six Greater Toronto Area (GTA) Colleges*. Higher Education Quality Council of Ontario, <http://www.heqco.ca/SiteCollectionDocuments/Final%20Formatted%20Seneca%20Student%20Attrition.pdf>

Three months after leaving their college program, 60% of leavers were working full or part time and 10% were looking for work. Only 9% had started new programs, while a small number were traveling, caring for a family member, were ill, or “doing nothing”. This focus on moving from education to work does not, however, represent a long-term rejection of college studies: 85% of the leavers who did not already have another credential and who had not enrolled in a new program at the time of the survey said that they planned to return to college at a later time.

Supports to Facilitate College Enrolment and Completion

Prior learning recognition

Colleges use Prior Learning Assessment and Recognition (PLAR) tools to help adult learners identify, articulate, and demonstrate relevant learning acquired through life and work experiences, and to translate this learning into college credit.⁶⁰ Credits earned through PLAR may help reduce the amount of in-class time required to earn a credential, lower the cost of education, and encourage placement in a certificate or diploma program at an appropriate level. PLAR takes the form of either a portfolio assessment or a challenge examination.

Institutional supports

Colleges apply a variety of approaches to help students commit to and complete programs. They offer a supportive learning environment focused on teaching and student success, link learning requirements to real world employment situations, and offer programs of different lengths and in different fields to appeal to a range of student interests and abilities. In addition, colleges offer remedial education to those who need it, as well as student support services, such as mathematics and English tutoring, peer support, and career and academic counselling.

The ability of students to transfer between postsecondary institutions is widely recognized by Canadian jurisdictions as a foundation of a strong post-secondary system. In 2009, CMEC endorsed the Ministerial Statement on Credit Transfer, which outlined the principles of effective credit transfer among institutions in Canadian jurisdictions. The Pan-Canadian Consortium on Admissions and Transfer was established to facilitate a discussion of policies and practices for implementing credit transfer in provinces and territories through work with regional councils on credit transfer, institutions, and other stakeholders.⁶¹ Jurisdictional and regional councils on credit transfer have been established, including:

- New Brunswick’s Council on Articulations and Transfer
- Alberta’s Council on Admissions and Transfer
- British Columbia’s Council on Admissions and Transfer
- Ontario’s Council on Admissions and Transfer

⁶⁰ For more information on PLAR, see: <http://capla.ca/what-is-pla/>

⁶¹ For more information on the Pan-Canadian Consortium on Admissions and Transfer, see: <http://www.uwindsor.ca/pccat/>

Through these organizations and CMEC, efforts are underway to build a better understanding of student pathways through the post-secondary system, and to provide students with opportunities to better transition within the system.

Student financial assistance

Post-secondary students in Canada take advantage of a diverse and well-developed system of financial assistance that is provided by both the federal and provincial/territorial governments. In 2009–10, Canadian governments provided an estimated \$8.3 billion in financial assistance to its post-secondary students, of which 39% came in the form of loans, 29% in tax remissions, and 14% in grants.⁶² While the specific elements of financial assistance students receive varies from jurisdiction to jurisdiction, post-secondary students have access to a suite of supports that includes loans, grants and loan remission, tax credits and savings incentive programs, and merit scholarships.

Student loans play a role in supporting access to eligible VET programs by providing financial support to Canadians enrolled in full- or part-time studies.⁶³ The Government of Canada works in partnership with participating provincial and territorial governments to deliver financial assistance to Canadian students. Participating provinces and territories determine eligibility and assess students' financial need based on agreed criteria and award the aid by issuing a loan certificate; they also designate eligible educational institutions. Applicants for federal and provincial loans and grants are assessed through a single application process. For full-time study, roughly 60% of funding is provided by the Canada Student Loans Program (CSLP) and 40% by provincial or territorial loan programs.⁶⁴

Québec, the Northwest Territories, and Nunavut do not participate in the CSLP, but offer their own student financial assistance programs. They receive alternative payments from the Government of Canada to assist in the operation of those programs. In the 2011–12 academic year, these payments amounted to approximately \$258 million.

Many students are also eligible for immediate non-repayable grants. For instance, the federal Canada Student Grants target students from groups traditionally under-represented in PSE, such as students from low- and middle-income families.⁶⁵ Some grants are paid in the form of loan remissions at the end of each eligible study period.

⁶² Government of Ontario (2012). *Commission on the Reform of Ontario's Public Service*, <http://www.fin.gov.on.ca/en/reformcommission/chapters/ch7.html>

⁶³ Programs must lead to a degree, diploma, or certificate at a designated post-secondary institution and run for least 12 weeks in a 15-week period.

⁶⁴ Employment and Social Development Canada (2014). *Canada Student Loans Program: Annual Report 2012–2013*, http://www.esdc.gc.ca/en/reports/cslp_cesp/cslp_2013.page.

⁶⁵ For more information on the Canada Student Grants, see:

http://www.canlearn.ca/eng/loans_grants/grants/

The Government of Canada and participating partner provinces and territories have taken further steps to support access to post-secondary education by helping borrowers manage their student loans in repayment. The Repayment Assistance Plan (RAP) allows those who have difficulty repaying their loans to pay back only what they can reasonably afford.⁶⁶ The plan ensures a borrower does not have a repayment period of more than 15 years, or 10 years for borrowers who have permanent disabilities. It also ensures borrowers do not make payments exceeding 20% of their family income. RAP benefited 165,000 borrowers in 2010–11.⁶⁷

The Canada Education Savings Grant (CESG) has been developed to help the next generation of learners participate in full- or part-time studies in an apprenticeship program, CEGEP, trades school, polytechnic, college, or university, including both public and private institutions.⁶⁸ The basic CESG is a 20% match for Registered Education Savings Plan (RESP) contributions that are made for an eligible beneficiary until the end of the calendar year in which the beneficiary turns 17 years old. For families with low net income, there is an additional CESG payment over and above the basic CESG amount of either 10% or 20% on the first \$500 or less of annual RESP contributions, which is made until the beneficiary turns 17.

Provision of learning and labour market information

To facilitate youth participation in VET, each province and territory provides employment assistance services online. The Government of Canada also provides key labour market information to help youth make decisions about their field of study.

The Government of Canada has modernized its Job Bank website to include a new Job Match Service feature.⁶⁹ The upgraded job matching service will allow Canadians to match their skills and knowledge to available jobs. As part of the new website, the Government of Canada will also be introducing a tool designed to help students and their influencers (i.e., parents, guidance counsellors) make more informed post-secondary education choices by providing job market information—such as wage trends and employment rates—disaggregated by field of study.

The Government of Canada also produces the Career Handbook, a resource that is an integral part of the career counselling process for recent graduates and workers in mid-career transition.⁷⁰ The Career Handbook covers 923 occupational profiles for

⁶⁶ For more information on RAP, see:

http://www.canlearn.ca/eng/loans_grants/repayment/help/repayment_assistance.shtml

⁶⁷ Canada Student Loans Program Annual Report 2010–2011. Employment and Social Development Canada, http://www.esdc.gc.ca/en/reports/cslp_cesp/cslp_2011.page

⁶⁸ For more information on the Canada Education Savings Grant, see:

<http://www.canlearn.ca/eng/savings/cesg.shtml>

⁶⁹ For more information on Job Bank, see: www.jobbank.gc.ca

⁷⁰ For more information on the Career Handbook, see:

<http://www5.hrsdc.gc.ca/noc/English/CH/2001/Welcome.aspx>

counselling based on Canada's National Occupational Classification system, and includes information on aptitudes, interests, physical activities, environmental conditions, education/training indicators, career progression, and work settings.

Through the CanLearn website, the Government of Canada provides information about the costs and benefits associated with PSE, and on how best to save, plan, and pay for that education.⁷¹ This website contains an array of information on PSE programs and available loans, grants, scholarships, and bursaries. It also provides student financial assistance-related tools, such as a loan repayment estimator and parental contribution calculator, which are intended to help students and their families make informed decisions about PSE.

Assisting skills development for the unemployed and underemployed

Although it has fallen consistently since the peak of the 2008 recession, Canada's unemployment rate has remained above 6.5%.⁷² Skills development plays a critical role in combatting unemployment: The unemployment rate is twice as high for individuals who have not completed high school as for those who have. Both orders of government assist the unemployed in obtaining VET and other skills to facilitate a return to employment.

The Government of Canada supports provincial and territorial programs through fiscal transfers to provinces and territories, such as Labour Market Development Agreements⁷³ and Labour Market Agreements (LMAs).⁷⁴ Under the Labour Market Agreements, the Government of Canada provided funding from 2008 to 2014 to provincial and territorial governments for labour market programs or services designed to improve the labour force participation of Canadians.

In *Economic Action Plan 2013*, the Government of Canada announced the introduction of the Canada Job Grant to better align training with labour market needs.⁷⁵ The Government of Canada worked with provincial and territorial governments to transform the existing LMAs into the new Canada Job Fund agreement, which covers the Canada Job Grant.⁷⁶ The Canada Job Grant will encourage greater employer participation in skills training decisions and ensure that training is better aligned with job opportunities,

⁷¹ To view the CanLearn website, see: www.canlearn.ca

⁷² Labour Force Survey (January 2013). <http://www.statcan.gc.ca/daily-quotidien/130208/dq130208a-eng.htm>

⁷³ See p. 25 for more information.

⁷⁴ For more information on Labour Market Agreements, see: <http://www.hrsdc.gc.ca/eng/employment/partnerships/lma/index.shtml>

⁷⁵ For more information on the Canada Job Grant, see: <http://actionplan.gc.ca/en/initiative/canada-job-grant>

⁷⁶ The governments of Canada and Québec have negotiated an agreement for the transfer of funds under the Canada Job Fund. This agreement recognizes that the key principles behind the Canada Job Grant—greater employer involvement and employer investment in training—are already formally and legislatively entrenched in the Quebec training system.

particularly in sectors facing skills mismatches and labour shortages. The Grant will require matching from employers, but in recognition of the particular challenges they face, small businesses will benefit from greater flexibility in their cost-matching arrangements. As the cornerstone of the new agreements, the Canada Job Grant will:

- Help Canadians get the training they need for available jobs;
- Put skills training decisions in the hands of employers;
- Provide up to \$15,000 per person for training costs, such as tuition and training materials, which includes up to \$10,000 in federal contributions; and
- Require employers to contribute on average of one-third of the total costs of training.

Supports for Specific Populations

Both orders of government provide supports to groups that face particular barriers in the labour market, in education, or in trades training.

Aboriginal peoples

Based on data from the 2011 National Household Survey, 1.4 million people identify as Aboriginal, representing 4.3% of the total Canadian population.⁷⁷ The Aboriginal population grew significantly faster than the general population between 2006 and 2011: It increased by 232,385 people, or 20.1%, compared to a 5.2% increase in the non-Aboriginal population. Despite the recent drop in oil prices, strong economic conditions are forecast for much of Western Canada and significant major projects planned in the North create opportunities for both Aboriginal peoples and employers to benefit from this population growth.

The Canadian VET system is relatively accessible to people who are under-represented in post-secondary education, such as Aboriginal peoples. In 2011, 48.4% of off-reserve Aboriginal peoples aged 25–64 had a post-secondary qualification compared to the Canadian average of 64.7%.⁷⁸ This gap in educational attainment can be accounted for by differences at the university level, where 31.4% of the non-Aboriginal population has a bachelor's degree or a university certificate below the BA level, compared to 13.3% of the Aboriginal population. At the college level, both groups have a college attainment rate of approximately 21%. This trend reverses at the trades level, where 14.4% of the Aboriginal population has a trades certificate compared to 12% of the non-Aboriginal population.⁷⁹ Despite this relatively higher VET attainment, a gap persists in the transition of Aboriginal peoples to employment: Compared to Canada's non-Aboriginal population, Aboriginal youth are three times more likely to have dropped out of high

⁷⁷ National Household Survey (2011). *Aboriginal Peoples in Canada: First Nations People, Métis and Inuit*. Statistics Canada, <http://www12.statcan.gc.ca/nhs-enm/2011/as-sa/99-011-x/99-011-x2011001-eng.cfm#a1>

⁷⁸ National Household Survey (2011). *The educational attainment of Aboriginal peoples in Canada*. Statistics Canada, http://www12.statcan.gc.ca/nhs-enm/2011/as-sa/99-012-x/99-012-x2011003_3-eng.cfm

⁷⁹ Ibid.

school, and Aboriginal peoples aged 25–64, regardless of their educational attainment, are significantly less likely to be employed full time.⁸⁰

Supports for Aboriginal peoples

Many initiatives exist to help Aboriginal peoples access VET training and transition into the workforce.

Manitoba's E-Apprenticeship and Mobile Training Labs (MTL) allow rural and Northern apprentices to access on-the-job training in their own communities. E-Apprenticeship provides technical training online for specific trades. MTLs are portable labs that move across Manitoba communities, enabling greater access to technical "in-class" training for rural and Northern apprentices.

Manitoba's Community-Delivered Training (CDT) model provides rural and Northern First Nations, Métis, and Inuit apprentices with the opportunity to complete the technical training component of their apprenticeship in or near their home communities. On-site training gives communities the opportunity to develop or enhance facilities that complement local infrastructure. The MTLs can be used in conjunction with CDT.

The Government of New Brunswick gives funding to New Brunswick Community College to provide block training to apprentices within First Nations communities.

The Northern Apprenticeship Committee of Saskatchewan, a collaboration of employers, training institutions, and agencies, works to advance the entry of Northern residents into the trades.

At the federal level, the Aboriginal Skills Employment and Training Strategy (ASETS) is a federal partnership with the private sector, provinces and territories, and learning institutions.⁸¹ It supports training, education, skills development, and employment opportunities for Aboriginal clients. The Government of Canada has provided Aboriginal organizations across the country with \$1.68 billion over five years (2010–15) to prepare First Nations, Inuit, and Métis individuals for sustainable, meaningful employment. Agreement holders design and deliver employment services to meet the needs of their local communities. There are currently 84 agreement holders with over 600 points of service across Canada.⁸²

⁸⁰ C. Ciceri & K. Scott (2006). *The determinants of employment among Aboriginal peoples*. In J.P. White, S. Wingert, & P. Maxim (Eds). *Aboriginal policy research: Moving forward, making a difference, Volume 3* (pp. 3–34). Toronto: Thompson Educational Publishing.

⁸¹ For more information on the Aboriginal Skills Employment and Training Strategy, see:

http://www.hrsdc.gc.ca/eng/employment/aboriginal_employment/index.shtml

⁸² Federal Framework for Aboriginal Economic Development – Progress Report – June 2014. Aboriginal Affairs and Northern Development Canada, <https://www.aadnc-aandc.gc.ca/eng/1404919955464/1404921311609>

The Skills and Partnership Fund (SPF), which was launched in July 2010 with funding of \$210 million over five years, helps integrate Aboriginal peoples into the labour market through support for projects that encourage innovation and partnerships, and that increase Aboriginal skills development and participation in the labour market.⁸³ As a partnership-based, opportunity-driven fund, SPF supports projects that test new approaches to the delivery of employment services and address systemic gaps in service delivery. It has the flexibility to respond to skilled labour shortages, and is currently focused on projects that address employer demand for skilled workers in the mining and energy sectors.

Canada's *Economic Action Plan 2013* announced \$241 million over five years to improve the on-reserve Income Assistance Program to help Aboriginal youth access the skills and training they need to secure employment.⁸⁴ This includes a new First Nations Job Fund, totalling \$109 million over five years, to fund the provision of personalized job training for recipients. In addition, \$132 million over five years will be provided to First Nations communities to create the service delivery infrastructure, including counselling support, that is necessary to effectively support and ensure compliance among on-reserve Income Assistance recipients. Funding will be accessible only to those reserve communities that implement mandatory participation in training for young Income Assistance recipients.

Persons with disabilities

As the Canadian population ages, persons with disabilities represent an increasingly important segment of the labour market. Their labour force participation rate (56.1%) lags the national average by 21.7 percentage points.⁸⁵ Most persons with disabilities acquire a disability in their working years—after completing their education and gaining job experience. This makes them “work ready”, often only requiring minor accommodations or a modified work schedule to be able to work.⁸⁶

⁸³ For more information on the Skills and Partnership Fund, see:

http://www.hrsdc.gc.ca/eng/employment/skills_partnership/index.shtml

⁸⁴ For more information on the Income Assistance Program, see:

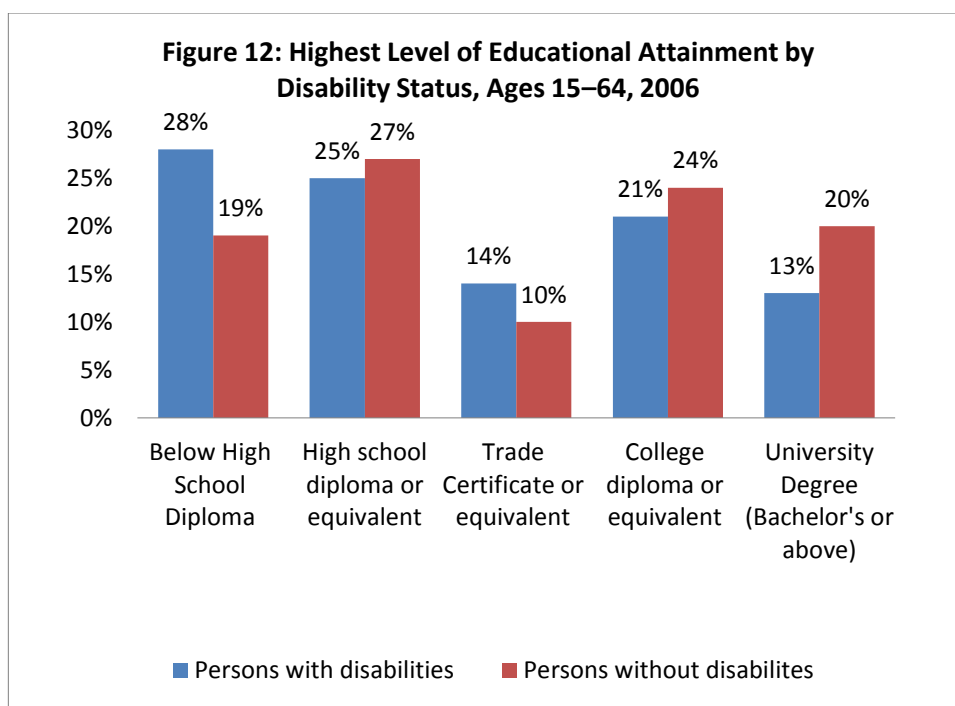
<http://actionplan.gc.ca/en/initiative/training-reserve-income-assistance-recipients>

⁸⁵ D. Galarneau & M. Radulescu (2009). *Employment among the disabled*. Statistics Canada,

<http://www.statcan.gc.ca/pub/75-001-x/2009105/article/10865-eng.htm>

⁸⁶ The Panel on Labour Market Opportunities for Persons with Disabilities Report (2013). *Rethinking DisAbility in the Private Sector: We All Have Abilities, Some Are Just More Apparent Than Others*. Employment and Social Development Canada,

http://www.esdc.gc.ca/eng/disability/consultations/rethinking_disabilities.shtml



Source: Census, 2006.

Supports for persons with disabilities

Many initiatives exist to help persons with disabilities access VET training and transition into the workforce. New Brunswick's Training and Employment Support Services offers training and employment assistance to persons with disabilities.

Saskatchewan's Workforce Development for Persons with Disabilities program provides a variety of supports to help persons with disabilities acquire necessary training and transition successfully into the labour market. Supports include assistance to cover disability-related costs for a wide variety of PSE and training programs.

Labour Market Agreements for Persons with Disabilities (LMAPD) are an annual transfer of \$222 million from the Government of Canada to provinces and territories for programs and services designed to improve the employment situation of persons with disabilities by enhancing their employability, increasing the employment opportunities available to them, and building on their existing knowledge base.⁸⁷ This funding supports programs and services that are designed and delivered by provinces and territories up to a maximum amount specified in each bilateral agreement. This amount is then matched by each jurisdiction.

The Opportunities Fund (OF) for Persons with Disabilities currently provides \$30 million annually to assist persons with disabilities who have little or no labour force

⁸⁷ For more information on LMAPDs, see:

http://www.esdc.gc.ca/eng/jobs/training_agreements/lma_disabilities/index.shtml

attachment.⁸⁸ This program helps them prepare for, obtain, and keep employment, or become self-employed. *Economic Action Plan 2013* committed to maintain ongoing funding of \$40 million per year starting in 2015–16, as well as to reform the program so that it provides more demand-driven training solutions for persons with disabilities and is more responsive to labour market needs. Employers and community organizations will be involved in project design and delivery.

The Enabling Accessibility Fund invests \$15 million annually in projects that support the capital costs of construction and renovations related to improving physical accessibility and safety for people with disabilities in Canadian communities and workplaces.⁸⁹ To date, the fund has financed over 1,400 projects. The Government of Canada has also introduced a number of specific measures for persons with disabilities that are delivered through the tax system that facilitate their integration into the labour market.

Older Canadians

Older workers represent the largest potential pool of experienced and skilled labour in Canada. The number of older workers is growing, but many are on the cusp of retirement. However, many older workers are willing to continue to work if alternative work arrangements are available (e.g., flexible working hours, better adapted places of work, and combined pension and work opportunities).

To support the participation of older workers in the labour market, the Government of Canada introduced the Targeted Initiative for Older Workers (TIOW).⁹⁰ TIOW is a federal-provincial/territorial cost-sharing initiative designed to assist unemployed older workers (aged 55–64) in communities of 250,000 people or less that are affected by significant downsizing, closures, or ongoing high unemployment. TIOW programming is aimed at reintegrating these individuals into employment, and may include vocational education and training support.

Canadian veterans

Between 2001 and 2014, 40,000 Canadian Armed Forces members served in Afghanistan. As these veterans have returned to Canada, some have encountered difficulty translating the skills they acquired in the military to the civilian workforce.

The Government of Canada has committed to supporting veterans by providing them with skills and job opportunities to transition from military to civilian life. For example, the Government of Canada contributed \$150,000 through Veteran Affairs Canada's Community Engagement Partnership Fund to support Helmets to Hardhats, a program

⁸⁸ For more information on OF, see: <http://actionplan.gc.ca/en/initiative/opportunities-fund-persons-disabilities>

⁸⁹ For more information on the Enhancing Accessibility Fund, see: <http://www.esdc.gc.ca/eng/disability/eaf/index.shtml>

⁹⁰ For more information on the TIOW, see: http://www.esdc.gc.ca/eng/jobs/training_agreements/older_workers/index.shtml

that brought union, private-, and public-sector resources together to provide veterans, Canadian Armed Forces members, and reservists with access to a range of careers in the construction industry, including apprenticeships in various building trades.⁹¹ The program is modeled after the Helmets to Hardhats program in the United States.

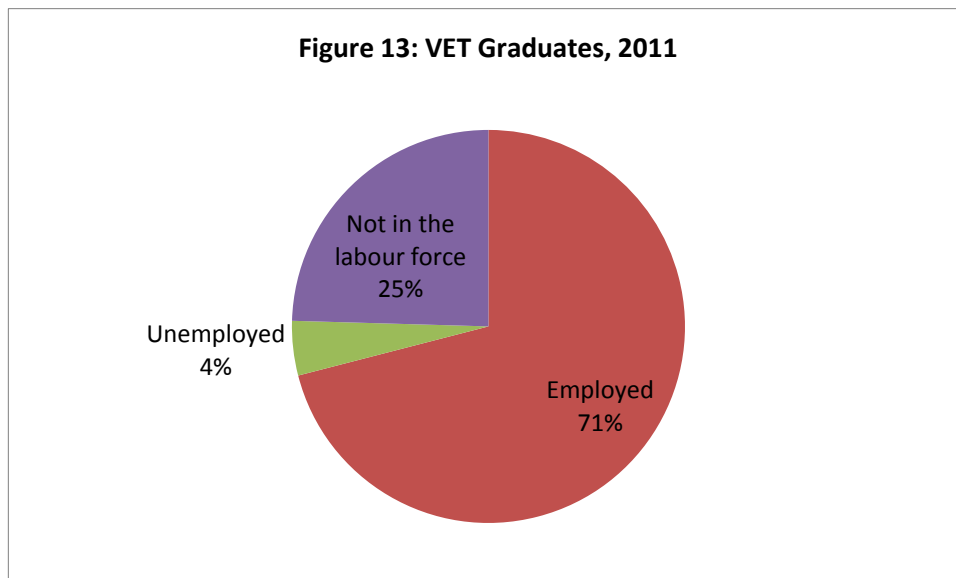
⁹¹ For more information on the Helmets to Hardhats program, see:
<http://helmetstohardhats.ca/en/home.htm>

MOVING FROM VET INTO THE LABOUR MARKET

While VET can be a springboard to further study, the primary focus of Canada's VET systems is preparing people for employment. VET strives to give people the skills they need to succeed in the labour market.

Labour Market Participation

The majority of college and polytechnic students and apprentices enter the labour market after graduating, most of which are employed. Apprentices and college graduates fare significantly better in the labour market than high school graduates, and employer job vacancy data suggests VET graduates are in high demand.⁹² College education is also in demand. A survey of post-secondary graduates showed that 15% of university graduates pursued further studies at a college, and an additional 15% acquired a college credential.⁹³



Source: Statistics Canada, CANSIM table 282-0004.

Earnings

The Census 2006 data suggest that employers attach value to college diplomas and certificates and trades qualifications. The return to a college diploma relative to a high school diploma is typically around 15–20%. The trades premium varies widely by trade, with higher premiums in certain fields. For example, the 2007 National Apprenticeship Survey, which exclusively surveyed apprentices, found an average annual income of

⁹² Department of Finance (2014). *Job Report: the State of the Canadian Labour Market*, <http://www.budget.gc.ca/2014/docs/jobs-emplois/pdf/jobs-emplois-eng.pdf>

⁹³ S.J. Ferguson & S. Wang (2014). *Graduating in Canada: Profile, Labour Market Outcomes and Student Debt of the Class of 2009–2010*. Statistics Canada, <http://www.statcan.gc.ca/pub/81-595-m/81-595-m2014101-eng.pdf>

approximately \$59,000 for apprenticeship completers and \$49,500 for apprenticeship discontinuers.⁹⁴ The same study also demonstrates that apprentices who complete their program and become certified have hourly wages that are 25% higher than those who do not complete and do not become certified.⁹⁵ In addition, individuals who complete have better earnings potential, greater job satisfaction, and are more employable.

Projected Need

The demand for VET occupations is demonstrated by the economic recovery that followed the 2008–09 global recession. During that recession, 465,000 jobs were lost in Canada, but since July 2009, the Canadian economy has created over 1.2 million net new jobs.⁹⁶ While the number of new jobs is greater than those that were lost, the skills profile required to fill these jobs has changed substantially. Between January 2011 and February 2013, occupations requiring a college education or apprenticeship training recorded the largest gains in employment. These occupations grew by 5% and represented 267,000 of the 465,000 jobs created between January 2011 and February 2013.⁹⁷ Occupations requiring a university education also grew by 4%, or 120,000 jobs over the period.⁹⁸ Growth was much smaller for occupations requiring a high school diploma or less (1%, or 62,000 jobs).⁹⁹

Figure 14 shows the job openings from expansion and replacement demand by skill level between 2011 and 2020. The Canadian Occupational Projection System indicates that two-thirds of all job openings over the next decade are expected to be in occupations that typically require post-secondary education or that are in management.¹⁰⁰ Of these occupations, the largest share will continue to be jobs that typically require a college education.¹⁰¹ For example:

- The Construction Sector Council notes that between 2012 and 2020, the construction sector will need 319,000 new workers.¹⁰²
- The Mining Industry Human Resources Council forecasts that—even under a contractionary scenario—the industry will need at least 116,000 workers to sustain even modest growth over the next decade.¹⁰³

⁹⁴ C. Laporte & R. Mueller (2012). *Certification, Completion and the Wages of Canadian Registered Apprentices*. Statistics Canada, <http://www.statcan.gc.ca/pub/11f0019m/11f0019m2012345-eng.pdf>

⁹⁵ Ibid.

⁹⁶ Department of Finance (2014). *Pre-Budget Consultations*, <http://www.fin.gc.ca/n14/14-170-eng.asp>

⁹⁷ S. Uppal & S. LaRoche-Côté (2013). *Employment changes across industries during the downturn and recovery*. Statistics Canada, <http://www.statcan.gc.ca/pub/75-006-x/2013001/article/11775-eng.pdf>

⁹⁸ Ibid.

⁹⁹ Ibid.

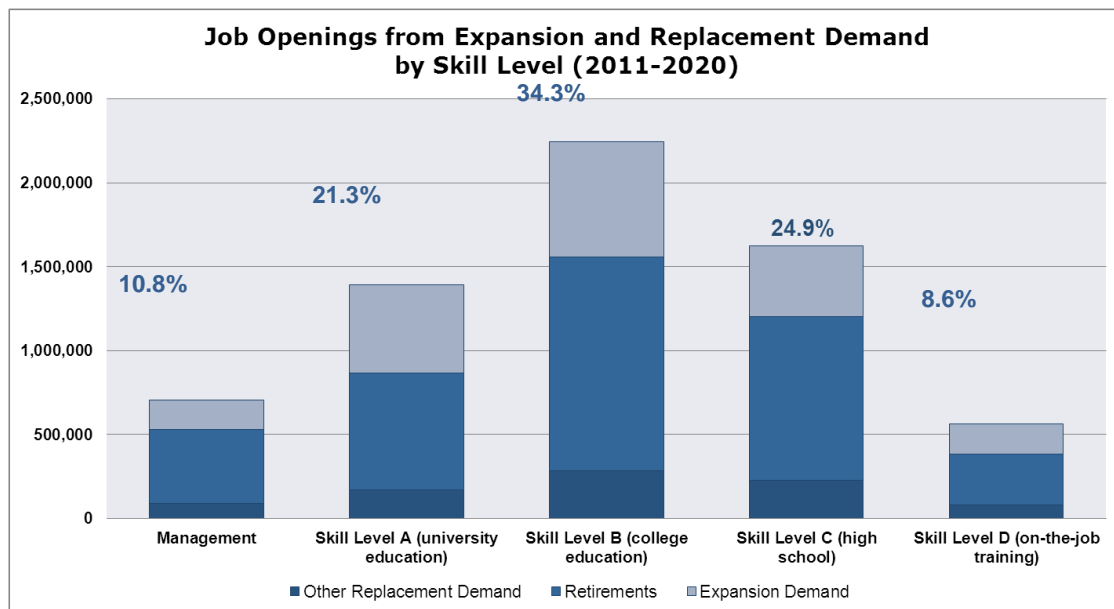
¹⁰⁰ The Canadian Occupational Projection System (2011), <http://www23.hrsdc.gc.ca/w.2lc.4m.2@-eng.jsp>

¹⁰¹ Although rates of growth will be faster for jobs requiring a university education.

¹⁰² BuildForce Canada (2012). *Priority on recruiting, training and managing trade mobility for resource projects*, <http://www.buildforce.ca/en/media/press-release/2012/04/19/construction-canada-enters-2nd-decade-strong-growth>.

- The Conference Board of Canada predicts that, by 2020, the gap between the supply and demand of truck drivers will be on the order of 25,000–33,000.¹⁰⁴
- The Canadian Association of Petroleum Producers finds that over the next decade, total hiring needs for direct oil and gas jobs range between 125,000 and 150,000 due to industry activity, age-related attrition and nonretirement turnover.¹⁰⁵

Figure 14: Job Openings from Expansion and Replacement Demand by Skill Level (2011–20)



Source: Canadian Occupational Projection System, 2011.

Measures to Support Transition to the Labour Market

Both orders of government provide supports to help VET graduates transition into the labour market.

The provinces and territories are working to create easier pathways for vocational certificate graduates to start their own businesses. Manitoba's New Journeyperson

¹⁰³ Mining Industry Human Resources Council (2013). *Canadian Mining Industry Employment, Hiring Requirements and Available Talent – 10-year Outlook*, http://www.mihrc.ca/en/resources/MiHR_10_Year_Outlook_2013.pdf

¹⁰⁴ V. Gill & A. Macdonald. *Executive Summary: Understanding the Truck Driver Supply and Demand Gap and Its Implications for the Canadian Economy*. Conference Board of Canada, <http://www.conferenceboard.ca/topics/energy-enviro/truckdrivers.aspx>

¹⁰⁵ Petroleum Human Resources Council of Canada (2013). *The Decade Ahead: Labour Market Outlook to 2022 for Canada's Oil and Gas Industry*, http://www.iecbc.ca/sites/default/files/Enform%20Petroleum%20Labour%20Market%20Information%20canada_labour_market_outlook_to_2022_report_may_2013.pdf

Business Start program provides a start-up grant of up to \$5,000 for new journeypersons who want to start a business by themselves or in partnership with other new journeypersons (the business must be located in rural Manitoba). The applicant would also be eligible to receive an additional \$2,000 for hiring an apprentice within a three-year period.

The New West Partnership Trade Agreement is an accord among the governments of British Columbia, Alberta, and Saskatchewan that seeks to reconcile or provide mutual recognition of occupational standards so that skilled tradespeople certified in one province will be recognized as qualified in all three provinces.¹⁰⁶

Alberta and Saskatchewan have implemented the Blue Seal Program.¹⁰⁷ The program is designed to encourage journeypersons to continue to learn after they have achieved journeyperson status, and specifically, to encourage them to gain business skills. The Blue Seal demonstrates that a journeyperson has successfully achieved a reasonable level of business education and knowledge of various business subject areas. Tradespeople who complete the Blue Seal program may move into leadership, supervisory, entrepreneurial, and other roles.

The federal Youth Employment Strategy (YES) assists transition into the labour market.¹⁰⁸ YES helps young people aged 15–30 acquire the skills and work experience they need to overcome barriers to gaining and maintaining employment. The main focus of YES is to provide youth with workplace training, employment experience, and employability skills. This goal is achieved by targeting youth who have not completed high school, Aboriginal and newcomer youth, lone parent youth, and others. YES also subsidizes employment for recent post-secondary graduates and provides wage subsidies for summer jobs.

In addition, both orders of government provide learning and labour market information to the public to facilitate youth participation in the labour market.¹⁰⁹

CONCLUSION

Canada's vocational education and training system performs well. The number of people enrolling in VET programs continues to increase, as does the number of Canadians who hold VET credentials. Overall, the labour market outcomes of these graduates are strong.

¹⁰⁶ For more information on the New West Partnership, see:
http://www.newwestpartnershiptrade.ca/the_agreement.asp

¹⁰⁷ For more information on the Blue Seal Program, see: <http://www.saskapprenticeship.ca/blue-seal-program/>

¹⁰⁸ For more information on YES, see:
<http://www.servicecanada.gc.ca/eng/epb/yi/yep/newprog/yesprograms.shtml>

¹⁰⁹ See pp. 36–37 of this report for more information on learning and labour market information.

Provinces and territories have developed well-governed VET systems that respond to local education and training needs, while at the same time recognizing the broader skills needs of the Canadian society and economy. In partnership with provincial and territorial governments, the Government of Canada has played an important part in supporting the development of these systems.

Canadians can typically choose from a wide variety of VET options offered by a broad range of providers, including publicly funded colleges, institutes, and polytechnics, as well as private career colleges and union training centres. Employers play a key role in VET systems, both through their provision of apprenticeship training and through their engagement with educational and training institutions. A broad variety of programs at the federal and provincial/territorial levels—as well as at individual institutions—support individuals' choices, help learners fund their training, and provide them with work experiences. These programs recognize the particular needs of a variety of groups, including Aboriginal peoples, people with disabilities, older Canadians, and veterans.

Overall economic growth and the individual prosperity of Canadians rely, in part, on high-quality, responsive, accessible vocational education and training systems. VET programs link directly to the evolving needs of employers, teaching practical skills demanded by the labour market. As the baby boom generation retires, as Canada further develops its rich natural resources, and as technological change drives an evolving economy, strong VET systems will be an ever more important foundation for economic success.

Annex A: List of the 57 Red Seal Trades

The top 10 Red Seal Trades by number of Red Seals issued in 2012 are included in bold.

Agricultural Equipment Technician	Appliance Service Technician	Automotive Painter
Automotive Service Technician	Baker	Boilermaker
Bricklayer	Cabinetmaker	Carpenter
Concrete Finisher	Construction Craft Worker	Construction Electrician
Cook	Drywall Finisher and Plasterer	Electric Motor System Technician
Floorcovering Installer	Gasfitter – Class A	Gasfitter – Class B
Glazier	Hairstylist	Heavy Duty Equipment Technician
Heavy Equipment Operator (Dozer)	Heavy Equipment Operator (Excavator)	Heavy Equipment Operator (Tractor-Loader-Backhoe)
Industrial Electrician	Industrial Mechanic (Millwright)	Instrumentation and Control Technician
Insulator (Heat and Frost)	Ironworker (Generalist)	Ironworker (Reinforcing)
Ironworker (Structural / Ornamental)	Landscape Horticulturist	Lather (Interior Systems Mechanic)
Machinist	Metal Fabricator (Fitter)	Mobile Crane Operator
Mobile Crane Operator (Hydraulic)	Motor Vehicle Body Repairer (Metal and Paint)	Motorcycle Mechanic
Oil Heat System Technician	Painter and Decorator	Partsperson
Plumber	Powerline Technician	Recreation Vehicle Service Technician
Refrigeration and Air Conditioning Mechanic	Rig Technician	Roofer
Sheet Metal Worker	Sprinkler System Installer	Steamfitter / Pipefitter
Tilesetter	Tool and Die Maker	Tower Crane Operator
Transport Trailer Technician	Truck and Transport Mechanic	Welder