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# The Skills Imperative: Workforce Development Strategies Post-COVID

*Canada still stands below the top-performing countries in skills development, and has no comprehensive approach toward lifelong learning. The long-term unemployed and the low-educated are slipping between the cracks.*

Parisa Mahboubi and Momanyi Mokaya



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## ABOUT THE AUTHORS

### PARISA MAHBOUBI

is Senior Policy Analyst at the C.D. Howe Institute.

### MOMANYI MOKAYA

is a former Max Bell Policy Scholar at the C.D. Howe Institute. He holds an MPP degree from the Max Bell School of Public Policy at McGill University.

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*Daniel Schwanen*

*Vice President, Research*

## THE STUDY IN BRIEF

Automation, digital innovation, globalization and demographic shifts have been reshaping the labor market, leading to some long-term structural changes and redefining the skills required to maintain a productive workforce – a trend that has been amplified by the effects of the COVID-19 pandemic.

Our study shows Canada still stands below the top-performing countries in skills development, and has no comprehensive approach toward lifelong learning. As well, the participation gap in training between high- and low-skilled and educated people is large.

In 2019, the federal government announced the Canada Training Benefit, a universal skills development program intended only for employed Canadians who meet eligibility criteria; several temporary skills training programs have also been introduced in 2021, after more than a year into the pandemic. Some features of these programs need improvement, however, particularly in regards to eligibility criteria and addressing barriers.

Despite the growing importance of training the workforce and the availability of various programs, individuals, businesses and governments face several challenges in taking the necessary steps to ensure sustainable upskilling and reskilling.

Evidence shows that businesses play a central role in providing training to their employees, but they invest less in low-skilled employees because of lower returns. However, the wider social returns from lifelong learning for adults with low qualifications can be high because it improves their employability, reduces their dependency on unemployment benefits and other targeted transfer spending and boosts inclusive growth. Although subsidies to businesses promote participation in lifelong learning, employers normally fail to address the needs of low-skilled employees.

Another acute problem is long-term unemployment post-COVID. In September 2021, it stood 124 percent above the pre-pandemic level in February 2020. This unprecedented growth in long-term joblessness resulted in an increase in the proportion of long-term unemployment by about twelve percentage points to more than 27 percent in September 2021. A sizeable share of the long-term unemployed in September 2021 were unemployed for 52 weeks or more (63 percent) and prime-working-age adults (59 percent).

As the Canadian labour market recovers from the pandemic, adult education will be pivotal in ensuring that individuals have the right tools to adapt to the new skills the market demands. Skills acquisition is a moving target that needs a dynamic response. Therefore, governments need to pursue a comprehensive adult education and training strategy centred around public and private sector collaboration to identify skills needs and barriers, and to support the development and implementation of strategies to ensure the strategy's effectiveness. The goal should be to prepare the workforce to thrive in an environment of rapidly changing demand for skills and more frequent disruption. Governments also need to recognize the limitations of training by businesses, and be prepared themselves to provide high-quality training support to disadvantaged individuals and the long-term unemployed.

Policy Area: Education, Skills and Labour Market.

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**In today's competitive global economy, adopting new knowledge and skills will continue to play a defining role in shaping Canada's economic prosperity (OECD 2014a). Skills are the backbone of a prosperous economy and a yardstick for a nation's ability to survive in a dynamic marketplace (Watt and Gagnon 2005).**

Automation, digital innovation, globalization and demographic shifts have been reshaping the labor market, leading to some long-term structural changes and redefining the skills required to maintain a productive workforce – a trend that has been amplified by the effects of the COVID-19 pandemic. Furthermore, during the pandemic, Canada has witnessed not only high unemployment, but also, despite recent high job vacancies, unprecedented increases in the number of people unemployed for long periods. Some of the long-term unemployed might find employment or return to their previous job when the economy recovers fully and hard-hit industries, such as tourism-related sectors, can operate at, or closer to, full capacity. Yet the risks of skills depreciation, structural unemployment and labour market detachment among the long-term unemployed are high, requiring a nimble response. Post-pandemic, investment in human capital to enhance productivity, employability and innovation will be even more important to increase labour market attachment and to ensure Canada's competitive advantages as it emerges from recession.

To address both the long-term and short-term challenges, a forward-thinking government should start by improving and investing in skills development programs. As the crisis has shown, demand for skills can shift overnight. Adaptability, flexibility and a commitment to adult learning will be crucial, especially as industries and companies reposition themselves in a highly data-driven, digital world.

The federal government has taken an important step in this direction. The 2021 budget promised a \$2.5 billion, five-year investment in skills and training to create opportunities for young and core-age individuals, mostly with the involvement of employers. There seems to be a trade off, however, between equity and efficiency in training programs: adult training administered in partnership with employers likely would lead to high returns to investment (in the form, for example, of higher productivity), since employers tend to provide training to highly skilled workers, while an equitable approach would target investments at low-skilled people.

## Key Concept Explainer

**Lifelong Learning** – refers to the participation of adults ages 25–64 in education and training that responds to the needs of current and future labour markets, based on international approaches to adult education and training programs. There are different approaches to these issues, but our focus is on the concept of learning to become or remain productive and employable. Work-related lifelong learning can take many forms, such as formal and non-formal education and on-the-job training (OECD 2017). While encouraging lifelong learning in any of these forms and addressing barriers to participation are pillars of any lifelong learning policy, the recognition, validation and accreditation of non-formal learning should not be overlooked.

Furthermore, Canada’s efforts to increase adult education and essential skills training historically have faced a number of problems related to jurisdictional constraints<sup>1</sup> and the coordination of program delivery, including funding, lack of capacity, partner and citizen engagement, learning methods, program access and culturally appropriate programming. There have also been concerns about the lack of consistent data collection and evaluation tools, including difficulty in tracking learners over multiple years (CMEC 2012). Currently, bilateral transfer agreements between the federal government and the provinces and territories – the Workforce Development Agreements (WDAs) – to support and fund targeted training programs include a requirement for a “performance measurement strategy” that requires the collection and compilation of data to track progress and evaluate outcomes. Available data, however, are fragmentary. Canada also needs a comprehensive data-collection system to link training programs to skills and jobs, and to gather data on initiatives

not funded by government to identify and address training needs and gaps.

This *Commentary* reviews skills development efforts by the federal and provincial governments, and provides recommendations on improving existing programs to tackle short-term skills issues related to the pandemic and to develop a system of lifelong learning (see box above).

A review of international strategies in selected countries with a strong adult education and training system, such as Singapore, shows that ensuring the provision of relevant adult learning requires a strong partnership among all levels of government, business and educational institutions to gather, track and share data between stakeholders, identify skills needs and barriers to participation, address barriers and provide sufficient support and necessary training. Governments should consider strategies that support and encourage workers as well as unemployed persons to take part in skilling, reskilling or upskilling, and support the delivery of high-quality, short-term, flexible career

1 Canada is the only member country of the Organisation for Economic Co-operation and Development (OECD) with no centralized body responsible for education and training (Soliman et al. 2021). Since education is a provincial/territorial responsibility in Canada, a great deal of diversity also exists across jurisdictions in regards to strategies, policies or legislation relating to adult learning and skills development (CMEC 2012).

training programs. Also helpful would be to move toward a more centralized lifelong system and more integrated and better targeted programs and strategies – with more clarity as to the role of the federal and provincial governments – increase awareness about the programs, making information more accessible and easy to find, and offer personalized education counselling.

As the Canadian labour market recovers from the pandemic, adult education will be pivotal in ensuring that individuals have the right tools to adapt to the new skills the market demands. Skills acquisition is a moving target that needs a dynamic response. Therefore, governments need to pursue a comprehensive adult education and training strategy centred around public and private sector collaboration to identify skills needs and barriers, and to support the development and implementation of strategies to ensure the strategy's effectiveness. The goal should be to prepare the workforce to thrive in an environment of rapidly changing demand for skills and more frequent disruption. Governments also need to recognize the limitations of training by businesses, and be prepared themselves to provide high-quality training support to disadvantaged individuals and the long-term unemployed.

## THE BENEFITS OF AND BARRIERS TO TRAINING

Education and skills development are important resources for economic success and personal advancement. Human capital investment bestows benefits on individuals, enterprises and societies. These benefits can be economic in nature and accrue in the form of earnings and productivity gains as well as economic growth. Research shows a strong relationship between investments in human capital and economic growth (Azariades and Drazen 1991; Lucas 1988; Romer 1986). Investment in human capital to build a highly skilled workforce enhances global competitiveness (Godfrey 1997; Wood 1994), enables the transition

to a knowledge-based economy (Leitch 2006) and addresses a range of social and economic problems. These issues include some challenges related to a rapidly ageing population, the decline in the share of manufacturing employment, shifts in demand for highly skilled labour and the difficulties that low-skilled individuals face in finding stable employment with adequate income (Bound, Sadik, and Karmel 2015).

Overall, studies show that adult education and training have positive effects on earnings, occupational mobility, employment and labour market participation (see, for example, Midtsundstad 2019), but a number of factors and characteristics appear to influence the effects, resulting in dramatic variations in estimates across studies:

- the types of skills acquired – for example, basic skills or a degree from upper secondary school or tertiary school (Elman and Weiss 2014; Nordlund, Stehlik, and Strandh 2013; Stenberg and Westerlund 2013, 2016);
- gender – women seem to benefit more than men from participation in education and training (Bucholz, Unfried, and Blossfeld 2014; Csanádi, Csiznady, and Róbert 2014; Elman and Weiss 2014; Hällsten 2012; Kilpi-Jakonen et al. 2014; Saar, Unt, and Roosmaa 2014; Stenberg, de Luna, and Westerlund 2014); and
- the labour market status of participants in training – for example, whether they are employed (temporally or permanently) or unemployed – and their education level (Kilpi-Jakonen et al. 2012).

There are also variations between countries (Blossfeld et al. 2014) that could be related to differences in data and methodologies used, variations in educational systems, welfare systems and labour markets and institutional differences, among others (Kilpi-Jakonen et al. 2012; Triventi and Barone 2014; de Vilhena et al. 2014). In Canada, evidence also shows that participation in government-funded skills development programs has positive effects on earnings and employment (Canada 2017). Human capital investment can also

give rise to a wide range of non-economic benefits, including lower crime, greater social cohesion and better health (Blöndal, Field, and Girouard 2003).

Although providing training is a sound policy for enhancing competitiveness and standards of living, fundamental barriers, such as lack of time, money, ability and motivation, remain. Full-time workers are more likely to be too busy at work to pursue any training; low-income, low-education individuals also have the lowest capacity to pay for training and might also be least aware of the benefits of education and how to get support. Other barriers can include the inconvenient timing or location of a training program, the unavailability of a course or program and the lack of employer support (Cooke, Zeytinoglu, and Chowhan 2009). At the same time, the shift toward distance education options, particularly in light of COVID-19, provides individuals with more flexible options to meet their training needs. The pandemic, however, has likely exacerbated learning barriers for those who need educational and training the most due to digital skills gaps or limited or no access to online opportunities, equipment or connectivity to take full advantage of online learning (James and Thériault 2020; OECD 2021a).

To spread the advantages of online training and give Canadians more flexible options, Canada needs to enhance basic digital skills, broaden the range of high-quality online courses and close the digital divide by strengthening the digital infrastructure (OECD 2020a) and by ensuring that all Canadians have access to high-speed internet and digital services, including remote training opportunities.

## THE IMPORTANCE OF A SKILLS DEVELOPMENT STRATEGY

Key factors that today shape labour markets and

affect the market for skills include automation, globalization, demographic shifts, other economic changes and, recently, COVID-19.

Automation has displaced some jobs, but has increased demand for others and led to new jobs that might need different sets of skills; it is also reshaping the skills needed for some existing jobs.<sup>2</sup> Globalization has increased competition for companies and workers and formed new market opportunities. While still growing mainly due to immigration, Canada's population is ageing, highlighting the importance of older workers staying in the labour market longer as well as the need to increase productivity to maintain output and living standards. However, both the basic skills (Mahboubi 2017) and participation in skills development needed for higher productivity decline with age (Desjardins 2015; Park 2012). Due to increased life expectancy, young individuals entering the labour market expect to work longer. Moreover, the shift toward gig work and increases in the prevalence of temporary employment mean they might have to change jobs and careers more frequently than older workers did. Changes in the economic structure have also seen the emergence of knowledge-based enterprises; as a result, many jobs have become more complex, requiring greater workplace flexibility and resilience.

Lastly, short-term disruptions caused by COVID-19 seem to be accelerating previous trends and posing new challenges. Health-related measures such as social distancing have affected the way businesses operate and people work and live – in the process, radically amplifying companies' digital transformation, requiring, for example, digital skills across all sectors. COVID-related disruptions have also resulted in unprecedented unemployment, as we discuss in more detail below. All these changes

2 In addition to higher demand for digital skills, the demand has also increased for soft skills and human skills such as communications, teamwork, problem solving and self-management, which are harder to automate.

pose new demands on businesses and individuals in terms of skilling, reskilling and upskilling. Economic security has evolved from having a job for life to requiring the upgrading of skills through lifelong learning throughout an individual's career progression. The economy is dynamic in nature, and so is the labour market, requiring constant evaluation of the types of skills the labour market needs. Organizations also see data-driven decision making as vital to their existence today and their success tomorrow. They are making investments in analytics, artificial intelligence, automation and digitization to secure their future in a changing world. All these areas could open doors to remarkable opportunities for innovation and growth and create new trials and complexities for employers (Deloitte 2019).

### COVID-19 and Its Effect on Skills

The coronavirus has had devastating effects on the labour market. Due to social distancing measures instituted by public health to control the virus's spread, the number of unemployed people increased by about 1.5 million (a 128 percent increase) between February and May 2020, according to Statistics Canada. More than 80 percent of unemployment has recovered since then, but there were still 1.42 million unemployed in September 2021 – 24 percent higher than in February 2020. While unemployment is an indicator of poor labour market conditions, high long-term unemployment – the number of people unemployed for 27 weeks or more – is more worrisome. Long-term unemployment in September 2021 was 124 percent above the pre-pandemic level in February 2020, but the change varied substantially across demographic groups (Figure 1). This unprecedented growth in long-term joblessness resulted in an increase in the proportion of long-term unemployment by about

twelve percentage points to more than 27 percent in September 2021. A sizeable share of the long-term unemployed in September 2021 were unemployed for 52 weeks or more (63 percent)<sup>3</sup> and prime-working-age adults (59 percent).

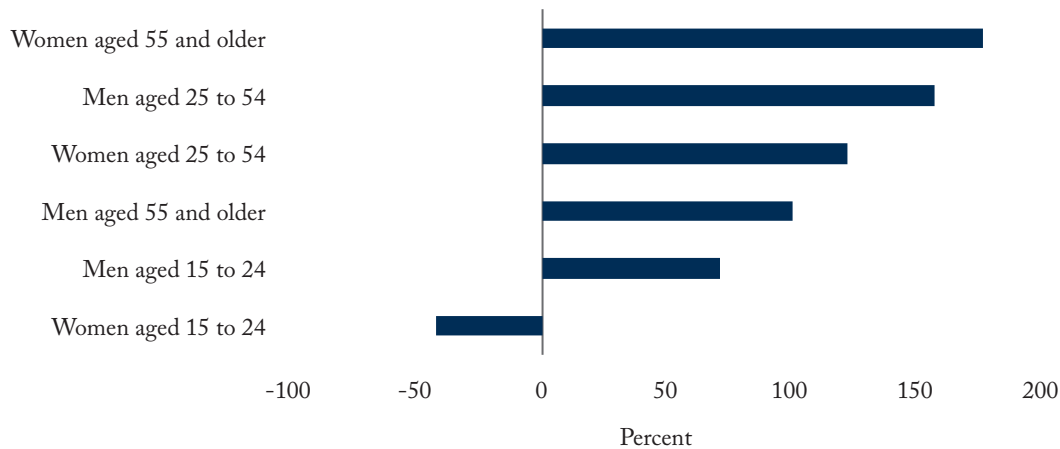
When individuals are out of work, their skills start to diminish, which progressively leads to the depreciation of human capital and social capital, resulting in lower re-employment wages over time (Apergis and Apergis 2020). The probability of an individual getting a new job also significantly decreases the longer the individual stays out of work (Machin and Manning 1998), and the longer an individual is out of the labour market, the harder it is to re-enter it. Employers are often cautious about hiring unemployed job seekers because their productivity is perceived to be lower than that of employed workers. This productivity gap only widens the longer an individual remains unemployed (Blanchard and Diamond 1994).

As well, Edin and Gustavsson (2008) provide statistically strong evidence of a negative relationship between work interruptions and skills, finding that the depreciation of general skills is economically important. For example, a full year of non-employment is associated with a five-percentile drop in skills relative to those of continuously employed workers. The recurring theme in the literature is that human capital depreciation occurs with long periods of absence from the labour market. In general, persons in long-term unemployment frequently experience limited employability, due to loss of skills, low educational attainment or the high costs of rebuilding these skills. These factors also contribute to a lower participation rate for the long-term unemployed and older unemployed individuals in employment programs (Bejaković and Mrnjavac 2018). Evidence shows, however, that adult education increases

3 In February 2020, 55 percent of the long-term unemployed were unemployed for 52 weeks or more.



**Figure 1: Percentage Change in the Number of Long-term Unemployed in September 2021 Compared with February 2020**



Notes: The long-term unemployed are those who have been searching for work or on temporary layoff for 27 weeks or more.

Source: Authors' calculations using Statistics Canada table 14-10-0342-01.

the chances of re-employment (Wahler et al. 2014) and reduces the length of unemployment (Csanádi, Csiznady, and Róbert 2014). More important, the effect of educational, training and employment programs on reducing the duration of unemployment is the strongest for those with the least previous experience in the labour market and those who are the most vulnerable (Bjorklund et al. 1991; Spermann 2015). Furthermore, early participation in training upon becoming unemployed plays an important role in generating better labour outcomes in terms of earnings and

employment incidence (Canada 2017). These observations suggest the need for government interventions to improve the motivation, skills and employability of the long-term unemployed.

Although the number of long-term unemployed has increased substantially during the pandemic, it is possible to reduce the number and any potential structural unemployment by ensuring early investments in skills development and addressing barriers to training.<sup>4</sup> Moreover, since long-term unemployment has been associated with poor mental health (Brown et al. 2003), the long-term

4 It is important to note that, while the inability to find employment is a reason some people remain unemployed for a long time, certain factors might discourage some unemployed people from actively seeking employment and returning to work – for example, fear of catching COVID-19, economic uncertainty and the possibility of having another lockdown. Many are also looking to retrain in another industry. Another potential factor could be related to the design of income-support programs and access to financial supports that might discourage people from seeking a job or opting for self-employment (Mahboubi 2021). These individuals, however, likely would face the difficulties associated with long-term unemployment when seeking a job if they decide to return to work. Governments, therefore, should tackle work disincentives present in income-support programs.

unemployed also need mental health support. Such support would help mitigate the risk of poor training outcomes and drop out.

The pandemic's effect on mental health is not limited to unemployed persons in the labour force: stress is the top reason stated by more than half of managers and employees who have considered leaving their role since the start of the pandemic, according to the Mental Health Index surveys. Managers stated they required more support for the mental health and well-being of their team (38 percent), more training (32 percent) and more support for their own mental health and well-being (29 percent) (Lifeworks 2021).

The long-term effects of COVID-19 on local labour market outcomes will become more apparent with time. There is a significant risk, however, that the pandemic could aggravate social and economic inequalities, since its employment effects have fallen disproportionately on certain population groups (such as women and Indigenous peoples) and some sectors (such as tourism and hospitality). The pandemic, moreover, is forecast to accelerate the pace of automation in the labour market: more firms have decided to capitalize on technology to automate the production of goods and services to decrease their exposure to any probable future quarantine and social distancing measures. COVID-19 is thus affecting both workforce and skills needs in Canada, cementing the dynamic need for better skills training to match the needs of the labour market, especially post-pandemic (OECD 2020b).

## INTERNATIONAL APPROACHES TO SKILLS DEVELOPMENT AND LIFELONG LEARNING

An important policy issue for any country is improving its national skills set. A traditional way to enhance skills is through formal education directed mainly at young people and provided on a full-time basis. With changes in the labour market driving a shift toward lifelong learning, however, providing opportunities for skills upgrading is

becoming increasingly important. In particular, lifelong learning can lead to enhanced social inclusion (Edwards, Armstrong, and Miller 2001), active citizenship (Jarvis 2009) and community development (Kilpatrick, Field, and Falk 2003). As a result, international organizations (such as UNESCO, the Nordic Council of Ministers, the OECD and the European Union) and many countries at all levels of development, including Canada, have shifted their focus toward lifelong learning and developing adult learning strategies and programs. In response to COVID-19 and the increased need for learning, particularly for disadvantaged and vulnerable groups, many countries have increased their support for adult education and training – for example, by increasing funding or relaxing eligibility criteria of existing programs (Germany) to expand access or by adding a new temporary program intended for unemployed people (Singapore).

Countries differ, however, in obtaining similarly desirable outcomes in adult learning, for a variety of reasons. They include differences in education and training systems, lifelong learning policies and strategies, recognition and quality of competencies and qualifications, and ability to identify and predict skills needs. Therefore, it is useful to assess international experiences and identify best practices for skills development and lifelong learning.

Lifelong learning is not a new phenomenon: the concept arose in the 1970s to tackle the challenges of improving social equality and quality of life (Dave 1976; Lengrand 1972; Rubenson 2006). Since then, the desire to prompt lifelong learning has resurfaced whenever economic conditions have increased the risk of unemployment and there is a resurgence of perceived needs for higher productivity, better standards of living and quicker transitions and adjustments – for example, in the late 1980s and 1990s, and since the beginning of the twenty-first century.

Most parts of Europe have had policies on adult learning and education since the 2000s (Borg and Mayo 2005). The importance given to lifelong

learning as a basis for sustainable competitiveness, resilience, increasing employability and social fairness and cohesion was re-emphasized in Europe with the revised Strategy Europe 2020 and with the recent European Council Conclusions. Lifelong learning is becoming a reality in several European countries, including Denmark, Iceland, Norway, Sweden and the United Kingdom (Green 2002; Kupiainen, Hautamäki, and Karjalainen 2009; UKCES 2014).

Although adult participation in formal education is considerably lower than that in non-formal education, there are variations across countries and some countries, such as Norway, have recently made far-reaching progress in coupling comprehensive qualification programs with adult learning, which otherwise would have been identified as non-formal. Finland, Denmark, Norway and the United Kingdom have the highest proportion of adults participating in formal education (Desjardins 2015).

Asian countries such as the Philippines and Thailand have also taken initiatives to develop systematic approaches to adult learning and education (Di Gropello, Tan, and Tandon 2010; Fry 2002; Mok 2006), while Singapore has already developed a successful comprehensive lifelong learning system.

A review of successful reforms that led to dramatic increases in adult learning participation in Austria, Estonia, Italy, Hungary, the Netherlands and Singapore shows that no single strategy exists to improve participation, and highlights the need for comprehensive approaches (OECD 2020c). Successful approaches include covering different target groups (for example, low-skilled, unemployed or older individuals), addressing multiple barriers and improving incentives to participation, expanding and diversifying training types and options and involving stakeholders in both the development and implementation of strategies. To achieve desirable labour market outcomes, in addition to participation rates, countries should also focus on other elements of success of policies and programs, such as the quality of training, the

inclusion of vulnerable groups and alignment between individuals and labour market needs (OECD 2020c).

To complete our review of international approaches, we summarize lifelong learning strategies used in selected countries with strong adult learning systems, highlighting strengths and challenges: the Nordic countries, Germany and Singapore. Some key approaches to consider are developing strong partnerships with, and requiring the involvement of, all stakeholders; developing a comprehensive system of lifelong learning that targets all vulnerable population groups; addressing barriers to participation and offering a variety of high-quality training options; creating a platform to validate skills and allowing individuals to assess and identify their skills needs based on labour market information.

### **The Nordic Countries**

The Nordic countries – Denmark, Finland, Iceland, Norway and Sweden – have always had a great ability to adapt to changes and respond well to new demands because of their lifelong learning model, which was different from that of other European countries. The Nordic countries have taken steps toward the systemic governance of lifelong learning (Ranki et al. 2021), and are among the top performers in the world. Specifically, they invest more than other European countries in lifelong learning as a share of gross domestic product (GDP) (Eurostat 2020a), and they have higher adult learning participation (Eurostat 2020b).

The International Adult Literacy Survey on public and private support for participation in adult education and training shows that, in the Nordic countries, the majority of financial support for such participation comes from employers. At the same time, the level of public support appears to have a meaningful positive effect on the participation rate of those otherwise least likely to enroll in adult education and training (Rubenson 2006; Tuijnman and Hellstrom 2001), thus highlighting

the importance of public support for disadvantaged groups.

Over time, the Nordic countries have developed comprehensive validation frameworks and created strong cooperation on lifelong learning among themselves (Nordic Council of Ministers 2014). While the education ministry in most countries generally oversees educational matters, the provision of adult education and lifelong learning typically involves several other ministries, particularly those dealing with the labour market, employment and social issues (Sprogøe 2003). In fact, close involvement of the social partners in adult education policy and a strong link between adult education and labour market policies for economic stability and full employment are main characteristics of the Nordic model of lifelong learning. Furthermore, both formal and informal learning are central to the Nordic countries' lifelong learning policies. These countries have adopted a national qualifications framework for lifelong learning to cover all formal education, but also take into account training competencies acquired outside the formal system (Nordic Council of Ministers 2014).

Although the Nordic countries have been able to tackle some challenges of the digital economy due to their ability to access and use digital infrastructure, they still face the challenges of closing the digital skills gap and offering adequate lifelong learning courses. To tackle these challenges, they have established partnerships with major stakeholders such as the Association of Nordic Engineers and the Network of Nordic and Baltic Universities of Technology to improve the provision of adult education and training (Smidt 2020).

The COVID-19 pandemic has disrupted the delivery of face-to-face adult education, highlighted the need for flexible delivery and amplified the need for reskilling and upskilling and increasing digital knowledge, skills and competences (Myklebust and Smidt 2020). In response to the crisis, the Nordic countries have increased investment in lifelong learning to facilitate flexible learning as well as to enhance educational opportunities for unemployed

people by expanding the number of learner places (Ranki et al. 2021).

## Germany

Germany has a strong skills development system that provides occupation-specific training and produces work-ready graduates with high productivity and less need for on-the-job training at the beginning of their career (Forster and Bol 2018). As a result, German youth face a smooth school-to-work transition and low unemployment rates (Forster et al. 2016; OECD 2018).

Germany also recognizes lifelong learning as the most important route to personal advancement, economic success and social cohesion. While the *Länder* (states) are responsible for school-based vocational education and training and the federal government oversees in-company training, companies in Germany play an important role in offering continuing vocational education and training either within their organizations or with their support. Various public and private bodies are involved in financing vocational education training, and there is a strong partnership among all levels of government, businesses and trade unions to provide training. Statistics show that more than 50 percent of German businesses provided training in 2016, with higher support from larger companies.

To promote training during the pandemic, Germany has increased incentives for firms to offer training opportunities by further boosting funding and increasing the limit on company size (from up to 249 workers to up to 499 employee) for receiving a training bonus to allow more firms to take part.

The participation rate in the continuing vocational education and training (CVET) program, however, is low among certain population groups, particularly the unemployed and those with low qualifications. This could be related to the complexity of governance structures of continuing education and training, as it makes coordination and cooperation among governments, educators, companies and other partners challenging, and

makes it difficult for individuals to select proper training opportunities or identify suitable financial support options (OECD 2021b).

To promote participation in adult learning and to reduce the risk of long-term unemployment, Germany offers a host of financing schemes targeted at a variety of groups. For example, it gives CVET vouchers to eligible employed people in order to upskill. While the voucher compensates training expenses fully or partially, candidates who meet the requirements can also receive unemployment benefits for the duration of their participation in the CVET program. Government also strengthened its support in 2016 by improving access and increasing funding for further training and better unemployment coverage in order to increase the participation of people with few or low-level qualifications, the long-term unemployed and older employees. A review of these programs reveals, however, that low-skilled adults who are neither unemployed nor at risk of job loss do not receive enough support (Deutsches Institut für Internationale Pädagogische Forschung 2018; Germany n.d.a, n.d.b). Germany thus could benefit from more targeted funding for these low-skilled, low-income workers (Hutfilter, Lehmann, and Kim 2018; OECD 2017).

One important requirement to shape and improve a skills development system is to gather relevant information and monitor trends. To identify, assess and anticipate the skills needs of the labour market, the government in 1999 began the systematic recording and research of future skills needs. The government applies various approaches to monitor new skills requirements and to forecast unemployment and skilled labour shortages. Some examples are developing qualification and

occupational field projections to provide long-term skill forecasts; analysing job advertisements; conducting surveys regularly to gather information on the supply of and demand for skills; and monitoring labour market and training trends. These surveys include those of companies, workers, continuing education providers and guidance staff. In addition to using skills anticipation in policy decisions, the government makes outputs and reports available to a range of groups and stakeholders, such as career and vocational guidance services (Cedefop 2017).

Although Germany has increased funding to boost both the demand for and supply of online learning since 2016, many educators and learners, at the beginning of the pandemic, had difficulty transitioning to online learning due to lack of experienced and sufficiently qualified educators and necessary technical equipment.

### Singapore

The government of Singapore has taken many initiatives to move toward a knowledge-based economy.<sup>5</sup> In 2015, the country ranked as the most “technology-ready nation,” according to the Global Technology Report by the World Economic Forum. It is also seen as a model nation for the outstanding educational performance of its students in international benchmarking studies, such as the Program for International Student Assessment and for its comprehensive skills development and lifelong learning system. Singapore’s system is designed to advance the skills of its workforce in order to promote lifelong employability and enhance the country’s global competitiveness (Lee and Morris 2016).

5 For example, the government took on a major curriculum review in 1997 to re-examine its objective and directions for the future (Tan et al. 2017), and started rolling out the Applied Learning Programme and Learning for Life Programme in 2014 to focus on the application of skills to professional real-world settings and to develop students’ interpersonal skills (Tan et al. 2017).

Although upgrading workforce skills has a long history in Singapore, lifelong learning was launched officially only in 1997 with the creation of the Skills Development Fund to provide employers with funding to train their workers in the aftermath of the Asian financial crisis. Over time, this program has been supplemented by other initiatives, such as the establishment of the Lifelong Learning Endowment Fund in 2001.

What makes Singapore's lifelong learning system remarkable is that a single organization, the Singapore Workforce Development Agency, not only oversees all the state-led programs and initiatives, but also directly aligns key economic strategies of the government with lifelong learning provision (Sung 2011). Other major contributing factors to Singapore's skills development success include a linkage between economic development needs and skills development; collaboration between government and the private sector on skills training; educational reforms to support long-term skills development; operating levy-grant schemes such as the Skills Development Fund to incentivize employers to invest in their workforce; and connecting different skills development institutions and initiatives to ensure the effectiveness and relevance of upskilling programs (Kuruvilla and Chua 2000). Kumar (2004) explains that the emphasis Singapore places on lifelong learning is one of the most important strategies to move toward a knowledge-based economy that is "pragmatic and rational," a key economic driver of competitiveness and an antidote for unemployment. Similarly, Cheong, Wettasinghe, and Murphy (2006) observe that Singapore's lifelong learning system is key to the workforce's constantly learning new skills and being adaptable to new and fast-changing economic situations in a shorter time.

For example, one important initiative was the launch in 2014 of the SkillsFuture agenda, a more holistic and integrated strategy toward lifelong learning for all and facilitating the development of a career-resilient and future-ready workforce (Tan 2015). This strategy required the Workforce

Development Agency to strengthen its partnerships and work closely with employers, unions and industry associations to identify sector-specific skills needs and develop a skills framework, as well as with training organizations to provide a wide range of high-quality opportunities and improve delivery of education training and career guidance (Tan 2015). The skills framework complemented existing national credential systems, and provides up-to-date information on jobs, career pathways, existing and emerging skills and competencies and relevant education and training programs to assist people in making informed choices on career development and skills upgrading. Building on this skills framework, in 2017 Singapore launched a comprehensive platform called MySkillsFuture, which allows employees to assess their interest and identify their learning needs and required type of training for their chosen career path; employers to obtain information on training opportunities for their employees; and training providers to give information on training programs and other content.

Through the MySkillsFuture program, Singapore provides training opportunities to mid-career individuals to reskill or upskill through full-time courses or to increase their employability through training developed and delivered by reputable companies over six to twelve months while receiving a monthly training allowance. In July 2020, in response to COVID-19, Singapore introduced a new program, SGUnited Skills, to allow those affected by the pandemic to participate in full-time training over a similar period.

One way to develop an effective and successful lifelong learning system is to learn from best practices and replicate their key features. In these features, Singapore's system has a lot to offer. Kuruvilla and Chua (2000) note, however, that each major aspect of Singapore's model is necessary but not independently sufficient for the rapid skills development of the workforce, and that similar outcomes might not be achievable in other institutional settings.

## SKILLS DEVELOPMENT AND LIFELONG LEARNING STRATEGIES IN CANADA

We should underscore that Canada has already taken significant steps to ensure that local communities are ready for the future of work. Earlier estimates indicated that the future of work was largely dependent on the risk of automation. Canada's pre-pandemic labour market, however, seems to have been dynamic enough to counter the effects of technology through training and skills development programs as well as income-support programs. In fact, Wyonch (2020a) shows that, with about 22 percent of pre-pandemic employment at high risk of automation, the risk of technology-induced unemployment remains low for the near future. She also suggests, however, that the government should be moderating the negative effects of technological change for those affected in the short term. Similarly, the government could mitigate the pandemic's effect on the labour market by using, expanding and improving existing job training programs and skills development for the unemployed.

Some governments have temporarily increased investments in training and skills development and introduced new programs to support recovery. For example, Ontario is working with postsecondary institutions to design more micro-credentials to help people retrain and upgrade their skills more quickly, while Quebec launched a temporary training program – the Renewed Prosperity through Greater Training program – to help unemployed people access training.<sup>6</sup> In addition, the 2021 federal budget introduced various programs to create 500,000 training opportunities for young and core-age workers over five years (see Table 1).

Canada, however, still needs a long-term, comprehensive skills development system to promote lifelong learning. This will not be an easy goal to achieve, as education is a provincial responsibility and Canada lacks a centralized body that organizes, manages and evaluates policies for adult education, training and skills development. In fact, the Canadian education system is the most decentralized among OECD countries, and there are variations in adult training programs across the provinces and territories. Yet the federal government is heavily involved in supporting and funding adult education and skills development programs. In this section, we provide a review of programs and initiatives by the federal and provincial governments to support skills development, as shown in Table 2, to identify the gaps and find the best approaches to addressing them. In addition to these programs, tax treatment of certain types of human capital investments in some jurisdictions can also encourage investment in training. Some examples are the apprenticeship training tax credit in Ontario and British Columbia and the employee training tax credit for small and medium-sized businesses in Quebec.

### Federal

The federal government oversees several programs targeted at different population groups, as shown in Table 2. These programs allow the government to focus on the right demographics, since there is no one-size-fits-all solution to human capital development.

Through the Youth Employment and Skills Strategy, the government aims to provide flexible and holistic services to help young Canadians successfully develop the skills and paid work

6 The registration was available for only five months, however, and ended at the end of April 2021.

**Table 1: New Federal Government Initiatives, 2021**

Measure	Number of New Opportunities (5-year timeframe)*
<b>For Youth</b>	
Student Work Placement Program (\$239.8 million)	20,000
Youth Employment and Skills Strategy (\$109.3 million)	7,000
Canada Summer Jobs (\$371.8 million)	75,000
Mitacs (\$708 million)	85,000
Canada Digital Adoption Program (\$4 billion)	28,000
<b>For Core Working Age</b>	
Sectoral Workforce Solutions Program (\$960 million)	90,000
Apprenticeship Service (\$470 million)	55,000
Skills for Success (\$298 million)	90,000
Community Workforce Development Program (\$55 million)	2,500
Transitioning Workers to New Jobs (\$250 million)	15,500

\* The Community Workforce Development Program is for three years only.

Source: Federal budget 2021.

experience to transition to the labour market. The program targets youth from visible minorities, recent immigrants, leavers from high school, youth experiencing homelessness or precarious housing and youth living in rural or remote areas (Canada 2020).

In addition, through the Office of Literacy and Essential Skills (now the Office of Skills for Success, OSS), the government has put a program in place to help adult Canadians improve their foundational and transferable skills in order to “participate and thrive in learning, work and life.”

The program is supported by the new Skills for Success model, which focuses on adaptability, creativity and innovation and digital skills – the foundational and transferable skills needed to respond to the needs of the labour market. OSS works closely with provincial and territorial governments and third-party organizations to support the integration of these skills into the employment and training programs they in large part deliver and for which they are further supported by federal labour market transfers such as



Table 2: Examples of Existing Training Programs in Canada

Jurisdiction	Program	Target Population
Federal	Indigenous Skills and Employment Training (ISET)	Indigenous persons
	Youth Employment and Skills Strategy Program (YESS)	Youth
	Office of Literacy and Essential Skills (OLES)	Adult Canadians
	Student Work Placement Program	Postsecondary students
	Union Training and Innovation Program (UTIP)	Red seal apprentices, with priority given to projects that target the participation and success of key groups (i.e., women, Indigenous peoples, newcomers, persons with disabilities, and visible minorities, including black Canadians)
	Skilled Trades Awareness and Readiness Program (STAR)	Canadians, including groups that face barriers to explore and prepare for entering the trades
	Canada Training Credit (CTC)	Anyone requiring training
Ontario	Second Career	Laid-off workers
	Adult learning: Literacy and Basic Skills	Everyone
	Apprenticeship	Students registered apprentices
	Ontario Bridge Training Programs	Skilled newcomers to Ontario
	Skill Advance Ontario (SAO)	Everyone
Alberta	Integrated Training	Unemployed or marginally unemployed adults
	Occupational Training	Unemployed or marginally unemployed adults
	Workforce Training	Anyone under a participating employer
Manitoba	Trade-Up Your Future	Unemployed/employed low skilled
British Columbia	Skills Training for Employment	Everyone
Nova Scotia	Skills Development (SD)	Anyone unemployed
New Brunswick	Workplace Essential Skills Program (WES)	Any adult employed or seeking employment
Prince Edward Island	Workplace Skills Training	New or existing employees
	Workforce Development Projects	Employed or unemployed individuals
Northwest Territories	Skills 4 Success	Anyone

Sources: Various government ministry or department websites.

Workforce Development Agreements and Labour Market Development Agreements (LMDAs) (Canada 2020).<sup>7</sup>

Evidence shows, however, that public expenditure on work-related training in Canada is not well targeted at vulnerable groups, with spending per unemployed person lower than the OECD average and well below that in Denmark, Finland, Germany and Norway, despite Canada's having a higher intensity of financial support per participant (as a share of GDP per head) (OECD 2019, fig. 5.4). As well, more than half of the funding intended for unemployed Canadians through LMDAs is limited to those eligible for EI (Canada 2017).

The most significant attempt to date to move toward the development of a lifelong learning system was the announcement of the Canada Training Benefit (CTB) in the 2019 federal budget. The government's plan was to invest more than \$1.7 billion over five years to give workers tuition credits to assist with training costs, provide EI benefits during training and offer job protection so that workers can take the time they need to keep their skills relevant and in demand with the labour market. The only aspect of the 2019 announcement that has been implemented is the Canada Training Credit (CTC), a refundable tax credit intended to help Canadians with the cost of eligible training fees. The credit may be claimed for tuition and other fees paid for courses taken in the year for which the individual is claiming the credit. Starting in 2019, the CTC has offered a \$250 credit each year, up to a lifetime limit of \$5,000. Workers need also to have a total working income of at least

\$10,000 and personal net income below \$150,473 (in, for example, 2020) to be eligible and must file a tax return.

The CTC could address the changing nature of work and the workforce, since workers need training to help them keep their existing jobs while acquiring new skills to prepare them for their next roles (Canada 2019), but some adjustments and improvements are necessary to respond to changes and address gaps, as we discuss in the policy section below.

### Provincial

Decentralization has enabled provinces to tailor their skills and labour market programs to best address their needs with federal funding (through the Canada Job Fund and LMDAs). Table 2 gives a brief outline of the various provincial programs currently being offered. For example, the intent of Workplace Training in Alberta is to provide individual-focused training or work experience to enable individuals to find and maintain employment. The program also provides incremental training and work experience, whereby participating employers agree to train or provide work experience for a predetermined period of time, with the expectation that the individual will be able to engage and maintain employment – in most cases with the same employer.

Ontario and Quebec have the largest economies of the provinces, and therefore skills development and training in these provinces are critical to the country's overall growth and productivity.

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7 The LMDAs represents Canada's largest annual investment (almost \$2.5 billion) in provincial and territorial labour market/skills development programming to support individuals – including current and former employment insurance (EI) claimants and those who have made minimum EI premium contributions in at least five of the past ten years. Under the LMDAs, employment benefits enable eligible individuals to gain skills and work experience with a combination of interventions such as skills training and wage subsidies. LMDAs also support the provision of employment assistance services for all Canadians.

Ontario delivers training and employment services by a network of outsourced non-profit organizations through Employment Ontario, managed by the Ministry of Labour, Training and Skills Development. This ministry also manages postsecondary education and vocational training policies, creating a single policy space for the 15–64-year-old Ontario workforce. The ministry has a vital role in supporting unemployed persons and linking them to job prospects. Workforce Planning Boards jointly bring together a range of training, employment and economic stakeholders to cultivate local labour market planning information. Ontario has an opportunity to develop and expand these boards' role in developing local strategies that better link local employer demand and the supply of skills, while tackling broader barriers to employment. Locally based community colleges provide several training programs, which can be customized to both employers and individuals. For example, a training program known as Second Career aims to help people rejoin the workforce quickly. To that end, the program focuses on supporting training programs that take 52 weeks or less, including micro-credential programs, for up to \$28,000, which can cover tuition, a weekly living allowance (up to \$500 in 2021), books, transportation and child care.

More needs to be done in Ontario, however, particularly in developing labour market information that is sustainable, affordable, open and user-friendly to inform policy development, service delivery planning, training program services and resource allocation (OECD 2014b). The fundamental goal should be to create stronger government-business partnerships, especially with small and medium-sized enterprises (SMEs), while fostering networks to promote workplace training (2020).

Conversely, Quebec delivers public employment services by local employment centres through *Emploi-Québec*, a unit of the *Ministère du Travail, de l'Emploi et de la Solidarité sociale*. These centres offer local services to individuals through systematic regionalized budgets, and are able to design local

strategies to meet the demands of the communities they serve. Furthermore, local offices are given more flexibility and robust governance structures, which exist at the local, regional and provincial levels to encourage coordination and policy integration. In contrast to Ontario, there appears to be less flexibility in Quebec's skills development system. Principally, public colleges (CEGEPs) face several hurdles in adapting to local individual and employer demand. Although there are many avenues in the province to meet the numerous requirements for technical and vocational training, better flexibility would leverage the elevated level of cooperation that is already embedded in the province and further strengthen the development of skills to local requirements of businesses and individuals (OECD 2014).

### **Public-Private Partnerships**

The ability to foster public-private partnerships is a fundamental building block in ensuring that training and skills development programs can meet the demands of local labour markets. Nonetheless, it is key to highlight that there is an opportunity for provincial governments to pivot resources to cater to local business demands and the labour skills they require as the digital wave continues to break. Finding the right individuals with the right skills set locally to help businesses fully succeed will be an essential part of the recovery process. Efforts in this area require sufficient integration and flexibility, enabling stakeholders to take a lead role in skills strategies that promote economic growth and prosperity in local communities (Appendix Table A.1 shows some of the partnerships across the country and a brief summary of the available programs).

Although this is a positive step, our policy recommendation would be better dissemination of information from all stakeholders. As highlighted in an OECD report on *Leveraging Training and Skills Development in SMEs*, not all stakeholders are aware of the support offered to them. Directly involving employees in the training process –

from assessment of needs to communication and implementation of activities, followed by evaluation – is vital. Furthermore, training should be offered to all levels of staff, although evidence shows that the more qualified are more likely to receive opportunities to acquire requisite skills (OECD 2012).

## HOW TO IMPROVE TRAINING IN CANADA

Data on skills, education and training programs can provide information about where we are regarding adult education and training, and identify the gaps and issues that need to be addressed.

The federal government works with the provinces and territories through the Council of Ministers of Education to develop harmonized information on skills development in Canada. Current successes involve federal-provincial-territorial cooperation in large-scale international surveys such as the Programme for International Student Assessment and the Programme for International Assessment of Adult Competencies (PIAAC), as well as multilateral cooperation on collecting skills and learning data (for example, postsecondary education graduation rates and student enrolment) (CMEC 2012). A recent effort was to develop the Education and Labour Market Longitudinal Linkage Platform, which links three administrative datasets: the Registered Apprenticeship Information System, the Post-Secondary Information System and the T1 Family File (tax records). Such efforts support the foundation of information on skills levels and labour force supply in Canada, facilitate evidence-based decision-making and generate improved matching of skills and course offerings with market demand. Data on skills, however, are fragmentary, while publicly available data are limited and often out of date and irrelevant to the current labour market.

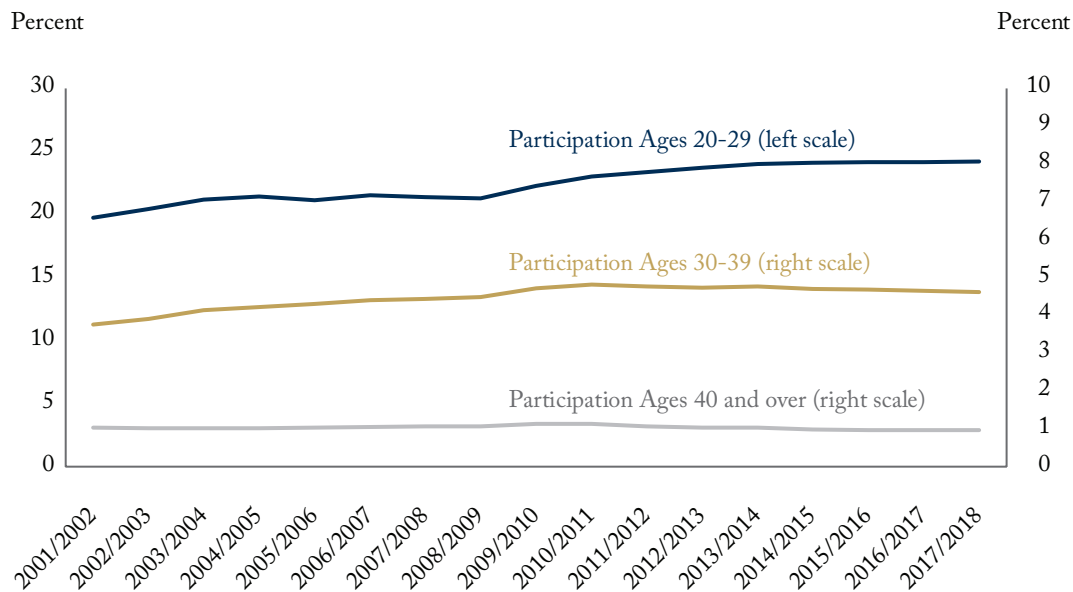
According to the 2005 Statistics Canada Workplace and Employee Survey – the last cycle of the survey with an employee portion – 60 percent of workers participated in employer-

supported training, while 12 percent declined to do so when offered an opportunity. Participation, however, was not uniformly distributed across all workers, but significantly lower among vulnerable workers – defined as low-wage or low-educated workers. Moreover, women received significantly less training than men (Cooke, Zeytinoglu, and Chowhan 2009).

Conversely, administrative data used to evaluate governments' labour market agreements show that the majority of participants in skills development (66 to 72 percent) in the 2002–05 and 2007–08 periods had an occupation requiring no postsecondary education and training prior to participation (Canada 2017). The 2012 PIAAC also showed that, while Canada's overall training participation rate was 58 percent, it was significantly lower for the low educated, low skilled and older people (Desjardins 2015).

Data from Statistics Canada's Post Secondary Enrolment show that the participation rate in the formal education of young individuals (ages 20–29) has been on an upward trend since the early 2000s, while those ages 30–39 and 40 and older have not witnessed significant changes over the years (Figure 2). For example, in the year 2001, the participation was around 18 percent of those aged 20–29; however, in 2018, this increased to 24 percent. This has resulted in increases in the share of students aged 20–29 in total enrolment from 55.5 percent in 2001 to 57.3 percent in 2018. Within the same time frame, the participation of those aged 30–39 only increased by less than one percentage point from 3.9 to 4.6 percent. Conversely, those aged 40 and over in Canada witnessed almost no change and stayed around one percent between 2001 and 2018, which can be related to the ageing population. This suggests that more needs to be done, particularly with respect to formal adult training and education programs given their importance for today's labour market. As Canada recovers from the pandemic, designing and implementing programs targeted at developing current national skill sets will be vital.

Figure 2: Adult Participation Rates in Post Secondary Education by Age Group



Source: Authors' calculations from Statistics Canada, tables 17-10-0005-01 and 37-10-0015-01.

## Data Challenges

A progress report that Canada submitted to the United Nations Educational, Scientific and Cultural Organization (UNESCO) underscores concerns that several jurisdictions have about the lack of consistent data collection and evaluation tools/assessment, including difficulty in tracking learners over multiple years (CMEC 2012).

Furthermore, the surveys mentioned above are generic and do not offer specific data on skills/training programs with which to measure and evaluate viable courses and subsequent policy formulation. Most provinces and territories have stated that they experience difficulties collecting adult-learning data. These problems range from the absence of data, especially on initiatives not backed by government, to inconsistent periodic reporting and a lack of consistent criteria. An additional challenge with data gathering is the inclination

of people with low-level literacy skills not to self-identify. The outcome is a dearth of information on learner outcomes to inform policy decisions and determine the return on investment (CMEC 2012).

Bonen and Oschinski (2021) lean toward a similar policy recommendation, namely, that “Canada needs actionable data on the training options that can connect workers to in-demand jobs.” They call on government agencies, training providers and employers to lay the foundation of a robust pan-Canadian mapping of training and employment opportunities. This mapping would link skills sought in the marketplace with those learned through education programs and training. Successful implementation, however, will depend on the ability to collect robust data and information on skills and individuals’ ability to cross-reference the skills required and to the training database. The requisite to provide data-driven skills and training information is not unique to Canada: Singapore,

the United States and the EU have already set up platforms that enable employees, job seekers, employers and training providers to identify skills needs and appropriate training opportunities. Implementation of such a robust data-collection system requires collaboration and tenacity from all levels of government.

## POLICY DISCUSSION AND CONCLUSION

Developing a comprehensive adult learning system is more important than ever to address issues and changes in the labour market related to the mid- and long-term effects of automation, globalization and ageing and the short-term effects of COVID-19 and other potential crises. Despite the growing importance of training the workforce and the availability of various programs, individuals, businesses and governments face several challenges in taking the necessary steps to ensure sustainable upskilling and reskilling.

Evidence shows that businesses play a central role in providing training to their employees, but they invest less in low-skilled employees because of lower returns (OECD 2003a, 2003b, 2012). However, the wider social returns from lifelong learning for adults with low qualifications can be high because it improves their employability, reduces their dependency on unemployment benefits and other targeted transfer spending and boosts inclusive growth. Although subsidies to businesses promote participation in lifelong learning, employers normally fail to address the needs of low-skilled employees (McCall, Smith, and Wunsch 2016; OECD 2017).

This highlights the possible limitation of recently announced programs such as the Sectoral Workforce Solutions program, which helps employers recruit and train workers with low qualifications and the long-term unemployed. Although the program goals currently include tools to reduce hiring biases and prioritizing initiatives to reduce barriers and help underrepresented

groups get the skills they need to find work, there is still no guarantee that those who need training and support the most would receive it without direct government involvement in the process. Therefore, government-funded training programs are important to provide support to all individuals and particularly to disadvantaged and vulnerable population groups.

Older workers are another population group that might receive less support from employers to reskill or upskill. Canada's ageing population means it is important that older workers remain in employment longer. Yet, given that some cognitive skills erode with age, which can affect the process of learning new skills, policymakers should promote lifelong learning and programs that mitigate age-related decline in skills more accessible for older workers and low achievers (Mahboubi 2017). Mahboubi (2019) shows that addressing the training needs of such groups would help reduce skills mismatches in the labour market.

Although there is no perfect skills development system in the world, and there is always room for improvement, the adoption of policies and programs based on best practices and lessons learned from existing programs are key to improving outcomes. From our review of international and Canadian approaches to and literature on skills development, we offer the following recommendations for developing a comprehensive skills development system:

- reduce complexity;
- enhance stakeholder involvement in designing and implementing programs;
- provide universal and targeted programs, with sufficient support to encourage participation and broader eligibility criteria and flexible options to meet all Canadians' training needs;
- address barriers to participation;
- expand training and skills development options; and
- address data gaps.

Many of these areas depend closely on one another

and need to be taken into consideration together. For example, reducing complexity would enhance cooperation among all stakeholders and help to address barriers related to lack of awareness and difficulties finding appropriate training and support options among program participants.

Across the OECD countries, policymakers have come to appreciate the prominence of developing policies that are place sensitive and that empower local communities to take a lead role in strategies to promote quality job creation, skills and economic development. Input at the local level plays a vital role in designing and developing policies, programs and processes that connect economic development with employment efforts, while accounting for regional labour market variations.

In Canada's case, the successful implementation of programs would not be possible without the involvement of the provinces. Yet, the complexity involved in the lack of a central body responsible for skills development and a combination of federalism and decentralization in designing and implementing programs make development of an effective and comprehensive system challenging. Moving toward a more centralized lifelong system and more integrated and better targeted programs and strategies, with more clarity as to the role of the federal and provincial governments, would help to address some of these challenges. While provincial and local communities' involvement in design and implementation is crucial, we recommend the creation of an administrative body that would work closely with all levels of government and other parties in this process to ensure that all Canadians are aware of and have access to training options.

Our review shows that Canada is moving in the right direction and that the federal and provincial governments as well as businesses are involved in providing training supports. All these actors, however, face challenges in taking the necessary steps to ensure continuing upskilling and reskilling. Canada still stands below the top-performing countries in skills development, and has no

comprehensive approach toward lifelong learning. As well, the participation gap in training between high- and low-skilled and educated people is large.

As noted, in 2019, the federal government announced the Canada Training Benefit, a universal skills development program intended only for employed Canadians who meet eligibility criteria; several temporary skills training programs have also been introduced in 2021, after more than a year into the pandemic. Some features of these programs need improvement, however, particularly in regards to eligibility criteria and addressing barriers.

The CTB program is a step in the right direction, especially in filling in the federal government's training gaps and its inclusion of a skills development fund, a feature of Singapore's lifelong learning program. The proposed program, however, does have pitfalls that could permit marginalized groups to fall through the cracks. In particular, the requirements of being employed and having a minimum income of \$10,000 prevent access to the program for the unemployed and those who are out of the labour force but need skills training to get a job. There are also concerns about its design, especially the amount of the yearly tax credit. For example, an individual earning \$75,000 would have to wait up to seven years to have enough funds to attend a training course, which makes us question whether the tax credit of \$250 is sufficient to encourage people to upskill or reskill (BDO Canada 2019). Furthermore, the program's design fails to allow it to respond quickly to sudden shocks that change the dynamic of labour markets.

In sum, the CTB fails to support people who currently need training the most: those affected by the pandemic and are in long-term unemployment due, for example, to jobs corresponding to their skills set having disappeared or to safety concerns and child care responsibilities. Although unemployed people, mainly those who are eligible for EI, could have access to training options available under the LMADs, they face various challenges to maximizing benefits, and many also

face barriers to participation in or completion of these programs (Canada 2017).

Therefore, as the federal government examines the implementation of the CTB program post-pandemic, there needs to be a shift in focus to broaden the scope of support and start accommodating those who do not qualify but are in need of training. Identifying and addressing barriers to, and incentivizing participation in, the training of vulnerable individuals such as the long-term unemployed and low-income and low-educated individuals, would improve the labour market outcomes of those workers. As we have discussed, barriers to training could be related to one or multiple factors, such as lack or insufficiency of time, money, essential skills, suitable training options, awareness about training programs, required equipment (digital equipment and connectivity) and ability and motivation to learn.

In line with Soliman et al. (2021), we recommend that policymakers learn from and consider features of Ontario's Second Career program in terms of providing support for tuition, living allowance, transportation and child care to help address barriers when reforming or designing training programs, particularly for low-income, low-educated individuals. Data show that these individuals participate less in training. They also have the lowest capacity to pay for training, and also might have the least knowledge of the benefits of education and how to get support to upskill. This has important implications for Canada, as the pandemic has affected low-wage workers the most. Research by the OECD suggests that government financial support for lifelong learning should target adults with the lowest qualifications or basic skills levels (OECD 2003), thus highlighting the importance of providing a foundation that allows individuals to achieve the basic skills (numeracy, literacy and basic digital skills) to obtain the competences necessary for lifelong learning.

In addition to better basic skills and job-related qualifications and discipline-specific training,

employers look for outcomes such as better soft and professional skills and more positive attitudes toward work (Dean 2017). Greater collaboration between employers and education providers and increasing work-integration learning opportunities (Wyonch 2020b) could help to equip education leavers with these skills. The quality of programs matters, however, in terms of their effect on workers' earnings and job placement (Bauman and Christensen 2018). Furthermore, individuals have different skills needs and require different training options. Therefore, the provinces should focus on education quality at all levels (Mahboubi 2017) and work with educational institutions to offer more flexible, diverse training options as well as micro-learning opportunities.

As well, opportunities for comprehensive learning and self-development should be expanded, and both the education system and employers should demonstrate greater flexibility in recognizing informal learning. According to the OECD Survey of Adult Skills, the extent of participation in adult education activities differs considerably across countries, with some nations featuring much higher participation levels in various forms of systematic adult training than others. Additionally, the proportion of adults who participate in formal education is much lower than those in non-formal education. Some countries have recently made far-reaching progress in coupling adult learning, which would otherwise have been identified as non-formal, to comprehensive qualification programs (Desjardins 2015).

Based on our review of provincial programs, and given that education and labour and employment issues are provincial responsibilities, we urge the provinces to strengthen policy coordination across public, economic development, employment, education and training institutions by revisiting and revising governance structures and business-government partnerships.

Lastly, Canada needs to gather better and more data on training options, barriers, outcomes and



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skills gaps, and make them accessible to researchers and the public. It also needs develop a framework by involving and working closely with all levels of governments, educational institution, employers, and other stakeholder to make stakeholder able to identify labour market skills needs and training options to address them. Universities and colleges should also work with educators, employers, workers and governments to detect and address skills shortages and imbalances and to improve syllabuses that guarantee graduates acquire the knowledge and skills desired by employers.

In conclusion, the ability to foster government-business partnerships is a fundamental building block in ensuring that training and skills development programs meet the demands of local

labour markets. Governments need to make sure, however, that support for training is available to people who are more vulnerable economically and are disproportionately at risk of negative outcomes: those with low-level qualifications, the long-term unemployed and others affected by the COVID-19 pandemic. We urge governments to act quickly and develop a comprehensive training system, based on best practices, to tackle the skills needs of the post-pandemic economic recovery.

## APPENDIX:

Table A1: Public-Private Partnerships for Skills Development, Canada

Jurisdiction	Programs	Target Group	Brief Program Summary
Federal	Skills and Partnership Fund (SPF)	Indigenous workers	The program funds projects that contribute to the skills development and training-to-employment of Indigenous workers towards long-term, meaningful employment. It requires the development of partnerships and leveraging of private sector and federal-provincial-territorial funding to maximize SPF investments and testing new service delivery models to embed long-term program improvements.
	Youth Employment and Skills Strategy Program (YESS)	Youth	The program provides funding to organizations to deliver a range of activities that help youth overcome barriers to employment and develop a broad range of skills and knowledge in order to participate in the current and future labour market.
	Student Work Placement Program	Post-secondary students	ESDC works with Employer Delivery Partners. Employer Delivery Partners are a group of recognized associations and organizations representing the interests of employers in industries. They work with businesses to provide wage subsidies to employers that offer quality student work placements; and create partnerships with colleges, universities, polytechnics and CEGEPs to recruit students for these placements.
Ontario	Canada-Ontario Job Grant (COJG)	Everyone	This program provides opportunities for employers, individually or in groups, to invest in their workforce, with help from the government. The Canada-Ontario Job Grant provides direct financial support to individual employers or employer consortia who wish to purchase training for their employees. It is available to small, medium and large businesses with a plan to deliver short-term training to existing and new employees.
	Skills Advance Ontario Pilot (SAO)	Everyone	The project funds partnerships that connect employers with the employment and training services required to recruit and advance workers with the right essential, technical, and employability skills. It also supports jobseekers to obtain employment by providing them with sector-specific employment and training services and connecting them to the right employers.
	Ontario Labour Market Partnership Program	Everyone	This program provides financial assistance to local communities, sector groups, employee/employer associations, and employers in developing and implementing strategies for addressing and responding to local economic (employment) development, labour force adjustments and human resource planning. The Ministry of Labour, Training and Skills Development delivers the program in Ontario.
	Sector Partnership Planning Grant	Everyone	This brings together partners – employers, training groups and employment and workforce planning agencies – to develop strategies that align training with the skills needed for their industry or sector to grow and compete in the new economy.
	Ontario Job Creation Partnerships (OJCP)	Everyone	The program provides funding to eligible employers that support projects while creating opportunities to eligible job seekers to gain meaningful work experiences. The primary objective is to provide valuable recent work experience to participants. As a result of their involvement on an OJCP project, participants will have recent work experience to add to their resumes. OJCP participants will develop and/or enhance their employability skills through this work experience opportunity. This experience, together with the networking which participants do while on a project, may increase their chances of successfully finding long-term employment.

Table A1: Continued

Jurisdiction	Programs	Target Group	Brief Program Summary
Ontario	Career Ready Fund	Post-secondary students & recent grads	The fund helps publicly assisted colleges and universities, employers and other organizations create experiential learning opportunities for postsecondary students and recent grads with emphasis on experiential learning. Experiential learning is "hands-on learning" in a real or simulated workplace that helps prepare students for the transition to work. It also helps employers connect students and new graduates with the skills they need to hit the ground running.
	Micro-credentials/Rapid Skills	Everyone	Micro-credentials are rapid training programs offered by colleges, universities and Indigenous institutes across the province that can help you get the skills that employers need. They help people retrain and upgrade their skills to find new employment.
Alberta	Workforce Partnerships	Everyone	This program supports workplace human resource development and labour market adjustment strategies through community partnerships. It is designed to develop and support projects with groups, organizations, industry sectors and communities with common labour market needs.
	Employment Partnership Program (EPP)	Indigenous workers	EPP provides funding to Indigenous Skills and Employment Training Program agreement holders for Indigenous workforce development. EPP priorities are to provide direct training and employment supports, foster industry partnerships to expand the availability, accessibility and quality of Indigenous employment opportunities, inform organizational priorities with labour market information to better meet skills needs and market demand.
British Columbia	Labour Market Partnerships (LMP)	Everyone	This program provides funding to projects that address challenges related to a local labour market or community and assists employers exclusively within that labour market. The Ministry of Social Development and Poverty Reduction (SDPR) administers local LMP projects. It also includes the Employer Sponsored Training (EST) program that provides eligible employers with financial assistance to support training activities for employees who would otherwise lose their jobs.
	Sector Labour Market Partnerships (Sector LMP)	Everyone	The program helps industry and employers respond to changing labour market conditions. It provides funding for broad-based sector partnerships to sponsor projects that research or develop plans to respond to labour market issues such as a lack of appropriate skills, workers or jobs.
	Community and Employer Partnerships (CEP)	Everyone	The program aims to increase employment opportunities for unemployed British Columbians through the use of agency and business partnerships, shared information and technology, and innovative processes and practices. CEP fosters collaborative, coordinated networks of community organizations and employers across the province. CEP also provides labour market information to communities and employers so that they can better address the needs of the community and help create jobs. The funding is administered by the Ministry of Social Development and Poverty Reduction.
	Community Workforce Grant	Everyone	The program provides funding for communities and industries to support in-demand skills training leading to secure and sustainable employment for unemployed or underemployed British Columbians. A key goal of the grant is to provide flexible and timely responses to emerging and urgent labour and skills needs in B.C.'s communities and sectors.

**Table A1: Continued**

Jurisdiction	Programs	Target Group	Brief Program Summary
Manitoba	Employment Partnerships	Everyone	This program provides funding that assists communities, sector associations and employers to address labour force development needs while assisting eligible unemployed and "job-loss threatened" individuals to gain sustainable employment. Program activities may include pre-employment preparation, job-specific skills training, and on-site (hands-on) training.
	Labour Market Partnerships (LMP)	Everyone	This program provides private, public and community sector organizations with financial support to undertake activities that address labour market development, labour force development and workforce adjustment issues.
	Research and Innovation	Everyone	This program provides financial support to organizations who research and/or design practical projects that identify innovative ways of helping individuals prepare for, find, return to, or maintain sustainable employment and/or strengthen and promote province-wide or regional labour force development.
Saskatchewan	Road to Employment Program (RTE)	Youth (18-25)	The RTE program provides youth aged 18-25 years of age with personal, academic and employment training to reduce barriers to gaining employment. This 47-week program cycle will provide 20 youth opportunities to identify and address personal obstacles, gain practical life skills and provide links to employment.
Québec	Local Development Centers (CLDs)	Everyone	CLDs are non-profit organizations that work to promote local economic development. Funded by the Québec government and the municipalities, they are composed of business, labour, community and institutional representatives. A protocol agreement between local employment centers and local development centres ensures activity planning and execution are aligned at the local level. Through this active, locally based partnership, Emploi-Québec is able to get a better grasp of the concerns of labour market stakeholders and develop closer links between the economy and employment.

Sources: Various government ministry or department websites.

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