



Higher Education
Quality Council
of Ontario

An agency of the Government of Ontario

Lifelong Learning in Ontario: Improved Options for Mid-career, Underserved Learners

Jackie Pichette, Rosanna Tamburri,
Jess McKeown, Kaitlyn A. W. Blair
and Emily MacKay

Higher Education Quality Council of Ontario



Published by

The Higher Education Quality Council of Ontario

1 Yonge Street, Suite 2402
Toronto, ON Canada, M5E 1E5

Phone: (416) 212-3893
Fax: (416) 212-3899
Web: www.heqco.ca
E-mail: info@heqco.ca

Cite this publication in the following format:

Pichette, J., Tamburri, R., McKeown, J., Blair, K.A.W. & MacKay, E. (2019). *Lifelong Learning in Ontario: Improved Options for Mid-career, Underserved Learners*. Toronto: Higher Education Quality Council of Ontario.



The opinions expressed in this research document are those of the authors and do not necessarily represent the views or official policies of the Higher Education Quality Council of Ontario or other agencies or organizations that may have provided support, financial or otherwise, for this project. © Queens Printer for Ontario, 2019

Table of contents

Executive Summary.....	3
Introduction	5
Job Losses and Gains.....	6
The Role of Postsecondary Institutions	9
Building Foundational Skills	9
Adult Training Opportunities	11
Competency-based Education.....	13
Government Programs.....	14
Employment Services	14
Workforce Development	15
Gaps in Government Programs	17
Conclusion.....	18
Summary of Recommendations	19
References	21
Appendix	30
Case Studies.....	30
International Examples of Adult Reskilling Programs.....	33

Executive Summary

Gone are the days when a high school diploma, college certificate or a bachelor's degree could set workers on a course for a job with a single employer until retirement. Ontarians, like others around the world, are experiencing — and will increasingly experience — job loss and job change. And while it may be tempting to try and anticipate these losses and changes, the reality is the labour market is unpredictable. We cannot predict which companies will thrive and which will fail, whose jobs are at risk and whose are not. Nor can we predict which new companies and industries will emerge.

Ontario's education system is undoubtedly the largest site — in terms of both number of participants and expenditure — to foster the skills required to adapt and thrive in today's volatile labour market. The Ministry of Training, Colleges and Universities provides \$5 billion a year in operating funding to Ontario colleges and universities, which play an important role in workforce training by providing foundational skills as well as job-specific degrees and other credentials (Government of Ontario, 2019b).

In addition, there is a large ecosystem of programs — offered by governments, colleges, universities and private career colleges — designed to address the retraining needs of displaced workers and those seeking new job opportunities. Government spending on labour market programs and services totals close to \$1.3 billion a year, the majority of which comes from the federal government.

Ontario's postsecondary institutions and government programs play a vital role in supporting displaced workers and adult learners, but there is room for improvement. The most important contribution postsecondary institutions can make is to focus on building learners' foundational skills. These skills will set students on a path of lifelong learning and prepare them for the unpredictability of the labour market, to withstand turmoil and to flourish. Inevitably there will be times when workers will require access to additional training and support, either as a result of job loss, disruptions to the workplace, the desire to advance in an existing job or to change careers altogether. In these times, workers should have access to flexible programs that allow them to complete their training quickly and that result in recognized credentials. For its part, government should facilitate the development of these programs and access to them by easing funding and regulatory restraints.

We offer the following recommendations for building an effective system of lifelong learning in Ontario.

Institutions should:

- Provide a strong foundation for lifelong learning by ensuring that postsecondary institutions teach and regularly measure transferable skills. Measurement results should be used to improve the teaching of those skills.

- Develop and offer short-term, flexible training programs geared to adult learners that lead to recognized credentials that are portable between institutions.
- Introduce competency-based education programs, which are particularly well-suited to meet the needs of adult learners with family and work responsibilities.

Governments should:

- Loosen the funding and regulatory restraints on public postsecondary institutions to make it easier for them to develop and offer new short programs and credentials geared to adult learners as well as competency-based programs.
- Create more flexibility in the eligibility criteria for workforce development programs (that is, strategic initiatives such as Second Career that support groups of workers) ensuring that all vulnerable mid-career workers have access to lifelong learning opportunities.
- Vigorously evaluate the outcomes of new and existing workplace training and education programs to ensure they are effective and efficient; and track the employment outcomes of displaced workers.

Ontario dedicates substantial public dollars to postsecondary education, employment services and workforce development. As displacement becomes a regular feature of our modern economy, the government should leverage these investments to create a more flexible and responsive system of lifelong learning in Ontario — one that enables displaced and other mid-career workers to re-invest in their human capital and secure desirable jobs.

Meanwhile Ontarians — students, workers, educators and policy-makers alike — should develop and embrace a modern culture of lifelong learning. Faced with an unprecedented pace and scale of economic change, we must all be prepared and open to continuously upskill and reskill throughout the arc of our careers.

Introduction

Ontario was rocked by the news in late 2018 that General Motors (GM) would close its Oshawa assembly plant, putting more than 2,500 workers on notice. GM’s Oshawa facility had been a presence in the city for more than a century and for much of that time, its biggest employer. Soon after, Fiat Chrysler Automobiles announced 1,500 layoffs at its Windsor site. These are but two of the most recent examples of job losses in Ontario. There are others, across industries and sectors, affecting companies both large and small.

Displacement is not a new phenomenon. Companies have always come and gone. Entire job categories have disappeared while new ones have emerged. What is new is the magnitude of displacement. Economic forces such as technological changes, globalization and demographic shifts are generating more disruptions to the workforce in Ontario and elsewhere (Advisory Council on Economic Growth, 2017; Manyika et al., 2017). The type of person who is most vulnerable is also changing. The Organization for Economic Co-operation and Development (OECD) reported in 2015 that Canadian men had a higher displacement rate than women, and roughly half of displaced workers had a high school education or less. Today, women are slightly more vulnerable to displacement, and while nearly all workers can expect to experience some effects of disruption, middle-skilled workers are expected to be disproportionately affected (Advisory Council on Economic Growth, 2017; Frey & Osborne, 2017).¹

Middle-skilled workers have some education and training beyond high school such as a college degree, vocational certificate, some university or training provided through work experience (Holzer & Lerman, 2009). They occupy the bulk of office support and administrative positions, for example, where disruption is predicted to have a major impact (Frey & Osborne, 2017).

This paper explores the options available to displaced workers and other adult learners in Ontario who wish to upgrade their skills to improve their prospects of finding new work, and considers how government and postsecondary institutions might better serve mid-career adults.

Ontario makes a significant investment in postsecondary institutions and employment programs. The province’s education system is undoubtedly the largest site — in terms of both numbers of participants and expenditure — to foster and develop the skills required in today’s labour market. The Ministry of Training, Colleges and Universities (MTCU) provides \$5 billion a year in operating funding to Ontario colleges and universities; these institutions play an important role in workforce training by providing the foundational

¹ While we are not necessarily tying these skill categories to income categories, it is worth noting that similar forecasts are made about income categories: Manyika et al. predict a net growth in low-income jobs as well as high-income jobs, while “a wide range of middle-income occupations will have the largest employment declines” (2017).

skills that should set students on a lifelong path of learning, and offering job-specific degrees and other credentials (Government of Ontario, 2019b).

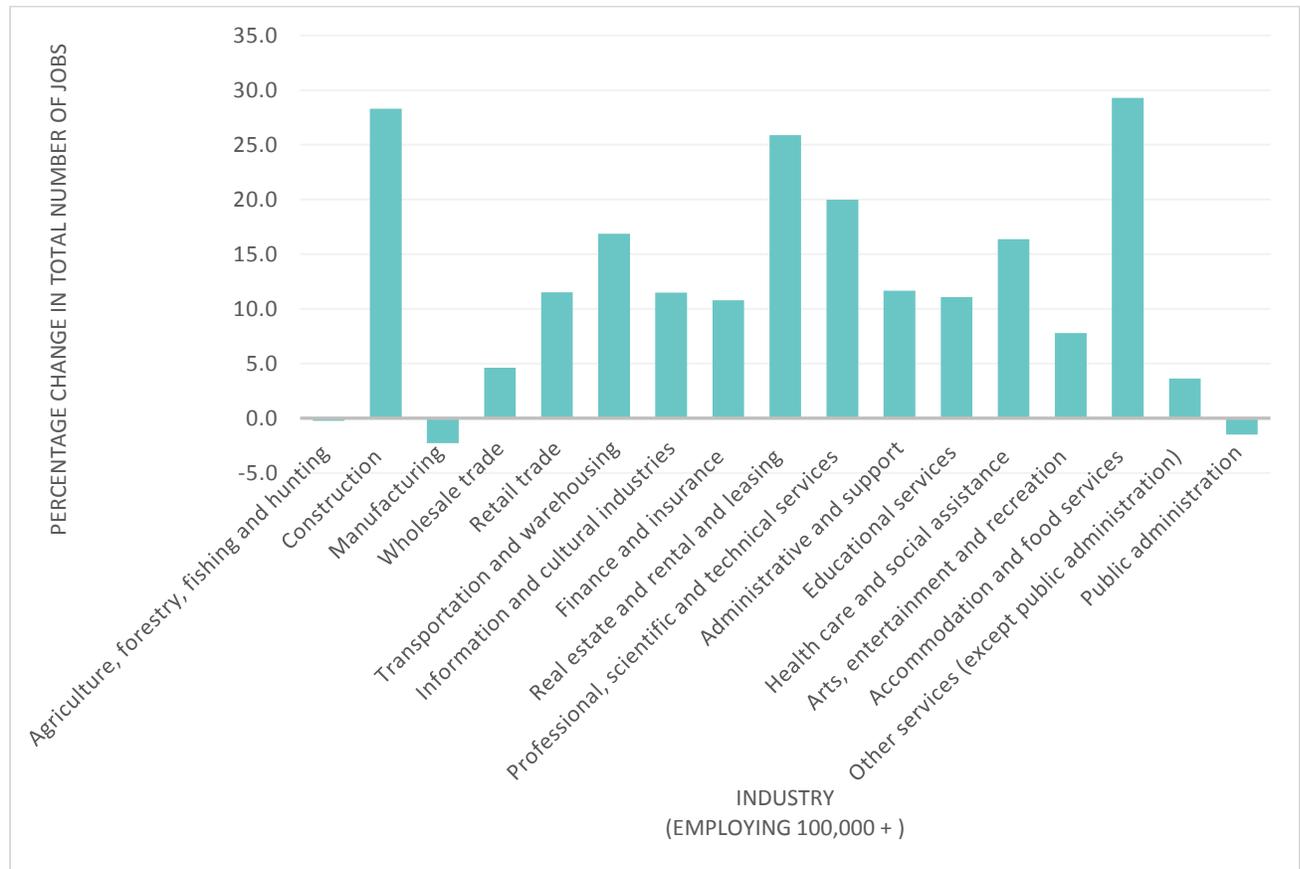
In addition, there is a large ecosystem of programs — offered by governments, colleges, universities and private career colleges — designed to address the retraining needs of displaced workers, workers whose occupations are changing and those seeking new job opportunities. The Ontario government funds a suite of programs designed to provide retraining services to those seeking work and to employers seeking new hires. These programs are provided through the Employment Ontario division of MTCU.² Government spending on labour market programs and services totals close to \$1.3 billion a year, the majority of which comes from the federal government through bilateral labour market transfer agreements. They include résumé-writing workshops as well as programs such as Second Career that were designed to help displaced workers obtain reskilling services and find new employment.

Job Losses and Gains

Ontario has experienced steady employment gains since the 2008–09 recession. Employment in the province increased by 79,400 jobs in the first quarter of 2019, the largest quarterly gain in more than 20 years (Ministry of Finance, 2018). However, the job gains were variable among different categories of occupations, and two job categories recorded job losses over this period: manufacturing and public administration. Figure 1 shows the percentage change in employment by industry between 2009 and 2017.

² Both the Employment and Training Division (ETD) and Workforce Policy and Innovation Division (WPID) are responsible for Employment Ontario — WPID on the policy side and ETD on the operational side.

Figure 1: Change in Employment by Industry, 2009–2017, Ontario



Source: Statistics Canada, 2019

The manufacturing sector was particularly hard hit; employment in this sector fell by roughly 3%, or 21,330 jobs, over the period. Even within sectors that experienced overall job gains, there were subsectors that saw substantial declines. For example, while employment in administrative and support services gained more than 40,000 jobs over the eight-year period, the office and administrative services subsector saw a reduction of more than 17,000 positions, a 34% drop. Within the information and cultural industries, significant displacements were experienced by broadcasting, newspaper publishing and telecommunications workers, who saw a combined reduction of almost 19,000 jobs.

At the same time, new opportunities emerged. The computer systems design and related services subsector (which falls under professional, scientific and technical services) added more than 37,000 jobs between 2009 and 2017. Within information and cultural industries, jobs in motion picture and video production grew by 38%.

Ontario, like other industrialized economies, has experienced significant changes in its industrial base, including a shift from higher-paying, goods-producing industries — particularly manufacturing — to lower-paying service-sector industries; a decline in middle-skill occupations in favour of increases in high-skill, high-paying ones as well as lower-paying, non-routine manual jobs; and an increase in precarious, contract work (Ministry of Finance, 2017). These forces have made the provision of an effective system of lifelong learning more vital for Ontarians.

We looked at several case studies in Ontario involving job losses and gains (see Appendix). Each case tells a story of labour market disruption. Together, they suggest a clear conclusion: The labour market is unpredictable. We cannot predict which companies will thrive and which will fail; whose jobs are at risk and whose are not. Nor can we forecast which new industries and jobs will emerge. As one prime example, who could have foreseen the rise of the province's cannabis industry just a few short years ago?

The case studies reinforce previous research findings that while we may be able to forecast broad labour market trends, we cannot accurately predict what jobs will be available in the future nor in what numbers. Previous HEQCO research has demonstrated that there is no clear relationship between a postsecondary credential or field of study and a specific job (HEQCO, 2015). This holds true even in the regulated professions (PRISM Economics and Analysis, 2016).

What fate befalls those who lose their jobs? One study found that displaced workers who pursued postsecondary education within a year of losing their jobs earned almost \$7,000 more in the long term than those who did not (Frenette, Upward & Wright, 2011). Another study of Canadians receiving employment insurance (EI) found that recipients who invested in skills development saw more pronounced positive effects on employment and earnings than other groups of EI recipients (Handouyahia, Roberge, Gringras, Haddad & Awad, 2016). Meanwhile, laid-off workers who seek new employment immediately after losing their jobs without pursuing upskilling opportunities experience lower earnings (lower hourly wages and fewer working hours) and a higher frequency of part-time work (OECD, 2015).

The potential for lost earnings following displacement hurts not only individuals and their families, but the province as well. An analysis by the World Economic Forum found that public investments in displaced workers' education can reduce government spending on social assistance and increase tax revenues, making support for further education in times of layoff a sound investment (2019).

These findings demonstrate the importance of providing support for displaced workers as they access training opportunities, especially during times of rapid economic change. Ontario does so primarily in two ways, through the province’s postsecondary education system and through a suite of government retraining and workforce development programs and services.

The Role of Postsecondary Institutions

Ontario’s postsecondary institutions have historically played an important role in in workforce training by providing the knowledge and foundational skills needed for successful careers, and offering job-specific degrees and other credentials.

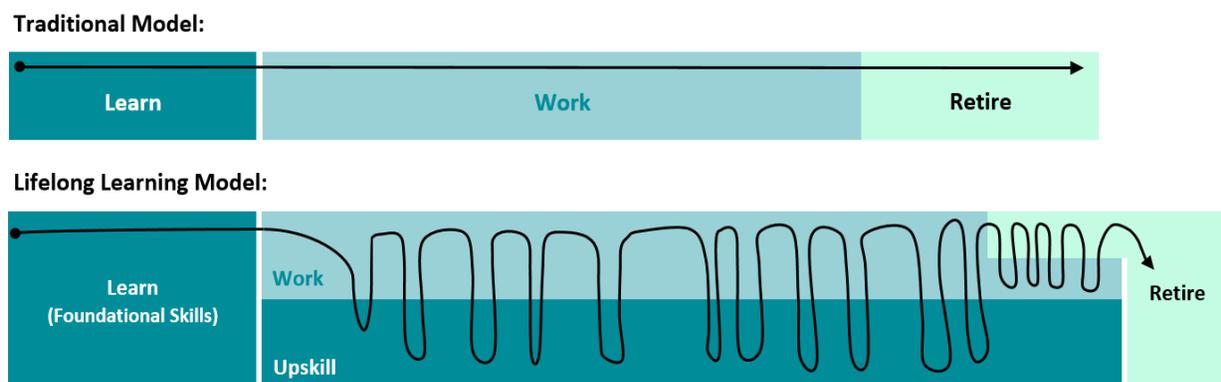
Building Foundational Skills

While we cannot predict which job-specific skills workers will require to occupy which jobs, we can say with certainty that employers will continue to demand transferable skills such as literacy, numeracy and critical thinking — skills that also form the basis for effective lifelong learning.³

McGowan and Shipley have called on educators in K–12 and traditional postsecondary programs to “focus less on preparing students for their first job and focus instead on preparing them intellectually, socially and emotionally to continuously adapt and re-invent themselves for the now much longer arc of their career — where job losses (and adaptations to new jobs) are the norm” (2017). This new model, relying on lifelong learning and requiring workers to upskill regularly, is depicted in Figure 2.

³ In previous reports, HEQCO has referred to a more detailed taxonomy of learning outcomes: basic cognitive skills, disciplinary content, higher-order cognitive skills and transferable life skills. In this report, we use the term “transferable skills” more broadly to include basic/higher-order cognitive skills as well as transferable life skills.

Figure 2: The Lifelong Learning Model⁴



Source: Adapted from McGowan & Shipley (2017)

Rather than acting as a linear pipeline to a specific job, the traditional postsecondary and K–12 sectors should build a foundation of transferable skills. At the postsecondary level, it is largely in undergraduate programs where these general skills are taught and honed, making graduates employable and setting them on a course for continuous lifelong learning (Harrison, 2017).

What are these transferable skills? When employers are asked what skills they seek in employees, they point to critical thinking, problem solving, and well-developed literacy and numeracy — the very same skills that postsecondary institutions purport to teach (Business Council of Canada, 2018). There is a wide discrepancy in the opinions of employers and postsecondary institutions as to whether students are, in fact, obtaining these skills (Mourshed, Farrell & Barton, 2013, Jaschik & Lederman, 2014).

HEQCO recently completed two large-scale trials, involving more than 7,500 students at 20 colleges and universities that measured skills and competencies including literacy, numeracy and critical thinking in entering and graduating postsecondary students. Our study revealed that one in four graduating students scored below adequate in measures of literacy or numeracy, and less than a third scored at superior levels (Weingarten & Hicks, 2018).

Research shows that differences in literacy skills are the single most important determinant of economic growth across countries and are becoming increasingly more important. A 1% increase in average literacy leads to a 3% increase in long-term rates of GDP per capita. (Schwerdt & Wiederhold, 2018). Jobs

⁴ The new model, depicted in a modified version of the illustration provided by McGowan and Shipley (2017), also portrays an increasing life expectancy and the idea of working retirement; that is, that seniors may meld work and retirement well into their 80s.

increasingly require higher levels of technical and cognitive skills. An analysis by the Canada West Foundation found that 97% of all jobs created between 1997 and 2015 demanded a proficiency of Level 3 or above in literacy in OECD-developed assessments (Lane & Murray, 2018).⁵

Yet while demand for strong literacy skills is growing, almost half of Canada's workforce has lower skills than required to be able to fully participate in the labour market (Lane & Murray, 2019). "The negative effects of having low literacy skills start in youth and perpetuate over a lifetime," Lane and Murray write (2019, p. 3). A separate study of numeracy skills found that 54% of Canadian adults achieved below the level regarded as necessary, up from 47% a decade earlier (Orpwood & Brown, 2015).

This is a worrisome trend. These skills are important for the long-term success of individuals and the economy. They should be taught with intention and measured with a view to ongoing improvement.

Adult Training Opportunities

Inevitably there will be times when workers will require access to training and support to adapt to changing job requirements or job loss, a desire to advance in an existing job or to change careers altogether. When adult learners require retraining or upskilling, they should have access to flexible programs that recognize prior learning and experience, are aligned with employer needs and are rigorously evaluated to ensure quality and market value (OECD, 2019b). Such programs should lead to an employer-recognized credential that is portable between postsecondary institutions to allow for learning progression.

In Ontario's postsecondary system, these sorts of programs are offered to some degree by public colleges and universities, as well as private career colleges.⁶

The province's 24 publicly funded colleges were created more than 50 years ago to offer programs "of career-oriented education and training to assist individuals in finding and keeping employment, to meet the needs of employers and the changing work environment, and to support the economic and social development of their local and diverse communities" (Government of Ontario, 2002). From their inception, colleges were designed to accommodate adult learners as well as traditional high school graduates. According to Colleges Ontario, 20% of college students did not enter directly after high school in 2016–17,

⁵ These assessments include the Programme for the International Assessment of Adult Competencies (PIAAC), which measures literacy, numeracy and problem-solving skills, and Education and Skills Online, the commercial version of PIAAC.

⁶ There are also some non-profit organizations, such as Palette Inc., that have recently emerged. Palette was launched in part by Ryerson University's Brookfield Institute for Innovation + Entrepreneurship and funded in part by the federal government. It provides a six-week training program to mid-career workers who either have been displaced or are at risk of displacement as a result of automation. The training component is followed by a three- or four-month work placement in sales and marketing roles within technology companies. Ryerson University, Humber College and Lighthouse Labs, a private career college, will deliver the program (Palette Inc., n.d.).

and an additional 17% had some PSE experience but hadn't completed a credential. Colleges offer a range of credentials from diplomas to career-specific degrees and post-graduate certificates, and deliver the in-class portion of apprenticeship training. About 35% of students in Second Career programs, a provincial-government-funded retraining initiative, get their training at Ontario colleges (Colleges Ontario, 2018).

Ontario's 20 publicly funded universities have a broader mandate that encompasses teaching and research. At the undergraduate level they offer bachelor-degree programs that are academically oriented as well as those that have a career focus such as nursing and engineering. Many universities also offer short-term certificate programs through their continuing education departments, which are not typically covered by public funds. They include degree-credit courses, non-degree career training and general-interest courses that are delivered in class and online.

Some students attend both sectors. In recent years an increasing number of university graduates, once they complete their undergraduate training, subsequently enrol in college programs for a second career-focused credential (Harrison, 2017). In 2016–17, about one-third of Ontario college students had previously completed a college or university credential, and of those 16.5% were university graduates (Colleges Ontario, 2018).

Ontario's 240 private career colleges (PCCs), which do not receive funding from the province, also play a role in adult education. PCCs offer shorter diploma and certificate programs, typically lasting seven to 12 months, many of them with a vocational focus. The program offerings overlap considerably with those of public colleges, although they are typically shorter and their tuition fees higher. PCCs tend to attract older learners; about 30% are over the age of 35. They also provide training to Second Career participants (Career Colleges of Ontario, n.d.; Pizarro Milian & Hicks, 2014).

Several PCCs and other training delivery agents have emerged in recent years offering boot-camp-style programs that run for up to 12 weeks, and part-time evening or accelerated courses designed for working professionals. While many of them are geared toward occupations in the tech field, some also offer product management and business programs. One provider, HackerYou College of Technology, has introduced a new payment option known as income sharing agreements that allow students to defer payment of the \$12,000 tuition fee until they have completed the program and have found a job that pays at least \$50,000, at which time they are required to pay a percentage of their monthly income each month for two years (repayment is capped at \$30,000). If a student doesn't get a job that pays that much within five years of graduating, they aren't required to pay any tuition (Hansen, 2019).

Ontario's postsecondary institutions could offer more and better versions of the sort of programs recommended by the OECD: that is, short, flexible, aligned with labour market needs, and with processes for recognition of prior learning (2019b). As Figure 2 illustrates, Ontarians will need access to these sorts of opportunities throughout their working lives.

Colleges in particular have a core mandate to offer flexible, career-oriented programs that accommodate adult learners. However, one constraint they face is the current funding and regulatory mechanism, which effectively discourages the delivery of short programs (less than a year).

In the 2019 Ontario budget the government announced plans to develop credential-based programs that focus on skills that employers are seeking and that help people find stable work more efficiently. It also announced plans to launch a micro-credentials pilot to promote the development of new, responsive training programs (Government of Ontario, 2019a).

Competency-based Education

Competency-based education (CBE) programs are a promising model for adult retraining programs, and particularly well-suited to meet the demands and constraints of displaced workers seeking to upgrade their skills. CBE programs are designed in consultation with employers to be industry aligned. They award credentials based on skill mastery rather than time spent in a classroom, allowing students with prior learning and experience to progress relatively quickly and cost-effectively. Often offered online, CBE programs give students the flexibility to access learning material and complete assessments at their own pace. Students in CBE programs advance only when they meet defined benchmarks for mastery. In the US, there has been an explosion of online, CBE programs offered by public and private institutions that are principally geared to adult learners with previous work experience and postsecondary education, who are looking to earn a formal credential with market value.

Western Governors University is one of the better-known providers of CBE programs, offering degrees in the health professions, education, business and IT. It and several other American institutions gear their CBE programs to serve mid-career adults (Pichette & Watkins, 2018). Southern New Hampshire University, another online CBE provider, has more than 90,000 students enrolled at a time when many US colleges are struggling with declining student numbers (Gardner, 2019).

CBE programs are particularly well-suited to meet the needs of adult learners with family and work responsibilities, and those with previous education and work experience who require retraining as a result of job loss or who wish to advance in the labour market — a group that is currently underserved in Ontario.

Previous HEQCO reports have highlighted the sustainability challenges that some postsecondary institutions face in part because of stagnating domestic enrolment levels as the number of 18-to-20 year-olds in the province declines (Weingarten, Kaufman, Jonker & Hicks, 2018). Adult learners represent a new and underserved market. Postsecondary institutions should seize the opportunity and introduce CBE programs targeted to adult learners.

Government Programs

The Ontario government also funds a suite of programs designed to provide retraining services to those seeking work and to employers seeking new hires. The bulk of these programs are provided through MTCU’s Employment Ontario division. Government spending on labour market programs and services in Ontario totals close to \$1.3 billion a year (Government of Ontario, 2019b), the majority of which comes from the federal government through various federal-provincial labour market agreements (Auditor General of Ontario, 2016). Some are funded directly by the federal government.

The programs can be grouped into two broad categories: employment services and workforce development.⁷ Several other ministries of the Ontario government also offer employment and training services. In this paper we limit our discussion to those administered by MTCU.

Figure 3: Government Programs that Facilitate Training of Displaced Workers

Employment Services Individual employment supports	Workforce Development Strategic initiatives that support groups of workers and employers
<ul style="list-style-type: none"> • Résumé and cover-letter writing • Networking and interview workshops • Job search assistance • Basic skills upgrading (e.g., numeracy, literacy) 	<ul style="list-style-type: none"> • SkillsAdvance • Canada-Ontario Job Grant • Second Career • Lifelong Learning Plan • Skills Boost • Canada Training Benefit

Employment Services

Employment services respond to individual needs in times of unemployment or underemployment. These services are delivered through a network of not-for-profit providers contracted by MTCU. The services offered include skills upgrading, job-search support, and providing information about careers and the local labour market, among other things. There are more than 700 service delivery sites across the province. In 2015–16, 673,000 people were served by third-party service providers (Auditor General of Ontario, 2016).

While employment services are available to everyone, they tend to target lower-skilled workers and underrepresented groups, such as at-risk youth, who together have historically been the most vulnerable to

⁷ This categorization is described by Zizys (2018).

displacement. The services focus on direct re-employment, and training is limited to basic entry-level skills (e.g., literacy and basic skills, adult high school credits, language training, etc.).

Workforce Development

Workforce development programs are designed to serve large groups of workers and employers, in alignment with labour market trends. Programs such as SkillsAdvance, the Canada-Ontario Job Grant and Second Career fall within this category. Workforce development programs are less reactive to individual circumstances than employment services and focus on the long-term economic prosperity of the province. Some of these programs offer opportunities to displaced workers looking to invest in their education and training beyond basic skills, in some cases by facilitating access to Ontario's postsecondary system.⁸

Second Career

Introduced during the peak of the financial crisis in 2008, Second Career was designed for laid-off workers struggling to find viable employment. The program provides funding for skills upgrading at an Ontario postsecondary institution, up to \$28,000 to cover tuition and living expenses over two years, with the goal of helping displaced workers find employment in a new sector.⁹ Eligibility is based on a suitability matrix that favours those who have a high school diploma or less, have been employed in the same occupation for more than seven years, are seeking employment in a field that may require college education (but not university training), and have been both unemployed and actively searching for work for more than six months. Participants must select a vocational program that they can demonstrate is aligned with available job opportunities. The most popular occupations pursued are truck driver, heavy equipment operator, social and community service worker, medical administrative assistant and accounting clerk (Colleges Ontario, 2018). Participation in the program has declined from 9,271 participants in 2014–15 to 5,379 in 2017–18.

Canada-Ontario Job Grant

The Canada-Ontario Job Grant was introduced in 2014 and designed to encourage employers to provide training for their employees. Funding for the grant is provided by the federal government and the programs are delivered by MTCU through its postsecondary and other training institutions. Eligible employers can receive up to \$10,000 per employee to train existing employees to facilitate promotion and preserve jobs during times of a threatened layoff. Large employers are required to cover at least half of the training costs. Small employers can contribute less and may be eligible to receive up to \$15,000 per employee.

⁸ The following information was obtained through interviews with personnel at the Ministry of Training, Colleges and Universities.

⁹ Average funding per participant is closer to \$16,000

Unemployed individuals may also be eligible to participate if they have a permanent or conditional offer of employment. Only about 6% of the Canada-Ontario Job Grant funding is dedicated to training unemployed workers. The training must not run longer than one year and must be provided by an Ontario college, university, private career college, school board or union-based training centre.

SkillsAdvance Ontario

MTCU launched the SkillsAdvance Ontario pilot program in 2016 to bring together employers with employment needs and training providers to develop a pool of job-ready workers. Currently in its second phase, the SkillsAdvance project is designed to meet the needs of employers in sectors that have been struggling to recruit workers with the right skills, including the construction and hospitality sectors. Participants in the program are provided with instruction on how to develop transferable skills as well as technical skills for a career in a specific sector and are then matched with employers with vacancies. In the first phase of the pilot project, MTCU worked with community organizations to deliver the program. SkillsAdvance was designed to provide a more comprehensive range of services than the Canada-Ontario Job Grant, and target unemployed Ontarians.

Financing Options

In addition to the retraining programs, Ontarians can access financing for skills upgrading and training initiatives through several programs. The Lifelong Learning Plan, a federal program, allows participants to withdraw funds from a Registered Retirement Savings Plan to obtain technical or vocational training from a federally recognized educational institution.

Displaced workers can also access funding through the Skills Boost Pilot Project. Introduced in the 2018–19 academic year, Skills Boost supports eligible adult learners seeking to upgrade their skills with a grant of up to \$1,600 a year provided through the Ontario Student Assistance Program. To qualify, learners must have been out of high school for at least 10 years, be enrolled as a full-time student in a program that is at least two years long, and have an income below a set threshold (ESDC, 2018).¹⁰

More recently, the federal government introduced in the 2019 budget the Canada Training Benefit, which will provide \$250 a year in non-taxable credits for workers to put toward a training program, up to a lifetime limit of \$5,000. The credits can be used to cover up to half the cost of taking a course or enrolling in a training program. In addition, a new Employment Insurance Training Support Benefit, expected to launch in

¹⁰ To qualify for Skills Boost funding, learners must be eligible for the Canada Student Grant for full-time students, which sets thresholds for family income.

2020, will provide workers with up to four weeks of income support over a four-year period through the EI system while they are pursuing training (Department of Finance, 2019).

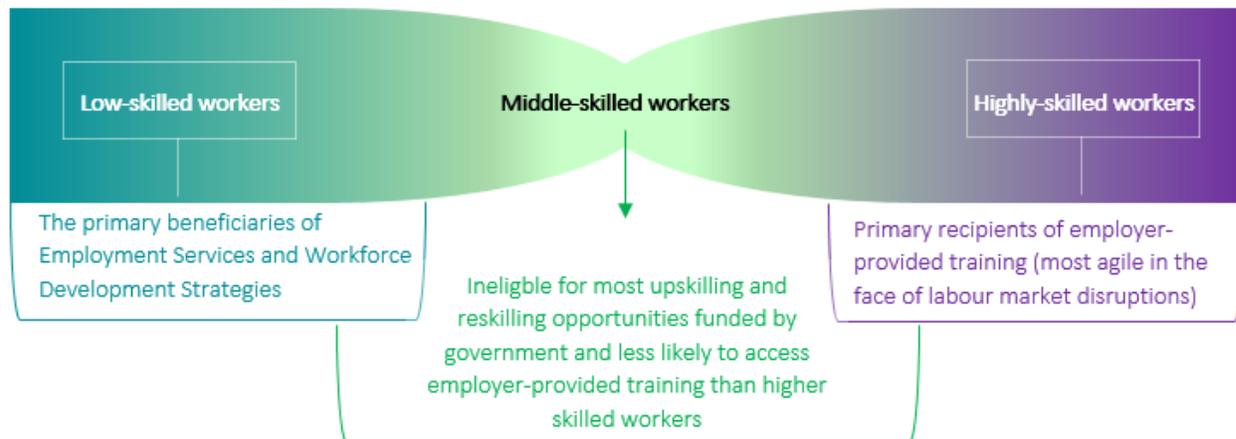
Gaps in Government Programs

The 2016 Ontario Auditor General's report found that the province's employment and training programs and services resulted in relatively few people finding full-time employment or employment in their field of training (Auditor General of Ontario, 2016). The report noted that many clients served under the Second Career program have been unsuccessful in finding full-time employment in their new career. The programs introduced in recent years, some with overlapping responsibilities, appear haphazard and confusing. Mid-career workers, especially those who have lost their jobs, shouldn't be left guessing. They should have access to retraining options that are straightforward and easy to access.

In the 2019 budget, the Ontario government acknowledged that the services currently available to displaced workers and employers are fragmented and do not always provide job seekers with a clear path to employment. It said it would review the programs, including Second Career, as well as the financial supports provided to laid-off workers and to employers who want to invest in training (Government of Ontario, 2019a).

We note that many of the employment services and workforce development programs provided by MTCU limit their focus on those with minimal or no previous postsecondary experience, and set a timeline that is unlikely to appeal to adult learners with family and work commitments. Meanwhile, employers are more likely to spend training dollars on their most highly educated staff (Munro, 2019). Canada's Advisory Council on Economic Growth notes that managers, supervisors, and professional, technical, and scientific personnel account for about 70% of the average training budget and receive more intensive training than employees with lower qualifications (2017). This leaves a gap in available retraining options for middle-skilled workers.

Figure 4: Who is Served?



Conclusion

Gone are the days when a high school diploma, college certificate or bachelor’s degree could set workers on a course for a job with a single employer until retirement. Ontarians, like others around the world, are experiencing — and will increasingly experience — job loss and job change.

Ontario dedicates substantial public dollars to postsecondary education, employment services and workforce development to support displaced workers and other adult learners seeking new job opportunities. Ontario’s postsecondary institutions play an important role in this regard, but there is room for improvement. The most important contribution they can make is to focus on the foundational skills that they instil in learners. These will form the building blocks that will prepare students for the unpredictability of the labour market, to withstand turmoil and to flourish.

Inevitably there will be times when workers will require access to additional training and support, either as a result of job loss, the desire to advance in an existing job or to change careers altogether. In these times, they should have access to flexible programs that allow them to complete their training quickly and cost effectively, and to obtain credentials that are recognized by employers and other educational institutions.

Adult learners represent a new and underserved market for postsecondary institutions. Their numbers are growing. We note that US institutions that cater to this demographic have seen a boom in enrolment. Postsecondary institutions in the province should seize the opportunity as well. Doing so will require a shift in thinking on the part of institutions and governments. They must work together to provide the new types of programs that are required. It would be to the benefit of learners, institutions and society.

All Ontarians — students, workers, educators and policy-makers — must recognize and embrace a new educational model where lifelong learning is the norm. We should no longer expect our education system to serve as a linear pipeline to a specific job. Rather, we should expect our postsecondary institutions to provide Ontarians with a foundation of transferable skills, topped up with job-specific skills, which will allow us to adapt and thrive in times of change.

Below, we summarize our recommendations for providing an effective system for lifelong learning.

Summary of Recommendations

Institutions should:

- Build a foundation for lifelong learning

Ontario's economy is changing rapidly, and while we cannot accurately predict which job-specific skills workers will require to occupy which jobs, we can predict with certainty that employers will continue to demand transferable skills such as literacy, numeracy and critical thinking — skills that also form the basis for effective lifelong learning. As we have previously recommended, all postsecondary institutions should conduct mandatory, large-scale assessments of transferable skills (for example, literacy, numeracy and critical thinking) on a regular basis and use the results to improve the teaching of these foundational skills (Weingarten, Hicks, Kaufman, Chatoor, MacKay & Pichette, 2019). This will ensure our postsecondary institutions prepare students to thrive, despite the unpredictability of the labour market.

- Offer short-term, flexible training programs

Ontario's 2019 budget announced plans to develop credential-based programs that focus on skills employers are seeking and that help people find stable work more efficiently. It also promised to launch a micro-credentials pilot to promote the development of new, responsive training programs. We recommend this pilot be used to test programs that align with the OECD's recommendations; that is, programs that are flexible and short, that lead to recognized credentials that are portable between institutions, and that include processes for recognition of prior learning. Ontario's postsecondary institutions do not currently offer programs that meet the OECD's criteria, but they could design new programs that do so. The new Canada Training Benefit should serve as further incentive to develop such programs. These programs could serve as an opportunity to access a new and underserved market of adult learners, enhancing the sustainability of our postsecondary institutions.

- Introduce competency-based education programs

CBE programs are particularly well-suited to meet the needs of adult learners with family and work responsibilities and for those with previous education and work experience who require retraining as a result of job loss or who wish to advance in the labour market. In the US, there has been an explosion of online CBE programs offered by public and private institutions and many of these have seen their enrolments rise at a time when other many other traditional US colleges are struggling with declining enrolment. We recommend that postsecondary institutions in the province offer CBE programs that cater to the needs of adult learners or that the province invite existing institutions offering CBE to expand in Ontario.

Governments should:

- Loosen funding restraints on postsecondary institutions

One impediment that colleges and universities face in developing and offering new programs is the current funding mechanism, which is geared to funding programs that are a year in length or longer. The Ontario government should loosen funding regulations and other regulatory constraints on public postsecondary institutions and make it easier for them to develop and offer new short programs geared to adult learners and CBE programs. We are not suggesting that this requires additional funding, but rather a rebalancing of the existing funding institutions already receive.

- Improve access for the middle-skilled

The Ontario government is currently reviewing its delivery of employment services with a view to optimizing their reach and effectiveness. And we are encouraged by Ontario's announcement in the 2019 budget that it intends to make changes to Second Career and other skills training programs. We recommend that as part of the review process, the government consider opportunities to create more flexibility in the eligibility of workforce development programs to better serve the needs of displaced middle-skilled workers, while maintaining basic skills training for lower-skilled workers.

- Measure outcomes

Any new programs and services that are introduced should be vigorously evaluated to ensure they are effective and meeting the needs of learners and employers. When students enrol in primary school, they are assigned an Ontario Education Number (OEN) that tracks their progress to and through the PSE system. Why not expand the use of the OEN to adult education and retraining programs to create a longitudinal database that will allow us to measure the outcomes of postsecondary education as well as adult retraining programs? In addition, the government should track the employment outcomes of displaced workers to understand and cater to their needs.

References

- Advisory Council on Economic Growth. (2017). *Learning Nation: Equipping Canada's Workforce with Skills for the Future*. <https://www.budget.gc.ca/aceg-ccce/pdf/learning-nation-eng.pdf>
- Alini, E. (2017, October 11). Sears Canada: Here's How Many Jobs Each Province Will Lose. *Global News*. <https://globalnews.ca/news/3797128/sears-canada-ontario-quebec-job-losses/>
- Auditor General of Ontario. (2016). *Annual Report 2016*. <http://www.auditor.on.ca/en/content/annualreports/arbyyear/ar2016.html#volume1>
- Bagnall, J. (2018a, May 28). The Strange Alchemy of Shopify's Millennials. *Ottawa Citizen*. <https://ottawacitizen.com/business/local-business/the-strange-alchemy-of-shopifys-millennials>
- Bagnall, J. (2018b, September 21). The Day Smiths Falls' Luck Finally Turned Around: The Story of a Marijuana Boom Town. *Ottawa Citizen*. <https://ottawacitizen.com/news/local-news/the-day-smiths-falls-luck-finally-turned-the-story-of-a-marijuana-boom-town>
- Blatchford, A. (2018, October 13). Smiths Falls Town Back to High Times after Cannabis Creates 800 Jobs, Saving Community. *National Post*. <https://nationalpost.com/news/high-times-optimism-in-smiths-falls-the-little-town-that-marijuana-saved>
- Bray, R. (2009, October 30). Life after Nortel. *Ottawa Citizen*. <https://ottawacitizen.com/news/life-after-nortel/wcm/4b98465f-bd99-4665-a5c9-6b7ef7f741bf>
- Business Council of Canada. (2018). Navigating Change: 2018 Business Council Skills Survey. <https://thebusinesscouncil.ca/wp-content/uploads/2018/04/Navigating-Change-2018-Skills-Survey-1.pdf>
- Calof, J., Richards, G., Mirabeau, L., Mouftah, J., Mackinnon, P., Chapman, P. & Vasudev, P. M. (2014). *An Overview of the Demise of Nortel Networks and Key Lessons Learned: Systemic Effects in Environment, Resilience and Black-cloud Formation*. Ottawa: University of Ottawa. <http://sites.telfer.uottawa.ca/nortelstudy/>
- Career Colleges of Ontario. (2013) What are Career Colleges? http://www.careercollegesontario.ca/w_what-are-career-colleges.aspx?
- Chassany, A-S. (2018, March 5). France to Overhaul Professional Training System. *Financial Times*. <https://www.ft.com/content/0439a8c0-205e-11e8-9efc-0cd3483b8b80>

- Colleges Ontario. (2018). Student and Graduate Profiles 18. *Environmental Scan 2018*.
https://www.collegesontario.org/research/2018_Environmental_Scan/CO_EnvScan_2018_PROFILES_WEB.pdf
- Counter, R. (2018, September 4). Want a Job in Canadian Tech? Don't Worry about that University Degree. *Canadian Business*. <https://www.canadianbusiness.com/work/want-a-job-in-canadian-tech-dont-worry-about-that-university-degree/>
- Dangerfield, K. (2017, October 11). Sears Canada: The Rise and Fall of the Department Store Empire. *Global News*. <https://globalnews.ca/news/3796409/sears-canada-history/>
- Department of Finance. (2019). *Backgrounder: The Canada Training Benefit*. Ottawa: Government of Canada. <https://www.budget.gc.ca/2019/docs/themes/good-jobs-de-bons-emplois-en.pdf>
- Elliot, J. (2018, November 26). Timeline: GM Canada's Rise, Fall, Bailout and Eventual Departure from Oshawa. *Global News*. <https://globalnews.ca/news/4698563/general-motors-oshawa-timeline-canada/>
- Employment and Social Development Canada (ESDC). (2018, January 24). Going Back to School is Now More Affordable Thanks to Skills Boost. Ottawa: Government of Canada.
https://www.canada.ca/en/employment-social-development/news/2018/01/going_back_to_schoolisnowmoreaffordablethankstoskillsboost.html
- France's New Labour Problem – Skills Shortages. (2018, March 8). *The Economist*.
<https://www.economist.com/europe/2018/03/08/frances-new-labour-problem-skills-shortages>
- Frenette, M. (2007). Life After the High-tech Downturn: Permanent Layoffs and Earnings Losses of Displaced Workers. Ottawa: Statistics Canada.
<https://www150.statcan.gc.ca/n1/en/pub/11f0019m/11f0019m2007302-eng.pdf?st=QVqMDQ-N>
- Frenette, M., Upward, R., Wright, P. (2011). *The Long-term Earning Impact of Post-secondary Education Following Job Loss*. Ottawa: Statistics Canada.
<https://www150.statcan.gc.ca/n1/pub/11f0019m/11f0019m2011334-eng.htm>
- Frey, C. B. & Osborne, M. A. (2017). The Future of Employment: How Susceptible are Jobs to Computerization? *Technological Forecasting and Social Change*, 114, 254–280.
- Gardner, L. (2019, February 18). The Rise of the Mega-university. *The Chronicle of Higher Education*.
<https://www.chronicle.com/interactives/Trend19-MegaU-Main>

- General Motors, (2019, May 8). *GM Canada and Unifor Reach Agreement to Save Hundreds of Jobs with a C\$170 Million Investment in Oshawa* [Press release].
https://media.gm.ca/media/ca/en/gm/oshawa_transformation_agreement.html
- General Motors Canada. (n.d.). *General Motors Accelerates Transformation* [Press release].
<https://www.gm.ca/en/news/recent.detail.html/content/Pages/news/ca/en/2018/Nov/1126.html>.
- Global News. (2017, November 22). *Sears Holds Job Fair for Displaced Employees* [Video file].
<https://globalnews.ca/video/3875683/sears-holds-job-fair-for-displaced-employees>
- GM's Oshawa Plant is Closing: Here's What You Need to Know. (2018, November 26). *CBC News*.
<https://www.cbc.ca/news/canada/gm-oshawa-closure-1.4921660>.
- Gollom, M. (2018, November 28). "It's Scary, No Doubt about It": How Former GM Workers Coped with Their Plant Closure. *CBC News*. <https://www.cbc.ca/news/business/oshawa-plant-gm-jobs-1.4922697>.
- Government of Ontario (2002). *Ontario Colleges of Applied Arts and Technology Act*.
<https://www.ontario.ca/laws/statute/02o08f>
- Government of Ontario. (2019a). Ontario Budget: Protecting What Matters Most.
<http://budget.ontario.ca/pdf/2019/2019-ontario-budget-en.pdf>
- Government of Ontario. (2019b). Expenditure Estimates for the Ministry of Training, Colleges and Universities (2019–2020). <https://www.ontario.ca/page/expenditure-estimates-ministry-training-colleges-and-universities-2019-20>
- Government of Singapore. (2019). *SkillsFuture Credit*. <https://www.skillsfuture.sg/Credit>
- Hansen, J. (2019, April 16). Trading Tuition for a Slice of Future Income. *CBC News*.
<https://www.cbc.ca/news/business/trading-tuition-for-a-slice-of-future-income-1.5096611?fbclid=IwAR1pxCesL91B6En3jfnorkUij2K-TqEuYGlElb1s2sNPTBC2yeuanowIRTA>
- Handouyahia, A., Roberge, S., Gringras, Y., Haddad, T. & Awad, G. (2016). *Estimating the Impact of Active Labour Market Programs using Administrative Data and Matching Methods*. Proceedings of Statistics Canada Symposium 2016.
- Harford, E. & Devoy, D. (2019, February 28). Smiths Falls' St. Francis Transferring Students to Perth as School is Projected to be Over Capacity. *Inside Ottawa Valley*. <https://www.insideottawavalley.com/news-story/9196747-smiths-falls-st-francis-transferring-students-to-perth-as-school-is-projected-to-be-over-capacity/>

- Harrison, A. (2017). *Skills, Competencies and Credentials*. Toronto: Higher Education Quality Council of Ontario.
http://www.heqco.ca/SiteCollectionDocuments/Formatted_Skills%20Competencies%20and%20Credentials.pdf
- HEQCO. (2015, September 29). EduData – Where do University Graduates Work in Ontario? [Blog post].
<http://blog-en.heqco.ca/2015/09/edudata-where-do-university-graduates-work-in-ontario/>
- Holtzer, H. J. & Lerman, R. I. (2009). *The Future of Middle-skill Jobs*. Washington, DC: Brookings Institution.
<https://www.brookings.edu/research/the-future-of-middle-skill-jobs/>
- Hrapsky, C. (2019, February 19). The Tiny Canadian Town that Marijuana Saved. *KARE*.
<https://www.kare11.com/article/news/local/marijuana/the-tiny-canadian-town-that-marijuana-saved/89-34b9c46c-bd95-42f4-a563-f202e0d1eccc>
- Hunter, D. (2018). Nortel. *The Canadian Encyclopedia*.
<https://www.thecanadianencyclopedia.ca/en/article/nortel>
- Jarvey, N. (2019, January 17). Netflix Grows Subscriber Base to 139 Million Worldwide. *The Hollywood Reporter*. <https://www.hollywoodreporter.com/news/netflix-grows-subscriber-base-139-million-worldwide-1176934>
- Jaschik, S. & Lederman, D. (2014). Pressure on the Provosts. *Inside Higher Ed*.
<https://www.insidehighered.com/news/survey/pressure-provosts-2014-survey-chief-academic-officers>
- Key Dates in Nortel Networks' History. (2013, January 14). *CBC News*.
<https://www.cbc.ca/news/business/key-dates-in-nortel-networks-history-1.802117>
- Lane, J. & Murray, T. S. (2015). *Smarten Up: It's Time to Build Essential Skills*. Calgary: Canada West Foundation. https://cwf.ca/wp-content/uploads/2015/06/HCP_SmartenUp_Report_JUNE2015_WEB.pdf
- Lane, J. & Murray T. S. (2018). *Literacy Lost: Canada's Basic Skills Shortfall*. Calgary: Canada West Foundation. https://cwf.ca/wp-content/uploads/2018/12/2018-12-CWF_LiteracyLost_Report_WEB-1.pdf
- Lane, J. & Murraray, T. S. (2019). *What Now? Opportunity Lost*. Calgary: Canada West Foundation.
<https://cwf.ca/research/publications/what-now-opportunity-lost/#pdf>

- Manyika, J., Lund, S., Chui, M., Bughin, J., Woetzel, J., Batra, P. ... Sanghvi, S. (2017). *Jobs Lost, Jobs Gained: Workforce Transitions in a Time of Automation*. New York: McKinsey Global Institute.
<https://www.mckinsey.com/~media/mckinsey/featured%20insights/Future%20of%20Organization/What%20the%20future%20of%20work%20will%20mean%20for%20jobs%20skills%20and%20wages/MGI-Jobs-Lost-Jobs-Gained-Report-December-6-2017.ashx>
- Mason, G. (2018, January 19). The Inexcusable Treatment of Sears Employees: A Cautionary Tale. *The Globe and Mail*. <https://www.theglobeandmail.com/opinion/the-inexcusable-treatment-of-sears-employees-a-cautionary-tale/article37661479/>
- McGowan, H. & Shipley, C. (2017, October 25). Preparing Students to Lose Their Jobs. *LinkedIn*.
<https://www.linkedin.com/pulse/preparing-students-lose-jobs-heather-mcgowan>
- McNish, J. & Scurria, A. (2017, October 10). Sears Canada Approves Plan to Liquidate Most of Retail Chain's Assets. *The Wall Street Journal*. <https://www.wsj.com/articles/sears-canada-approves-plan-to-liquidate-most-of-retail-chains-assets-1507653776>
- McQuaig, L. (2017, October 26). Demise of Sears Canada Should be Catalyst for Change. *The Toronto Star*.
<https://www.thestar.com/opinion/commentary/2017/10/26/demise-of-sears-canada-should-be-catalyst-for-change-mcquaig.html>
- Ministry of Finance. (2017). Ontario's Long-term Report on the Economy.
<https://www.fin.gov.on.ca/en/economy/ltr/2017/ltr2017.pdf>
- Ministry of Finance. (2018). Ontario Economic Accounts. Fourth Quarter 2018.
<https://www.fin.gov.on.ca/en/economy/ecaccts/eca.pdf>
- Mojtehedzadeh, S. (2018, November 28). Spending on Provincial Retraining Program Offered to GM Workers has Declined Sharply. *The Toronto Star*. <https://www.thestar.com/news/gta/2018/11/28/spending-on-provincial-retraining-program-offered-to-gm-workers-has-declined-sharply.html>.
- Mourshed, M., Farrell, D. & Barton, D. (2013), *Education to Employment: Designing a System that Works*. New York: McKinsey & Company.
<https://www.mckinsey.com/~media/McKinsey/Industries/Social%20Sector/Our%20Insights/Education%20to%20employment%20Designing%20a%20system%20that%20works/Education%20to%20employment%20designing%20a%20system%20that%20works.ashx>
- Munro, D. (2019). *Skills, Training and Lifelong Learning*. Ottawa: Public Policy Forum.
<https://ppforum.ca/publications/skills-training-and-lifelong-learning/>

- Nortel Networks Corporation. (2001). *Annual Report 2001*.
https://bib.kuleuven.be/files/ebib/jaarverslagen/NortelNetworks_2001.pdf
- OECD. (2015). *Back to Work: Canada: Improving the Re-employment Prospects of Displaced Workers*. Paris: OECD Publishing. https://read.oecd-ilibrary.org/employment/back-to-work-canada_9789264233454-en#page1
- OECD. (2016). *Back to Work: Denmark: Improving the Re-employment Prospects of Displaced Workers*. Paris: OECD Publishing. https://read.oecd-ilibrary.org/employment/back-to-work-denmark_9789264267503-en#page1
- OECD. (2019a). *Getting Skills Right: Engaging Low-skilled Adults in Learning*. Paris: OECD Publishing. <http://www.oecd.org/employment/emp/engaging-low-skilled-adults-2019.pdf>
- OECD. (2019b). *Getting Skills Right: Future-Ready Adult Learning Systems*. Paris: OECD Publishing. https://read.oecd-ilibrary.org/education/getting-skills-right-future-ready-adult-learning-systems_9789264311756-en#page1
- Office of the Premier. (2018, November 26). Statement by Premier Doug Ford on General Motors Canada's Announcement that they will be Closing their Oshawa Assembly Plant [Press release]. <https://news.ontario.ca/opo/en/2018/11/statement-by-premier-doug-ford-on-general-motors-canadas-announcement-that-they-will-be-closing-thei.html>.
- O’Kane, J. (2018, May 9). Shopify Looks to Offer More Services, Products as Part of Growth Strategy. *The Globe and Mail*. <https://www.theglobeandmail.com/business/technology/article-shopify-looks-to-offer-more-services-products-as-part-of-growth/>
- Orpwood, G. & Sandford Brown, E. (2015). Closing the Numeracy Gap: An Urgent Assignment for Ontario. http://www.numeracygap.ca/assets/img/Closing_the_numeracy_gap_V4.pdf
- [Ottawa Citizen]. (2018, September 21). *Hiring Boom at Canopy Growth Helps Smiths Falls’ Economy Recover* [Video File]. https://www.youtube.com/watch?v=Mva2lMmmP_4
- Paddon, David. (2018, December 14). GM Working to Retrain Employees Affected by Oshawa Plant Closure, but Union Calls it a Distraction. *Financial Post*. <https://business.financialpost.com/transportation/autos/gm-working-to-retrain-employees-affected-by-oshawa-plant-closure>.
- Palette Inc. (n.d.). *Mid-career Upskilling for a Digital Economy: A Tech Sales Pilot*. <https://static1.squarespace.com/static/5970f3982e69cfe25862bfd4/t/5c7d58c6085229e1b61f00f4/1551718599598/Palette+training+provider+call+for+proposal.pdf>

- Pazzano, Jasmine. (2018, December 4). Oshawa GM Plant Closure to Cost Durham More than 5,000 Jobs: Union President. *Global News*. <https://globalnews.ca/news/4728843/oshawa-gm-plant-closure-durham-5000-jobs/>.
- Pichette, J., Watkins, E.K. (2018). *Competency-based Education: Driving the Skills-measurement Agenda*. Toronto: Higher Education Quality Council of Ontario. http://www.heqco.ca/SiteCollectionDocuments/Formatted_CBE%20Paper_REVISED.pdf
- Pierce, J. (2018, January 2). Sears Canada: The Inside Story. *Canadian HR Reporter*. <https://www.hrreporter.com/culture-and-engagement/35529-sears-canada-the-inside-story/>
- Pizarro Milian, R. & Hicks, M. (2014). *Ontario Private Career Colleges: An Exploratory Analysis*. Toronto: Higher Education Quality Council of Ontario. <http://www.heqco.ca/SiteCollectionDocuments/PCC%20ENG.pdf>
- PRISM Economics and Analysis. (2016). *Labour Market Trends and Outlooks for Regulated Professions in Ontario*. Toronto: Higher Education Quality Council of Ontario. <http://www.heqco.ca/SiteCollectionDocuments/Labour%20Market%20Trends%20and%20Outlooks%20for%20Regulated%20Professions%20in%20Ontario.pdf>
- Rider, D. (2019, February 19). Netflix is Setting up a Toronto Production Hub in the Port Lands. *The Toronto Star*. <https://www.thestar.com/news/gta/2019/02/19/netflix-announces-creation-of-production-hub-in-toronto.html>
- Rodriguez, J. (2018, November 26). General Motors' Oshawa Assembly Plant: A Brief History. *CTV News*. <https://www.ctvnews.ca/autos/general-motors-oshawa-assembly-plant-a-brief-history-1.4192810>.
- Sali, D. (2019, January 14). "Nortel Did Not Need to Die": Ten Years Since the Collapse that Shook Ottawa's Tech Sector. *Ottawa Business Journal*. <https://obj.ca/article/nortel-did-not-need-die-ten-years-collapse-shook-ottawas-tech-sector>
- Schwerdt, G. & Wiederhold, S. (2019). Literacy and Growth: Policy Implications of New Evidence from PIAAC. PIAAC Gateway. <http://piaacgateway.com/new-blog/2019/4/30/murray>
- Secretary of State for Education (2019). Independent panel report to the review of post-19 education and funding. https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/805127/Review_of_post_18_education_and_funding.pdf

- Smith-Vidal, S. (2018, March 9). Vocational Training in France: Heading Toward a ‘Big Bang’ Reform? *Morgan Lewis*. <https://www.morganlewis.com/pubs/vocational-training-in-france-heading-toward-a-big-bang-reform>
- Statistics Canada. (2019) Labour Statistics Consistent with the System of National Accounts (SNA), by Job Category and Industry. Ottawa: Statistics Canada
<https://www150.statcan.gc.ca/t1/tbl1/en/cv.action?pid=3610048901#timeframe>
- Strauss, M. (2017). Who Killed Sears Canada? *The Globe and Mail*.
<https://www.theglobeandmail.com/report-on-business/why-sears-canada-failed/article36677039/>
- Tan, C. (2017). Lifelong Learning through the SkillsFuture Movement in Singapore: Challenges and Prospects. *International Journal of Lifelong Education*, 36(3), 278–291.
- The Canadian Press. (2019, May 8). GM Announces \$170M Investment in Oshawa Plant that Will Save 300 Jobs. *CBC News*. <https://www.cbc.ca/news/canada/toronto/gm-unifor-oshawa-operations-1.5127356>
- The Canadian Press. (2018, October 1). Toronto’s “Moment” in Tech Sector Brings \$500M Investment by Shopify. *CBC News*. <https://www.cbc.ca/news/canada/toronto/shopify-toronto-expansion-investment-1.4845247>
- Toronto Film, Television and Digital Media Board. (2017). *Spotlight on Toronto: A Strategic Plan for the Film, Television and Digital Media Board*. Toronto: City of Toronto. <https://www.toronto.ca/wp-content/uploads/2017/11/972e-spotlight-on-toronto-film-strategy-2017.pdf>.
- Usher, A. (2019, March 14). *Skills Accounts: Singapore* [Blog post]. <http://higherstrategy.com/skills-accounts-singapore/>
- Weingarten, H. P. & Hicks, M. (2018). *On Test: Skills. Summary of Findings from HEQCO’s Skills Assessment Pilot Studies*. Higher Education Quality Council of Ontario.
http://www.heqco.ca/SiteCollectionDocuments/Formatted_EASI_PAWS%20Summary.pdf
- Weingarten, H.P., Hicks, M., Kaufman, A., Chatoor, K., MacKay, E. & Pichette, J. (2019). *Postsecondary Education Metrics for the 21st Century*. Toronto: Higher Education Quality Council of Ontario.
http://www.heqco.ca/SiteCollectionDocuments/Formatted%20Metrics%20for%20the%2021st%20Century_FINAL.pdf

- Weingarten, H. P., Kaufman, A., Jonker, L. & Hicks, M. (2018). *The Sustainability of the Ontario Public Postsecondary System: Putting Together the Pieces of the Puzzle*. Toronto: Higher Education Quality Council of Ontario.
<http://www.heqco.ca/SiteCollectionDocuments/Formatted%20Capstone%20paper.pdf>
- Winstanley, J. (2018). *Careers in TV production Editorial and Production Roles*. Creative Skillset.
https://www.screenskills.com/media/1791/tv-careers-map_editorial-and-production-roles.pdf
- Wong, G. (2007). *From Unemployment to Sustainable Livelihoods in Ottawa's Technology Sector* (Working Paper 44). Kingston: Queen's University School of Policy Studies.
https://ospace.library.queensu.ca/bitstream/handle/1974/14852/Wong_2007_Unemployment_to_Sustainable_Livelihoods.pdf?sequence=1&isAllowed=y
- World Economic Forum. (2019). *Towards a Reskilling Revolution: Industry-Led Action for the Future of Work*. The World Economic Forum. <https://www.weforum.org/whitepapers/towards-a-reskilling-revolution-industry-led-action-for-the-future-of-work>
- Wright, L. (2018, January 12). Laid-off Sears Canada Employees Share Memories — and What They'd Like to Say to Top Executives. *The Toronto Star*. <https://www.thestar.com/business/2018/01/12/laid-off-sears-canada-employees-on-memories-whats-next-and-what-theyd-say-to-top-executives.html>
- Zizys, T. (2018). *Workforce Development, Demand-led Strategies and the Goal of Good Jobs*. Ontario Centre for Workforce Innovation. <https://ocwi-coie.ca/wp-content/uploads/2018/08/01-018-01-Zizys-Tom-Final-Report.pdf>

Appendix

Case Studies

We studied three cases of job losses in Ontario within the last decade: General Motors, Nortel Networks and Sears Canada.

General Motors

General Motors' assembly plant in Oshawa was once one of the largest in Ontario, producing 730,000 cars and trucks a year and employing roughly 23,000 people (Rodriguez, 2018; "GM's Oshawa Plant," 2018). In the years leading up to and following the 2008–09 recession, GM's Oshawa operation became a shadow of its former self. The company laid off thousands and filed for bankruptcy protection in 2009 (Rodriguez, 2018; Elliott, 2018). In November 2018, GM announced the closure of the Oshawa assembly plant as part of a global restructuring; 2,973 jobs will be affected by the closure, of which 2,522 are based at the plant ("GM's Oshawa Plant," 2018, General Motors Canada, n.d.). The majority of those affected are assembly-line workers (Gollom, 2018) as well as some engineers and security personnel (Pazzano, 2018). About half will be eligible to retire (Paddon, 2018). Approximately 15,000 indirect jobs in the region are also expected to be affected (Pazzano, 2018).

GM has since pledged to invest \$170 million to "transition the facility from manufacturing vehicles to stamping, sub-assembly and autonomous vehicle testing" — a move that is predicted to save approximately 300 jobs (The Canadian Press, 2019).

The provincial government, working with GM and Unifor, opened a Rapid Re-employment and Training Services centre in Oshawa to offer counselling to laid-off workers and help match them with Employment Ontario and other support services. Durham College will support the centre with a dedicated jobs portal and will hold several job fairs. GM has developed a database to match employees' skills with employer requirements and will offer training support for qualified employees seeking new employment. Durham College, Centennial College and Trent University (Durham campus) will offer training tailored to regional employer needs (Office of the Premier, 2018; Mojtehdzadeh, 2018; General Motors, 2019).

Nortel Networks Corporation

At its peak, Nortel employed 94,500 workers internationally, 16,000 of whom were in the Ottawa-Gatineau region (Nortel, 2001; Sali, 2019). The telecommunications giant collapsed in 2009 as a result of external market pressures and corporate mismanagement, leaving many Ottawa-area residents on a precarious years-long job hunt (Hunter, 2018; "Key Dates in Nortel Networks' History," 2013; Calof et al., 2014; Bray,

2009). Nortel’s mass layoffs between 2001 and 2009 eliminated between 10,000 and 15,000 jobs in the Ottawa-Gatineau region. Many of those affected were managers, engineers, analysts, programmers, technicians, sales specialist and assemblers, and those in clerical roles (Wong, 2007).

A Statistics Canada study on those who lost their jobs in Ottawa during the high-tech downturn of the early 2000s found that laid-off high-tech workers who found new work experienced steep declines in earnings, well above the declines registered among any other group of laid-off workers; that about four out of five of those who found new work did not locate employment in high tech; and that about two in five laid-off high-tech workers in Ottawa-Gatineau left the city (Frenette, 2007).¹¹

Laid off high-tech workers in Ottawa “formulated their own local skills strategy to acquire the necessary competencies to move from unemployment to sustainable employment” (Wong, 2007). The initiative was underfunded and failed to monitor activities or outcomes systematically (Wong, 2007).

Sears Canada

Sears was once the largest and most successful department store in Canada (Strauss, 2017). Its downfall began with the takeover in 2005 by a US-based hedge fund (Strauss, 2017; Mason, 2018; McQuaig, 2017; Dangerfield, 2017). Meanwhile, retailers like Amazon, Target and Walmart entered and stole growing shares of the market (Strauss 2017). Between 2011 and 2018, Sears Canada closed 225 stores, resulting in more than 12,000 job losses nationwide, roughly 5,500 in Ontario (Alini, 2017; McNish & Scurria, 2017).

Sears Canada offered support to laid-off workers including a mix of digital and in-person workshops, webinars, one-to-one career coaching, links to job search sites, professional headshot sessions, and interviews/job fairs with other companies hosted at stores, distribution and call centres, as well as head office locations (Pierce, 2018; Global News, 2017; Wright, 2018).

We also looked at three cases of emerging industries and job gains including Netflix, Tweed Inc. and Shopify.

Netflix

Video-streaming giant Netflix is bringing new film production jobs to Toronto. Netflix is a subscription-based film and TV streaming service with 139 million international subscribers (Jarvey, 2019). In 2017, approximately 30,000 people found skilled positions in Toronto’s screen industry, working on the 1,432

¹¹ We could not find any reliable information about what happened to Nortel workers specifically, aside from some personalized accounts in the media. The same is true for Sears.

projects shot in the city (Toronto Film, Television and Digital Media Board, 2017). As Netflix enters the stage, an additional 1,850 jobs per year are expected to be created (Rider, 2019).

According to the Toronto Film, Television and Digital Media Board (2017), in-demand roles in the screen industry include everything from creative talent and production crews, to licenced drivers. Indirect roles — outside of cast and production — include electricians, safety crews, accountants, teachers and even medical consultants.

Typical production-related roles include entry-level positions (e.g., assistants, runners, data loggers); production-management roles (supervisors, coordinators, managers); talent management; development and editorial roles (researchers, directors and producers). Routes into these roles can include apprenticeships, internships, postsecondary education or via entry-level roles (Winstanely, 2018).

Tweed

When Tweed Inc. and its parent company, Canopy Growth Corp., set up shop in Smiths Falls 2013, it brought new life to a town that had fallen on hard times since the Hershey Chocolate Factory closed five years earlier. The operation began as a medical marijuana startup, filling as many as one million medical orders across the country in four years. “After full legalization in October 2018, their next million orders were shipped in four weeks” (Hrapsky, 2019).

In 2008, when Hershey closed its factory, one-third of the town’s workforce was laid off. As community members left in search of work, housing vacancies along with social issues like crime began to rise (Blatchford, 2018). Shortly after Tweed came to town, local businesses began enjoying more traffic, the real estate market got a lift, and the local school was filled to capacity. The growth of the company and the community are expected to continue as a result of cannabis legalization in Canada (Blatchford, 2018; Bagnall, 2018b; Harford & Devoy, 2019).

The former Hershey chocolate factory has been transformed into a cannabis production facility, employing 750 people. It is expected to employ up to 1,200 by the end of 2019. In addition, Tweed has created roughly 400 indirect jobs in the community (Ottawa Citizen, 2018). Jobs at the Tweed facility range from lower-skilled roles like plant trimmers and oil packagers and middle-skilled roles in administrative support, to higher-skilled roles requiring backgrounds in pharmaceuticals, information technology and management.

Shopify

Shopify is an online retail platform that helps people start, run and grow businesses (The Canadian Press, 2018). Shopify customers are business owners looking to sell their products in person, online or both. The company offers tools and support for everything from “enabling sales on social-media channels to offering

product-shipping programs” (O’Kane, 2018). As of May 2018, Shopify had more than 3,000 employees, half of whom were hired in the preceding year. Many of these are support staff who work out of their homes. Of those working in Shopify’s offices, the majority are in Ontario. As of May 2018, there were 850 staff working out of the Shopify headquarters in Ottawa, 400 in Toronto, and 250 in Kitchener-Waterloo (Bagnall, 2018a). Shopify’s staff also includes software developers and people who manage the company’s sales channels and technology partners (Bagnall, 2018a).

Shopify’s job postings focus more on skills and less on degrees or experience. The company is looking instead for individuals with the foundational skills and desire to develop new technical abilities (Counter, 2018), as well as an ability to think on their feet (Bagnall, 2018a).

International Examples of Adult Reskilling Programs

In Singapore, the SkillsFuture program provides skill-development opportunities to citizens throughout their working lives. It relies on competency profiles, built-in consultation with industry and educators, as well as career pathways and occupational descriptions that allow government representatives to allocate financial aid based on an assessment of whether courses are relevant to an individual’s needs (Tan, 2017; Usher, 2019). As part of SkillsFuture, Singaporeans also have access to an online portal where they can chart and review their education, training and career developments, as well as opportunities for further training (Tan, 2017). The program also provides all Singaporeans aged 25 and over with a credit of \$500 in an Individual Skills Account to put toward approved courses offered by more than 500 providers. While credits cannot be used at institutions overseas, they can be used at some international online providers such as Coursera and Udemy (Tan, 2017; Usher, 2019). The one-time \$500 credit became available as of 2016 and will be periodically topped up (Government of Singapore, 2019).

In Denmark, adult learners have access to flexible learning modules that can be combined to earn a formal credential (OECD, 2019a). Types of learning opportunities include active labour market programs (similar to programs available through the Employment Service network in Ontario), basic education programs, higher education, non-formal liberal education programs and vocational education. Vocational courses are the most frequent form of adult training with courses typically lasting two to three weeks, often taking place on the job and generally covering firm-specific, industry-specific or occupation-specific material (OECD, 2016).

Denmark has regional employment councils that forecast the skills needed to meet local labour market needs, looking six months ahead. Based on that information, job centres can draw from a training fund to provide displaced workers with free training courses that align with industry needs (OECD, 2016). The country also boasts a formalized system of prior learning assessment that allows employees and job seekers to be assessed and provided with corresponding certification or advice about which courses are missing for a given qualification (OECD, 2016).

In France, working adults can access up to 24 hours of employer-financed vocational training a year.¹² If unused, the hours can accumulate to a limit of 150 hours. For employees who have no qualification, the entitlement is 48 hours per year with a ceiling of 400 hours (Smith-Vidal, 2018). The system, which is largely controlled by employers and unions, has been criticized for its complexity, lack of quality assurance and a tendency to benefit those who are already highly qualified and employed; only 14% of the financing goes to the unemployed (Chassany, 2018; “France’s New Labour Problem,” 2018). French officials are working on a reform of the system. Government will centralize control and provide individuals with a yearly training allowance of between €500 and €800, accessed through a mobile application that allows users to “book and rate training courses using their personal credits” (“France’s New Labour Problem,” 2018). The hope is that user comments and straightforward cost comparisons will facilitate quality improvement and cost control.

In Britain, a government-commissioned report released in May 2019 proposed investment in a network of institutions focused on technical and professional education with the aim of creating more vocational training options, and a “lifelong loan allowance” that could be put toward technical or academic programs (Secretary of State for Education, 2019).

¹² France uses a payroll levy



Higher Education
Quality Council
of Ontario

An agency of the Government of Ontario