

Job Posting Trends in Canada

2021 Update



Labour Market Insights

from the Diversity Institute



TED
ROGERS
SCHOOL
OF MANAGEMENT

DiVERSITY
INSTITUTE



Future Skills
Centre



MAGNET



The Diversity Institute conducts and coordinates multi-disciplinary, multi-stakeholder research to address the needs of diverse Canadians, the changing nature of skills and competencies, and the policies, processes and tools that advance economic inclusion and success. Our action-oriented, evidence-based approach is advancing knowledge of the complex barriers faced by under-represented groups, leading practices to effect change, and producing concrete results. The Diversity Institute is a research lead for the Future Skills Centre.



The Future Skills Centre (FSC) is a forward-thinking centre for research and collaboration dedicated to preparing Canadians for employment success. We believe Canadians should feel confident about the skills they have to succeed in a changing workforce. As a pan-Canadian community, we are collaborating to rigorously identify, test, measure, and share innovative approaches to assessing and developing the skills Canadians need to thrive in the days and years ahead. The Future Skills Centre was founded by a consortium whose members are Toronto Metropolitan University, Blueprint, and The Conference Board of Canada, and is funded by the Government of Canada's Future Skills Program.



Magnet is a digital social innovation platform founded at Toronto Metropolitan University (formerly Ryerson University). Magnet's mission is to accelerate inclusive economic growth for all in Canada by advancing careers, businesses and communities. The Magnet Network includes all relevant stakeholders involved in fostering economic growth and opportunity, including community partners, employers, post-secondary job boards, and job seekers across Canada.

Funder

The Future Skills Centre – Centre des Compétences futures is funded by the Government of Canada's Future Skills Program.



Authors

Yuna Kim

Diversity Institute at Toronto Metropolitan University

Kevin (Joong-Woo) Jae

Diversity Institute at Toronto Metropolitan University

Christopher Zou

Diversity Institute at Toronto Metropolitan University



Labour Market Insights

from the Diversity Institute

Labour Market Insights from the Diversity Institute

This series from the Diversity Institute, in its role as a research lead for the Future Skills Centre, aims to provide timely analysis on current patterns of labour demand across Canadian regions, industries, and occupations. In the rapidly changing world of work, job seekers, policymakers, educators, and other stakeholders require labour market information that is up-to-date, granular, and relevant. The need has become even more critical during the COVID-19 pandemic, in which the labour market has experienced the largest shock in recent history.

Reports in the [Labour Market Insights from the Diversity Institute](#) series cover a variety of topics relevant to the study of labour markets and are based on analyses of collated data from online job postings across Canada, as well as other traditional and innovative data sources. This project is funded by the [Government of Canada's Future Skills Centre](#).

Contents

<u>Key Takeaways</u>	1
<u>Introduction and Context</u>	2
<u>Trends in Job Postings</u>	4
<u>Skills Sought by Employers</u>	14
<u>Discussion</u>	18
<u>Conclusion</u>	22
<u>References</u>	23

Key Takeaways

- > In 2021, there were over **2.8 million online job postings across Canada**, a 38% increase from 2020.
- > The **health care and social assistance sector** had the largest number of job postings in 2021, with over 220,000 job postings.
- > By occupational group, occupations in **sales and service** had the largest number of job postings in 2021, with over 720,000 job postings.
- > From 2019 to 2021, **soft skills were consistently the most sought-after skills**. This suggests that a core set of foundational soft skills will help future-proof job seekers as they navigate a rapidly changing labour market, especially as the Canadian economy recovers from the COVID-19 pandemic.
- > Most importantly, **applying an equity, diversity, and inclusion (EDI) lens to labour market analysis and program development is important for ensuring an equitable economic recovery**. The implications of an EDI analysis include, but are not limited to, the provision of the tools, resources, and social and digital infrastructure various groups need to access skill development and job opportunities.

Introduction and Context

As the COVID-19 pandemic entered its second year in 2021, there continued to be significant impacts on the labour market. Case counts and hospitalizations continued to rise across the country, and by the end of 2021, Canada had endured two more waves before ending the year with the rapid rise of the Omicron variant. Many parts of the country continued to face closures, lockdowns, capacity limits, and, eventually, vaccination mandates. However, with the increased rollout of vaccinations, governments and policymakers revisited plans to re-open the economy. By June of 2021, armed with increasing vaccination rates and rising optimism,¹ several provincial governments announced a loosening of public health restrictions.

Throughout the year, the federal government continued to offer a suite of financial supports for businesses and workers to mitigate the effects of the pandemic.² These measures sought to support individuals and families who could not work due to COVID-19 and prevent businesses from closing their doors permanently. In conjunction with the public health

restrictions put in place by the provinces, these various benefits no doubt had an impact on the supply and demand of labour. Indeed, the number of job vacancies increased to record levels in the fourth quarter of 2021,³ and by December 2021, the unemployment rate was 5.9%—only slightly above the pre-pandemic level.⁴

Focusing on the demand for labour, this report examines trends for 2021. Specifically, this report aims to:

1. Describe trends in online job postings in Canada in 2021 by sector, industry, and occupation
2. Identify the top skills sought in 2021
3. Compare trends in job postings and skills sought between 2019, 2020, and 2021

As in the previous two reports in this series, this report focuses on one aspect of labour demand: the number of job postings. The number of job postings on its own, however, does not provide a complete picture of the overall health of the economy; consideration of employment levels, labour supply indicators (such as the

unemployment rate), and the constraints faced by and preferences of job seekers are also important. Yet labour demand, and job postings in particular, gives a good sense of where job opportunities are located both geographically and by sector.

This report uses data from a unique data source, the Vicinity Jobs Hiring Demand Analytics Suite,⁵ which collates data on online job postings across Canada. A strength of this database is that it provides near real-time information on job postings and categorizes jobs by sector and industry according to the North American Industry Classification System (NAICS) and by occupational category following the National Occupational Classification (NOC) system. Information about skills, location, wages, and several other details are also extracted from each job posting. This information is invaluable as it informs job seekers of the kinds of skills employers are looking for.⁶ However, since the database only looks at online postings, vacancies that are not made available online are not included, which may under-represent smaller firms.⁷



Labour demand, and job postings in particular, gives a good sense of where job opportunities are located both geographically and by sector.

This report begins with an overview of trends in job postings for 2021, examining differences by sector and industry group (two- and four-digit NAICS codes respectively), occupational category (one- and two-digit NOC codes), and educational requirements. This is followed by an analysis of the most in-demand skills sought by employers over time and across sectors. The report concludes with a discussion that situates these findings within recent research on equity, diversity, and inclusion (EDI) and the labour market. This EDI lens allows for an initial understanding of the opportunities for and barriers to participation in the labour market, especially as Canada emerges from the COVID-19 pandemic.

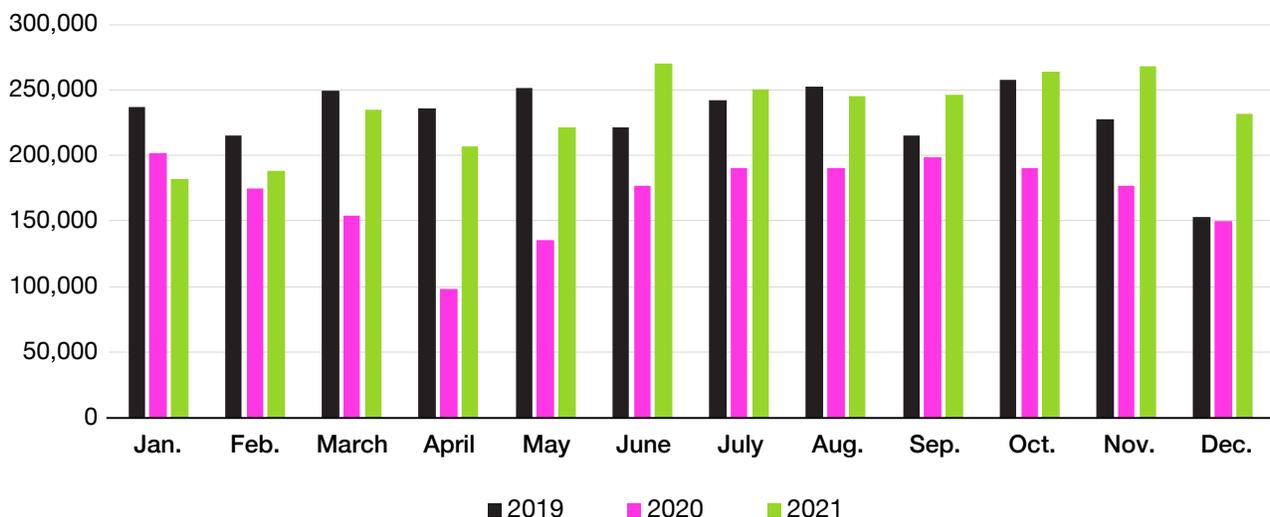
Trends in Job Postings

The total number of jobs posted across Canada in 2021 was 2.81 million, a 38% increase from 2020 (2.04 million job postings) and a 2% increase from 2019 (2.76 million job postings).

Looking at seasonal trends, the number of job postings remained low and comparable to 2020 levels in January and February of 2021, increased in March to May, and

remained relatively high from June onward (Figure 1). Notably, the number of monthly job postings from June to December 2021 exceeded 2019 levels for each of these months (except for August). The revival in job postings may be explained by increased summertime economic activity driven by declining case counts and an easing of COVID-19 public health restrictions.

FIGURE 1
Number of job postings by month, 2019–2021



Job Postings by Sector and Industry Group

The sectors with the most job postings in 2021 were health care and social assistance; retail trade; accommodation and food services; finance and insurance; and professional, scientific, and technical services (Table 1). Together, these sectors made up approximately one-quarter of all job postings in 2021.^a

TABLE 1

Number of job postings by sector (two-digit NAICS codes), 2019–2021

Sector Name	2019	2020	2021	% Change 2019–2021	% Change 2020–2021
Health Care and Social Assistance	161,149	115,769	221,486	37%	91%
Retail Trade	207,098	118,172	178,289	-14%	51%
Accommodation and Food Services	95,245	65,605	120,191	26%	83%
Finance and Insurance	123,401	62,807	111,216	-10%	77%
Professional, Scientific, and Technical Services	143,369	74,077	108,185	-25%	46%
Educational Services	70,356	47,344	97,012	38%	105%
Manufacturing	123,196	74,261	92,111	-25%	24%
Transportation and Warehousing	48,591	33,839	41,172	-15%	22%
Public Administration	35,380	24,556	37,330	6%	52%
Wholesale Trade	30,598	18,216	25,962	-15%	43%
Information and Cultural Industries	32,818	14,326	21,542	-34%	50%
Administrative and Support, Waste Management and Remediation Services	20,892	15,650	16,891	-19%	8%
Construction	16,863	11,832	15,155	-10%	28%
Other Services (except Public Administration)	15,877	9,407	10,990	-31%	17%
Arts, Entertainment, and Recreation	16,087	6,706	10,515	-35%	57%
Real Estate and Rental and Leasing	13,198	4,721	7,386	-44%	56%
Mining and Oil and Gas Extraction	9,325	4,392	6,204	-33%	41%
Utilities	3,843	2,083	2,851	-26%	37%
Agriculture, Forestry, Fishing, and Hunting	1,188	1,168	1,658	40%	42%
Management of Companies and Enterprises	313	65	1,111	255%	1609%

Note: In each year, approximately 60% of job postings could not be matched with a NAICS code. These job postings were excluded from this table.

a Over 1.6 million job postings (60%) could not be matched with a NAICS code in 2021; as a result, the number of job postings in these sectors is likely an undercount. The percentage of job postings made up by the top five sectors was calculated using all job postings (including those not matched with a NAICS code) as the denominator.



All sectors experienced a rebound in the number of job postings between 2020 and 2021. However, only six of the 20 sectors saw an increase in job postings relative to 2019 levels: health care and social assistance; accommodation and food services; educational services; public administration; agriculture, forestry, fishing, and hunting; and management of companies and enterprises. Of note is the educational services sector, which experienced a 105% increase in job postings between 2020 and 2021 and a 38% increase in job postings between 2019 and 2021.

For the most part, the fall and rise of job postings between 2019 and 2021 corresponds with the rise and fall in the unemployment rate reported by Statistics Canada for most sectors in the same time period.⁸ For instance, in the health care and social assistance sector—the sector

with the most job postings in 2021—the unemployment rate increased to 3.5% in 2020 and decreased to 1.8% in 2021. Similarly, the growth in job postings in the educational sector corresponded with a decline in the unemployment rate from 6.7% to 3.8% between 2020 and 2021, marking a return to pre-pandemic unemployment rates.⁹ On the other hand, a few sectors have not yet returned to pre-pandemic unemployment rates. For instance, in 2021, the unemployment rate in the accommodation and food services sector remained high at 8.8%, 3.2 percentage points higher than 2019 levels, despite the sector experiencing a 26% increase in job postings relative to 2019¹⁰ (see Box 1 for additional analysis). Thus, while job postings serve as an important signal, a full assessment of the health of a sector requires the examination of additional economic indicators.

Painting a full picture using multiple indicators: A closer look at the accommodation and food services sector

In 2019, there were 95,245 job postings in the accommodation and food services sector. With the declaration of the COVID-19 pandemic in 2020 and the accompanying public health measures, the number of job postings fell to 65,605, before rebounding in 2021 to a total of 120,191 (mostly in food service establishments) (Table 1).

Using job postings as the only indicator, however, provides an incomplete picture of the health of this sector. Despite an increase in job postings, the 2021 unemployment rate in the accommodation and food services sector (8.8%) remained higher than it was in 2019 (5.6%). Additionally, the unadjusted job vacancy rate for this sector increased steadily throughout 2021, peaking at 14.0% in September and ending the year at 10.8% in December (whereas the average vacancy rate across all sectors peaked at 5.9%).¹¹ Moreover, in the fourth quarter of 2021, many positions within this sector (e.g., food counter attendants, cooks, food and beverage servers, etc.) remained vacant for 60 days or more.¹²

There were likely several reasons behind the difficulties filling vacant roles, including seasonal factors combined with increased economic activity resulting from the lifting of public health restrictions and the re-opening of businesses.¹³ However, the unique circumstances facing workers in the accommodation and food services sector during the COVID-19 pandemic

may offer some additional explanations for the high vacancy rate. For instance, the wages offered relative to the federal financial benefits available and the health and safety considerations of taking on a public-facing position may have been major considerations for potential workers in this sector. In 2021, the average wage offered in accommodation and food services job postings was \$16.76 per hour.^{14, 15} Though further research would be required before drawing conclusions, for some workers, the financial benefits of taking a job at this wage rate during a pandemic may not have exceeded the health and safety costs of doing so (incurred by themselves or by members of their household). Furthermore, given that more than half of the workforce in this sector were women (56.1% in 2021),¹⁶ for some, caretaking responsibilities (which were heightened due to school closures, child care centre closures, long-term care home outbreaks, etc.) may have made it difficult to take on or return to work in this sector.

While data on job postings can inform governments and service providers of where opportunities exist and how to tailor skill development programs to meet the needs of growing sectors, examining the breadth of economic indicators and individual constraints faced by workers is important to understanding labour force trends and supporting an inclusive economic recovery.

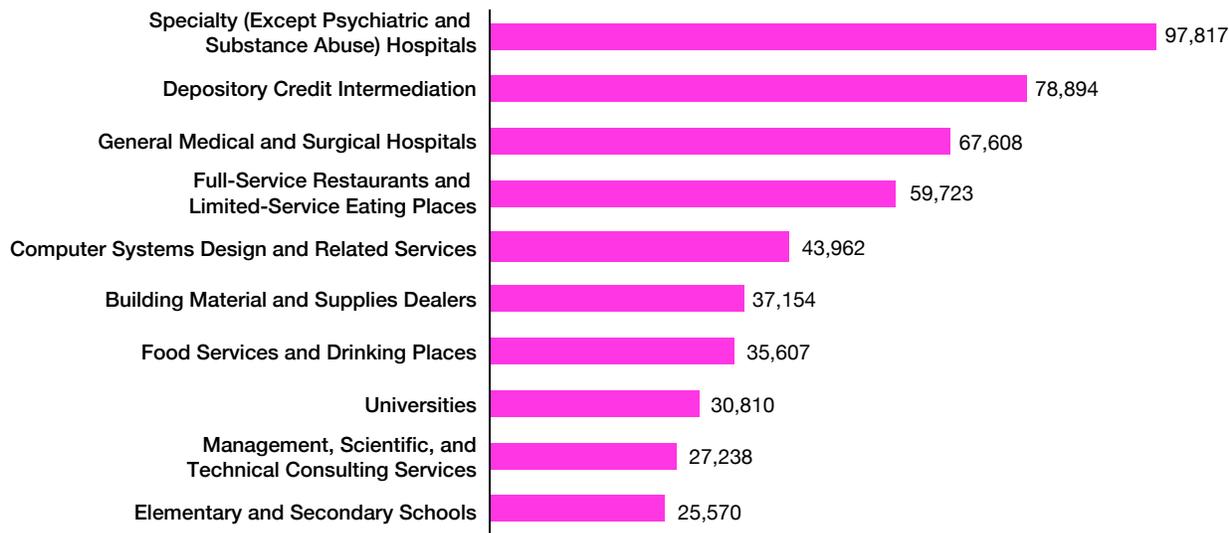
Narrowing down to the industry group level (four-digit NAICS codes), additional variation between establishment types can be found. Across Canada, the specialty hospitals (excluding psychiatric and substance abuse hospitals) and general medical and surgical hospitals industry groups together had the most job postings in 2021, with a combined total of over 165,000 listings (Figure 2). These industry groups include hospitals that provide treatment to patients with a wide variety of medical conditions and hospitals that provide long-term care for chronically ill patients with certain diseases; these hospitals may also provide other services, such as diagnostic X-ray and clinical laboratory services.¹⁷ The large number of job postings is likely reflective of the demand for health care services in response to the COVID-19 pandemic. The industry group with the second highest number of

job postings in 2021 was the depository credit intermediation industry group, which includes banking establishments and credit unions, with nearly 78,900 job postings.¹⁸

While the number of job postings declined during the pandemic in 2020, many industries showed signs of recovery in 2021. In fact, certain industry groups rebounded substantially between 2020 and 2021 (Table 2, Panel A). Most notably, the number of job postings in the elementary and secondary schools industry group increased by over 400% between 2020 and 2021. Over the same period, the electronic shopping and mail-order houses industry group experienced a 348% increase in job postings, likely reflecting an increase in online shopping—and the need for businesses to offer online services—during the pandemic.^{19, 20}

FIGURE 2

Top 10 industry groups (four-digit NAICS codes) with the most job postings, 2021



Note: Approximately 60% of job postings could not be matched with a NAICS code in 2021. These job postings were excluded from this analysis.

In contrast, some industry groups experienced declines or smaller increases in the number of job postings between 2020 and 2021 (Table 2, Panel B). Given the diverse set of industries experiencing declines (or smaller increases) in job postings, the factors driving these changes were likely unique to each industry. However,

two industry groups in Panel B of Table 2 stand out: job postings in the couriers and grocery stores industry groups experienced declines in 2021 relative to 2020, but they were also the only two industry groups in the bottom 10 that experienced increases in job postings between 2019 and 2020 (not shown).

TABLE 2

Changes in the number of job postings by industry group

Panel A: Top 10 industry groups (four-digit NAICS codes) with the largest increase in job postings between 2020 and 2021			
Industry Group	2020	2021	% Change 2020–2021
Elementary and Secondary Schools	5,020	25,570	409%
Electronic Shopping and Mail-Order Houses	1,467	6,567	348%
Gambling Industries	637	2,493	291%
Accounting, Tax Preparation, Bookkeeping, and Payroll Services	1,650	5,358	225%
Other Heavy and Civil Engineering Construction	717	2,201	207%
Vocational Rehabilitation Services	1,493	4,352	191%
Office Supplies, Stationery, and Gift Stores	2,768	7,288	163%
Sporting Goods, Hobby, and Musical Instrument Stores	1,824	4,506	147%
Individual and Family Services	3,277	7,889	141%
Sawmills and Wood Preservation	2,623	6,043	130%

Panel B: Bottom 10 industry groups (four-digit NAICS codes) with largest declines (or smallest increases) in job postings between 2020 and 2021			
Industry Group	2020	2021	% Change 2020–2021
Couriers	3,571	2,687	-25%
Grocery Stores	17,208	13,105	-24%
Aerospace Product and Parts Manufacturing	2,744	2,157	-21%
Investigation and Security Services	9,030	8,641	-4%
Plastic Product Manufacturing	3,388	3,426	1%
Business Support Services	2,482	2,640	6%
Other Schools and Instruction	2,815	3,079	9%
Business, Professional, Labour, and Other Membership Organizations	1,826	2,014	10%
Other Professional, Scientific, and Technical Services	2,803	3,145	12%
Building Equipment Contractors	4,016	4,542	13%

Note: Industry groups with fewer than 2,000 jobs postings in 2021 were excluded from this analysis. Approximately half of the transportation and warehousing job postings (NAICS codes starting with 48 or 49) were not assigned to an industry group in 2020 and 2021. The number of job postings for couriers (4921) may therefore be an underestimate.

Job Postings by Occupational Category

In 2021, the occupational category (according to the NOC system) with the most job postings was the sales and service category, with over 722,000 job postings (Table 3). The sales and service category on its own accounted for approximately 25% of job postings in 2021.^b The number of

job postings in all occupational categories increased between 2020 and 2021, led by natural resources, agriculture, and related production occupations (41% increase in postings). However, the number of job postings in four of the ten occupational categories have not returned to 2019 levels (i.e., sales and service occupations; management; natural and applied sciences and related occupations; and occupations in art, culture, recreation, and sport).

TABLE 3
Number of job postings by broad category (one-digit NOC code)

Broad Category	2019	2020	2021	% Change 2019–2021	% Change 2020–2021
Sales and Service Occupations	735,117	520,276	722,408	-2%	39%
Business, Finance, and Administration Occupations	412,740	308,722	431,474	5%	40%
Trades, Transport, and Equipment Operators and Related Occupations	287,685	250,193	316,185	10%	26%
Management Occupations	304,311	196,107	265,137	-13%	35%
Health Occupations	184,220	146,033	200,860	9%	38%
Occupations in Education, Law, and Social, Community and Government Services	151,469	122,670	164,965	9%	34%
Natural and Applied Sciences and Related Occupations	211,139	109,829	130,512	-38%	19%
Occupations in Manufacturing and Utilities	59,952	56,509	72,310	21%	28%
Occupations in Art, Culture, Recreation, and Sport	38,361	23,297	28,959	-25%	24%
Natural Resources, Agriculture, and Related Production Occupations	23,752	20,034	28,254	19%	41%

Note: In each year, a significant portion of job postings (ranging from 12% to 16%) were not matched with a NOC code and were therefore excluded from this analysis.

^b In 2021, 16% of job postings could not be matched with a NOC code; as a result, the number of job postings in this occupational category may be underestimated. The percentage of job postings made up by the sales and services occupational category was calculated using all job postings (including those not matched with a NOC code) as the denominator.

Examining year-over-year changes at a more granular level (two-digit NOC codes), the largest increases in job postings from 2020 to 2021 were in professional occupations in education services (76% increase) and professional occupations in nursing (74%) (Table 4, Panel A). Occupations that experienced slower growth in job postings between 2020 and 2021 include assisting occupations in support of health services; maintenance and equipment operation trades; and technical occupations related to natural and applied sciences (Table 4, Panel B).



The number of job postings in all occupational categories increased between 2020 and 2021, led by natural resources, agriculture, and related production occupations (41% increase in postings)

TABLE 4

Changes in the number of job postings by occupation type

Panel A: Occupations (major group, two-digit NOC code) with the largest increases in job postings between 2020 and 2021			
Major Group	2020	2021	% Change 2020–2021
Professional Occupations in Education Services	19,372	34,036	76%
Professional Occupations in Nursing	33,056	57,614	74%
Workers in Natural Resources, Agriculture, and Related Production	9,972	15,124	52%
Service Representatives and Other Customer and Personal Services Occupations	89,768	129,495	44%
Service Supervisors and Specialized Service Occupations	81,421	116,285	43%
Technical Occupations in Health	37,939	54,169	43%
Administrative and Financial Supervisors and Administrative Occupations	99,361	139,417	40%
Supervisors and Technical Occupations in Natural Resources, Agriculture, and Related Production	4,052	5,606	38%
Office Support Occupations	59,561	81,734	37%
Professional Occupations in Art and Culture	7,857	10,772	37%

Panel B: Occupations (major group, two-digit NOC code) with the smallest increases in job postings between 2020 and 2021

Major Group	2020	2021	% Change 2020–2021
Assisting Occupations in Support of Health Services	40,976	44,135	8%
Maintenance and Equipment Operation Trades	35,466	38,856	10%
Technical Occupations Related to Natural and Applied Sciences	38,020	41,814	10%
Processing, Manufacturing, and Utilities Supervisors and Central Control Operators	5,317	5,939	12%
Occupations in Front-Line Public Protection Services	552	626	13%
Sales Support Occupations	51,839	59,557	15%
Middle Management Occupations in Trades, Transportation, Production, and Utilities	14,419	16,907	17%
Technical Occupations in Art, Culture, Recreation, and Sport	15,440	18,187	18%
Transport and Heavy Equipment Operation and Related Maintenance Occupations	65,717	78,610	20%
Care Providers and Educational, Legal, and Public Protection Support Occupations	42,466	51,344	21%

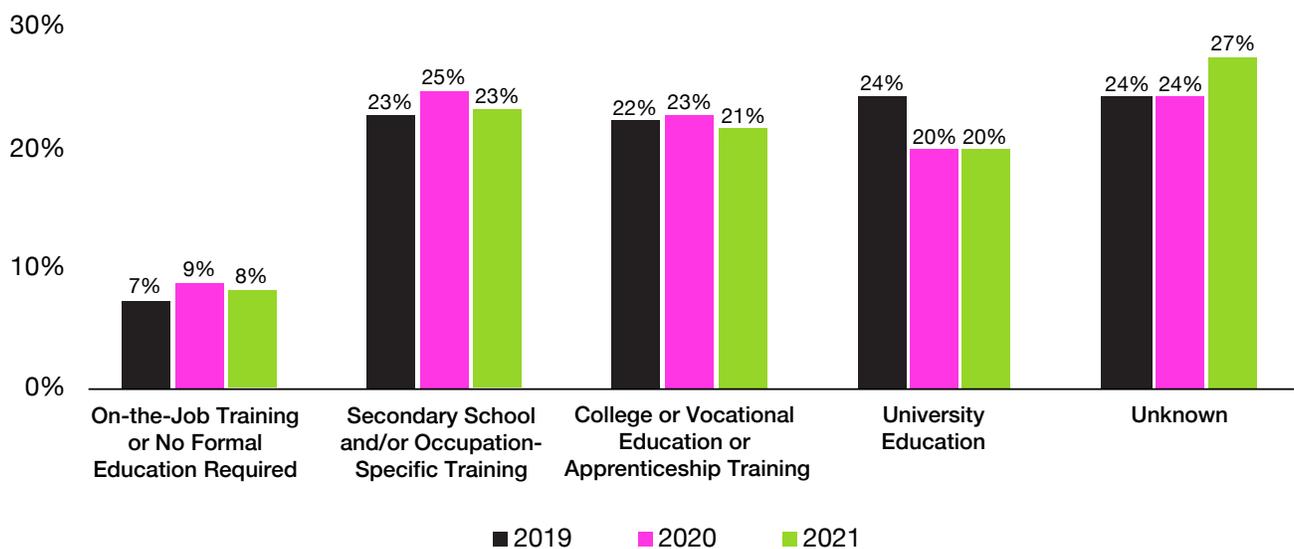
Note: In each year, a significant portion of job postings (ranging from 14% to 16%) were not matched with a NOC code and were therefore excluded from this analysis.

Job Postings by Skill Requirement/Education Level

Between 2019 and 2021, the distribution of job postings by skill level requirement did not change dramatically (Figure 3). One notable exception is the share of job postings requiring a university education, which dropped to from 24% to 20% between 2019 and 2020 and remained at the same level in 2021. However, note that the absolute number of job postings requiring a university education increased between 2020 and 2021 (from roughly 400,000 to nearly 560,000, a 38% increase); however, the overall number of job postings in 2021 increased by the same percentage, resulting in no change in the share of job postings requiring university education.



FIGURE 3
Share of job postings by NOC skill level/education, 2019–2021



Skills Sought by Employers

One advantage of the Vicinity Jobs database is its ability to extract skill requirements from the job postings. The result of this effort is a list of over 4,000 unique skills called for across all job postings in a given year. In 2021, the most frequently listed skills across all job postings were teamwork, communication skills, and customer service (Table 5).^c

TABLE 5

Top 10 skills sought, 2019–2021

Rank	2019	2020	2021
1	Communication Skills	Communication Skills	Teamwork
2	Teamwork	Teamwork	Communication Skills
3	Customer Service	Customer Service	Customer Service
4	English Language	English Language	Flexibility
5	Leadership	Flexibility	Leadership
6	Interpersonal Skills	Leadership	Organizational Skills
7	Organizational Skills	Organizational Skills	English Language
8	Fast-Paced Setting	Fast-Paced Setting	Fast-Paced Setting
9	Flexibility	Interpersonal Skills	Interpersonal Skills
10	Attention to Detail	Attention to Detail	Attention to Detail

The top skills remained consistent from 2019 to 2021, despite disruptions due to the COVID-19 pandemic. In fact, the top 10 skills remained the same across all three years, with only slight differences in their relative rankings.

^c While the frequency with which certain skills are mentioned is valuable to note and provides information on a core set of skills that are foundational across a wide variety of jobs, it is worth noting that this ranking of skills does not indicate the importance of each skill or the skill proficiency required to be successful in a given job. For more detail, see: Labour Market Information Council. (2020). *Through the looking glass: Assessing skills measures using 21st century technologies* [LMI Insight Report no. 32]. <https://lmi-cimt.ca/publications-all/lmi-insight-report-no-32-through-the-looking-glass-assessing-skills-measures-using-21st-century-technologies/#toc-4>



Important to note is that all top 10 skills from 2019 to 2021 were soft skills, demonstrating their resilience in the face of major economic and societal disruptions. Though there is no universally accepted definition of soft skills in the Canadian skills literature, they are often described as a combination of interpersonal and social skills.²¹ Examples of soft skills include communication, problem solving, critical thinking, leadership, collaboration, adaptability, and time management, among others.^{22, 23, 24} Soft skills have been shown to maintain their importance in times of recession and technological disruptions, and it can now be seen that they remain important during global pandemics.^{25, 26} The stability of these skills over time suggests that a core set of soft skills is foundational across occupational categories. This is not to say that specialized or technical skills are less relevant or important, but that soft skills have broad applicability across a wide range of

occupations and work contexts and support the development of other technical skills.^{27, 28} As Canada emerges from the pandemic, the development of these skills is a strategic way to future-proof the workforce in times of uncertainty.

Certain skills grew in popularity over the course of the pandemic. For instance, the C# and C++ computer programming languages increased in demand dramatically between 2020 and 2021 (by 406% and 330%, respectively) (Table 6). Interestingly, other types of digital skills declined in demand, illustrating the volatility of digital skills. (It is worth noting, however, that demand for basic digital skills, such as Microsoft Word and Excel, remained high throughout the pandemic.²⁹) Conversely, language skills (i.e., French, Mandarin, and English language skills) did not increase as much between 2020 and 2021 and experienced a decline in demand relative to 2019.

TABLE 6**Change in skills sought, 2019–2021**

Panel A: Skills with largest increase in number of mentions in job postings, 2019–2021					
Skill	2019	2020	2021	% Change 2019–2021	% Change 2020–2021
C#	6,260	2,259	11,441	83%	406%
C++	6,137	2,350	10,109	65%	330%
Knowledge Management	2,764	2,226	5,088	84%	129%
Computer Terminals	1,297	3,681	8,057	521%	119%
Business-to-Consumer (B2C)	3,320	2,958	6,330	91%	114%
XML	10,014	4,446	8,976	-10%	102%
Microsoft Power BI	6,776	5,828	11,594	71%	99%
Cash Handling	11,195	6,319	12,314	10%	95%
Business-to-Business (B2B)	16,945	11,285	21,702	28%	92%
Business Intelligence	45,961	37,628	72,044	57%	91%

Panel B: Skills with largest decline/smallest increase in number of mentions in job postings, 2019–2021					
Skill	2019	2020	2021	% Change 2019–2021	% Change 2020–2021
Multi-Tasking	75,710	31,385	29,413	-62%	-7%
Lead Generation	15,325	9,377	9,334	-39%	0%
Web Development	7,682	5,632	5,681	-26%	1%
French Language	336,556	261,094	264,753	-21%	1%
Mandarin Language	10,326	6,986	7,344	-29%	5%
English Language	612,463	418,356	466,752	-24%	12%
Autodesk AutoCAD	14,129	8,277	9,430	-33%	14%
Sage	8,590	7,217	8,292	-3%	15%
Cascading Style Sheets (CSS)	16,383	4,996	5,780	-65%	16%
Information Systems	36,198	28,115	33,412	-8%	19%

Note: Skills with fewer than 5,000 mentions in 2021 were removed from this analysis.

Skills Sought by Sector

Looking at the most in-demand skills across the top five sectors with the most job postings in 2021, several skills (i.e., communication skills, teamwork, leadership, and flexibility) are useful across all five sectors (Table 7). Similar to year-over-year comparisons, many of the skills listed in Table 7 are soft skills, demonstrating their transferability across various industries. The prevalence of these skills aligns with the

new Skills for Success framework, which identifies soft skills (i.e., problem solving, communication, collaboration, adaptability, creativity, and innovation) as being as essential as reading, math, and digital skills.³⁰ Given the rapid pace of change in today's labour force and the expectation that workers may have to pivot in their careers, a focus on developing these foundational soft skills may help prepare workers to transition more readily between sectors as their careers advance.^{31, 32, 33, 34}

TABLE 7

Top skills in demand among the five sectors with the most job postings in 2021

Rank	Health Care and Social Assistance	Retail Trade	Accommodation and Food Services	Finance and Insurance	Professional, Scientific, and Technical Services
1	Communication Skills	Customer Service	Flexibility	Teamwork	Communication Skills
2	Teamwork	Communication Skills	Teamwork	Customer Service	Teamwork
3	Organizational Skills	Teamwork	Customer Service	Communication Skills	Leadership
4	Leadership	Fast-Paced Setting	Fast-Paced Setting	Leadership	Customer Service
5	Interpersonal Skills	Flexibility	Communication Skills	Planning	Planning
6	Decision-Making	Leadership	English Language	Flexibility	Interpersonal Skills
7	Planning	Attention to Detail	Work Under Pressure	Problem Solving	Project Management
8	Problem Solving	Organizational Skills	Leadership	Analytical Skills	Flexibility
9	Critical Thinking	Occupational Health and Safety	Attention to Detail	Risk Management	Bilingual
10	Flexibility	Problem Solving	Organizational Skills	Fast-Paced Setting	English Language

Discussion

The COVID-19 pandemic has highlighted certain deep-rooted trends in the labour market. For the past 30 years, there has been a bifurcation in the Canadian labour market, with a steady drop in mid-skill work (e.g., manufacturing), accompanied by a continuous increase in high-skilled jobs, while low-skilled jobs in the labour market remained flat.³⁵ The COVID-19 pandemic has led to the further polarization of the labour market, and the Canadian economy has trended toward a K-shaped recovery.³⁶ Workers with higher levels of educational attainment were more likely to telework and to keep their jobs. Meanwhile, workers with lower levels of education were more likely to work at reduced hours, be furloughed, or lose their jobs. Those in the latter category who kept their jobs were low-paid essential workers who were exposed to health risks related to COVID-19 on a daily basis.^{37, 38}

As labour demand recovers from the downturn brought on by the COVID-19 pandemic, attention now turns to an equitable economic recovery. As part of this recovery, policymakers need to consider who participates in each sector and occupational category. A diversity lens allows

policymakers to better isolate and identify the disproportionate effects of the pandemic on various groups in Canada. Younger workers, those earning lower incomes, those less securely employed, recent immigrants, workers who are racialized, Indigenous Peoples, and workers with disabilities have all borne a larger loss from the pandemic.³⁹

Consider, for example, the effects of the pandemic on women. Prior to the pandemic, women faced barriers in the labour market, with a wage gap, under-representation in STEM, and under-representation in management positions.⁴⁰ In the first year of the lockdown, employment levels among women plummeted (particularly in service sectors),⁴¹ sparking worries that the pandemic would reverse decades worth of women's labour market participation gains.⁴²

With this context in mind, it is promising to see that, prior to the pandemic, women were strongly represented in the three sectors with the largest growth between 2020 and 2021 (education; accommodation and food services; and health care and social assistance) as well as one of the occupation categories with high growth in job postings



between 2020 and 2021 (business, finance, and administration occupations).⁴³ Moreover, in November 2021, the employment rate for women aged 25 to 54 rose above 80% for the first time ever.⁴⁴ However, given the stresses of the pandemic on women and the large share of women who left the workforce during the pandemic, the need for strengthened social infrastructure (i.e., child care, elder care), flexible work arrangements, and supports for women’s reskilling and upskilling are all paramount to ensure equitable participation of women moving forward.^{45, 46, 47}

An equitable economic recovery must also acknowledge the historical disadvantages faced by racialized people (which often includes immigrants to Canada).⁴⁸ The fastest growing sector between 2020 and 2021, the education services sector, was (prior to the pandemic) largely made up of

non-racialized persons. According to 2016 Census data, only 15.7% of workers in this sector were racialized persons,⁴⁹ whereas racialized persons made up 20.8% of the overall workforce at the time. Additionally, racialized workers in the education sector were paid significantly less than their non-racialized counterparts.⁵⁰ A similar pattern can be seen at the level of broad occupational categories, with the largest jump in job postings between 2020 and 2021 occurring in natural resources, agriculture, and related production occupations. In this occupational category, racialized persons were vastly under-represented (8.6% of workers in this occupational category were racialized persons).⁵¹ Thus, in terms of who benefits from growth in job postings, sustaining these entrenched patterns would likely leave behind racialized persons seeking to enter these occupations or sectors.

It is important to note the intersectional dynamics affecting racialized women, who are on the borders of two marginalized identities and face among the worst labour market outcomes due to their double disadvantage. They face a double penalty in terms of average wages earned and representation in management, and experience lower labour market participation rates and higher unemployment rates in comparison to racialized men.⁵² These intersectional dynamics need to be considered when policymakers aim for equitable interventions.

Indigenous Peoples experience more precarity in the Canadian economy and work in jobs that are disproportionately more at risk of automation. This may partly be addressed by reskilling or upskilling, as Indigenous workers are over-represented in occupations that involve routine tasks.⁵³ However, it is important to recognize that systemic racism is also a major factor in preventing economic inclusion, as Indigenous Peoples face barriers in the educational ecosystem, and there are major differences in educational outcomes between Indigenous Peoples and non-Indigenous persons.⁵⁴

Indigenous Peoples are largely excluded from new sectors of growth. Many of the skills that grew in popularity between 2019 and 2021 were digital skills, which aligns with the major digital transformations that have taken place since the start of the pandemic, as employees shifted to working from home and new technological software and tools were introduced into the workplace. However, there are significant gaps in digital



On top of the difficulties of navigating the impacts of the COVID-19 pandemic, people with disabilities may be at risk of facing challenges in the labour market related to increased automation.

skills between Indigenous Peoples and their non-Indigenous counterparts. Indigenous youth, despite being the fastest growing population in Canada, are less confident than their non-Indigenous peers when rating their own digital skills.⁵⁵ Part of the problem lies in the lack of digital infrastructure to access high-speed internet in many of the communities where Indigenous Peoples live.⁵⁶ To close this gap, the federal government needs to fulfill their commitment to providing high-speed internet to every Canadian citizen, a goal that is projected to be reached by 2030.⁵⁷ In the meantime, more funding needs to be invested into providing digital devices and digital skills training to Indigenous communities on and off reserve to ensure that they are not left behind in the digital shift.⁵⁸

The COVID-19 pandemic also brought about a number of challenges for people living with disabilities, including mental health challenges, job loss or reduced hours, and the ability to meet food or grocery needs.^{59, 60} On top of the difficulties of navigating the impacts of the COVID-19 pandemic, people with disabilities may be at risk of facing challenges in the labour market



related to increased automation. Drawing on data collected prior to the pandemic, people with disabilities were more likely to work in the retail trade sector (11.7% of people with disabilities vs. 9.4% of people without disabilities)⁶¹ and in sales and service occupations (23.4% of people with disabilities vs. 18.2% of people without disabilities).⁶² While the retail sector and sales and service occupations had among the largest number of job postings in 2021, previous studies have found that, within the retail setting, people with disabilities often held low-wage, low-skill, and low-education jobs (such as sales positions), which had a higher risk of automation.⁶³ Indeed, during the pandemic, a survey of individuals with long-term conditions or disabilities (though not nationally representative) found that those with lower levels of education (high school or less) were more likely to report unemployment or leaving the labour force during the pandemic compared to those

with some university education.⁶⁴ An inclusive recovery must therefore provide the necessary supports and resources to ensure people with disabilities can access the training they need to thrive in the post-pandemic economy.

While this discussion only briefly touched on a few dimensions of identity, thorough consideration of these types of demographic characteristics—and their intersections—can help policymakers and service delivery organizations design programs in an inclusive manner. Further research in this area should explore the barriers to entry in certain sectors and occupations, as well as access to skill development services. This analysis highlights the importance of applying a diversity and inclusion lens, including an intersectional lens, in workforce development analyses to ensure all persons have the opportunity to participate equitably in all sectors.

Conclusion

This report provided an overview of trends in job postings in Canada for 2021. As the economy began to bounce back from 2020, the number of job postings increased by 38% between 2020 and 2021, and the most in-demand skills across all sectors were largely soft skills.

Moving forward, tracking job postings and changes to in-demand skills in real time will be important as job seekers settle in to a new normal. In addition to overall trends in job postings, differences across provinces and deeper dives into specific sectors or occupational groups will continue to provide additional insights to job seekers and policymakers alike. Applying a diversity,

equity, and inclusion lens to this analysis in an intentional way will also be of critical importance, especially as governments speak of ensuring an equitable recovery. At the time of writing, several provinces have announced plans to lift most (if not all) public health restrictions. As the COVID-19 virus evolves, it is yet to be seen how the re-opening of the economy will impact case counts, health, and social and economic life. However, understanding which groups can take advantage of opportunities as the economy recovers and ensuring equitable access to programs that build and strengthen foundational and in-demand skills are essential to building back stronger.

References

- 1 Rabson, M. (2021). *Tam hopeful for summer even as Canada's COVID-19 death toll tops 25K*. Global News. <https://globalnews.ca/news/7874716/tam-covid-summer/>
- 2 Government of Canada. (2022). *COVID-19: Financial support for people, businesses and organizations*. <https://www.canada.ca/en/departement-finance/economic-response-plan.html>
- 3 Statistics Canada. (2022). *Job vacancies, fourth quarter 2021*. <https://www150.statcan.gc.ca/n1/daily-quotidien/220322/dq220322a-eng.pdf>
- 4 Statistics Canada. (2022). *Labour force survey, December 2021*. <https://www150.statcan.gc.ca/n1/daily-quotidien/220107/dq220107a-eng.pdf>
- 5 Vicinity Jobs. (n.d.). *Hiring demand analytics suite*. <https://www.vicinityjobs.net/hiring-demand-analytics-suite>
- 6 Vicinity Jobs has partnered with the Labour Market Information Council to create a publicly accessible Canadian Online Job Posting Dashboard: <https://lmi-cimt.ca/canadian-online-job-posting-dashboard/>
- 7 Labour Market Information Council. (2020). *Through the looking glass: Assessing skills measures using 21st century technologies* [LMI insight report no. 32]. <https://lmi-cimt.ca/publications-all/lmi-insight-report-no-32-through-the-looking-glass-assessing-skills-measures-using-21st-century-technologies/#toc-4>
- 8 Statistics Canada. (2022). *Table 14-10-0023-01: Labour force characteristics by industry, annual (x 1,000)*. <https://www150.statcan.gc.ca/t1/tbl1/en/tv.action?pid=1410002301>
- 9 Statistics Canada. (2022). *Table 14-10-0023-01: Labour force characteristics by industry, annual (x 1,000)*. <https://www150.statcan.gc.ca/t1/tbl1/en/tv.action?pid=1410002301>
- 10 Statistics Canada. (2022). *Table 14-10-0023-01: Labour force characteristics by industry, annual (x 1,000)*. <https://www150.statcan.gc.ca/t1/tbl1/en/tv.action?pid=1410002301>
- 11 Statistics Canada. (2022). *Table 14-10-0372-01: Job vacancies, payroll employees, and job vacancy rate by industry sector, monthly, unadjusted for seasonality*. <https://www150.statcan.gc.ca/t1/tbl1/en/tv.action?pid=1410037201>
- 12 Statistics Canada. (2022). *Job vacancies, fourth quarter 2021*. <https://www150.statcan.gc.ca/n1/en/daily-quotidien/220322/dq220322a-eng.pdf?st=K5lX7yaM>
- 13 Statistics Canada. (2021). *Job vacancies, third quarter 2021*. <https://www150.statcan.gc.ca/n1/en/daily-quotidien/211220/dq211220a-eng.pdf?st=BkQ2v1rk>
- 14 Vicinity Jobs. (n.d.). *Hiring Demand Analytics Suite*. <https://www.vicinityjobs.net/hiring-demand-analytics-suite>

- 15 Statistics Canada's fourth quarter job vacancies report noted that the average offered hourly wages in small business locations in the accommodation and food services sector was \$15.55 in the fourth quarter of 2021. The average offered hourly wage was higher in large business locations at \$22.60. Source: Statistics Canada. (2022). *Job vacancies, fourth quarter 2021*. <https://www150.statcan.gc.ca/n1/en/daily-quotidien/220322/dq220322a-eng.pdf?st=K5IX7yaM>
- 16 Statistics Canada. (2022). *Table 14-10-0023-01: Labour force characteristics by industry, annual (x 1,000)*. <https://www150.statcan.gc.ca/t1/tbl1/en/tv.action?pid=1410002301>
- 17 Statistics Canada. (2021). 6223 - Specialty (except psychiatric and substance abuse) hospitals. *North American Industry Classification System (NAICS) Canada 2017 Version 3.0*. <https://www23.statcan.gc.ca/imdb/p3VD.pl?Function=getVD&TVD=1181553&CVD=1181680&CPV=6223&CST=01012017&CLV=1&MLV=5>
- 18 Statistics Canada. (2021). 5221 - Depository credit intermediation. *North American Industry Classification System (NAICS) Canada 2017 Version 3.0*. <https://www23.statcan.gc.ca/imdb/p3VD.pl?CLV=3&CPV=5221&CST=01012017&CVD=1181680&Function=getVD&MLV=5&TVD=1181553>
- 19 Cukier, W., Elmi, M., Munro, D., & Sultana, A. (2020). *Skills for the post-pandemic world*. Public Policy Forum, Diversity Institute, Future Skills Centre. https://ppforum.ca/wp-content/uploads/2020/12/SkillForThePostPandemicWord-ScopingPaper-PPF_Dec2020-2.pdf
- 20 Cukier, W., McCallum, K. E., Egbunonu, P., & Bates, K. (2021). *The mother of invention: Skills for innovation in the post-pandemic world*. Public Policy Forum, Diversity Institute, Future Skills Centre. <https://ppforum.ca/wp-content/uploads/2021/06/MotherOfInvention-PPF-June2021-EN-1.pdf>
- 21 Futureworx. (2019). *Building a pan-Canadian soft skills framework*. <https://futureworx.ca/wp-content/uploads/2019/01/Soft-Skills-Framework-Report.pdf>
- 22 Futureworx. (2019). *Building a pan-Canadian soft skills framework*. <https://futureworx.ca/wp-content/uploads/2019/01/Soft-Skills-Framework-Report.pdf>
- 23 Palameta, B., Nguyen, C., Lee, W., Que, H., & Gyarmati, D. (2021). *Research report to support the launch of Skills for Success: Structure, evidence, and recommendations*. SRDC. <https://www.srdc.org/media/553148/sfs-srdc-final-report-en.pdf>
- 24 Cukier, W., Hodson, J., & Omar, A. (2015). "Soft" skills are hard: A review of the literature. Toronto Metropolitan University, Diversity Institute. https://www.torontomu.ca/content/dam/diversity/reports/KSG2015_SoftSkills_FullReport.pdf
- 25 Lapointe, S., & Turner, J. (2020). *Leveraging the skills of social sciences and humanities graduates*. <https://fsc-ccf.ca/wp-content/uploads/2020/01/UniversityGraduateSkillsGap-PPF-JAN2020-EN-FINAL.pdf>
- 26 Gyarmati, D., Lane, J., & Murray, S. (2020). *Competency frameworks and Canada's essential skills*. <https://www.torontomu.ca/diversity/reports/competency-frameworks-and-essential-skills/>
- 27 Palameta, B., Nguyen, C., Lee, W., Que, H., & Gyarmati, D. (2021). *Research report to support the launch of Skills for Success: Structure, evidence, and recommendations*. SRDC. <https://www.srdc.org/media/553148/sfs-srdc-final-report-en.pdf>
- 28 For an example of the foundational value of soft skills in the digital skills context, see Vu, V., Lamb, C., & Willoughby, R. (2019). *I, Human: Digital and soft skills in a new economy*. Brookfield Institute. <https://brookfieldinstitute.ca/wp-content/uploads/I-Human-ONLINE-FA.pdf>
- 29 This is worth noting because, often, the skills required for participation in the digital economy are basic digital skills. For more detail, see: Shortt, D., Robson, B., & Sabat, M. (2020). *Bridging the digital skills gap: Alternative pathways*. Public Policy Forum, Future Skills Centre, Diversity Institute. <https://fsc-ccf.ca/wp-content/uploads/2020/01/DigitalSkills-AlternativePathways-PPF-JAN2020-EN.pdf>
- 30 Palameta, B., Nguyen, C., Lee, W., Que, H., & Gyarmati, D. (2021). *Research report to support the launch of Skills for Success: Structure, evidence, and recommendations*. Social Research and Demonstration Corporation. <https://www.srdc.org/media/553148/sfs-srdc-final-report-en.pdf>

- 31 Cukier, W., Hodson, J., & Omar, A. (2015). *“Soft” skills are hard: A review of the literature*. Toronto Metropolitan University, Diversity Institute. https://www.torontomu.ca/content/dam/diversity/reports/KSG2015_SoftSkills_FullReport.pdf
- 32 Lapointe, S., & Turner, J. (2020). *Leveraging the skills of social sciences and humanities graduates*. Public Policy Forum, Future Skills Centre, Diversity Institute. <https://fsc-ccf.ca/wp-content/uploads/2020/01/UniversityGraduateSkillsGap-PPF-JAN2020-EN-FINAL.pdf>
- 33 Gyarmati, D., Lane, J., & Murray, S. (2020). *Competency frameworks and Canada’s essential skills*. Public Policy Forum, Diversity Institute, Future Skills Centre. https://www.torontomu.ca/diversity/reports/CompetencyFrameworks_EN.pdf
- 34 Royal Bank of Canada. (2018). *Humans wanted: How Canadian youth can thrive in the age of disruption*. https://www.rbc.com/dms/enterprise/futurelaunch/_assets-custom/pdf/RBC-Future-Skills-Report-FINAL-Singles.pdf
- 35 Speer, S., & Bezu, S. (2021). *Job polarization in Canada*. Public Policy Forum, Diversity Institute, Future Skills Centre. <https://ppforum.ca/wp-content/uploads/2021/04/JobPolarizationInCanada-PPF-April2021-EN.pdf>
- 36 Regan, W. (2021, Feb. 19). Consolidating two visions of recovery post-pandemic. *Policy Options*. <https://policyoptions.irpp.org/magazines/february-2021/consolidating-two-visions-of-recovery-post-pandemic/>
- 37 Haider, M. (2020). *Telework during COVID-19 lockdown in Canada: The implications of working from home for traffic congestion, housing affordability and commercial real estate*. Urban Analytics Institute. <https://urbananalyticsinstitute.com/telework-during-covid-19-lockdown-in-canada/>
- 38 Saba, T., Bezu, S., & Haider, M. (2021). *New working arrangements*. Public Policy Forum, Diversity Institute, Future Skills Centre. <https://ppforum.ca/wp-content/uploads/2021/05/New-Working-Arrangements-PPF-May2021-EN-1.pdf>
- 39 Environics Institute. (2021). *Widening inequality: Effects of the pandemic on jobs and income*. Environics Institute, Future Skills Centre, Diversity Institute. <https://fsc-ccf.ca/research/widening-inequality-effects-of-the-pandemic-on-jobs-and-income/>
- 40 Cafley, J., Davey, K., Saba, T., Blanchette, S., Latif, R., & Sitnik, V. (2020). *Economic equality in a changing world: Removing barriers to employment for women*. Public Policy Forum, Diversity Institute, Future Skills Centre. <https://ppforum.ca/wp-content/uploads/2020/09/RemovingBarriersToEmploymentForWomen-PPF-Sept2020-EN.pdf>
- 41 Grekou, D., & Lu, Y. (2021). *Gender differences in employment one year into the COVID-19 pandemic: An analysis by industrial sector and firm size*. Statistics Canada. <https://www150.statcan.gc.ca/n1/pub/36-28-0001/2021005/article/00005-eng.htm>
- 42 Desjardins, D., Freestone, C., & Powell, N. (2020). *Pandemic threatens decades of women’s labour force gains*. RBC Economics. <https://thoughtleadership.rbc.com/pandemic-threatens-decades-of-womens-labour-force-gains/>
- 43 Ng., E., & Gagnon, S. (2020). *Employment gaps and underemployment for racialized groups and immigrants in Canada: Current findings and future directions*. Public Policy Forum, Future Skills Centre, Diversity Institute. <https://www.torontomu.ca/diversity/reports/Employment-gaps-and-underemployment.pdf>
- 44 Feor, B., & Amery, B. (2022). *Women in recovery: COVID-19 and women’s labour market participation*. Labour Market Information Council. <https://lmic-cimt.ca/women-in-recovery-covid-19-and-womens-labour-market-participation/>
- 45 Cafley, J., Davey, K., Saba, T., Blanchette, S., Latif, R., & Sitnik, V. (2020). *Economic equality in a changing world: Removing barriers to employment for women*. Public Policy Forum, Diversity Institute, Future Skills Centre. <https://ppforum.ca/wp-content/uploads/2020/09/RemovingBarriersToEmploymentForWomen-PPF-Sept2020-EN.pdf>
- 46 Dessanti, C. (2020). *The She-covey project: Confronting the gendered economic impacts of COVID-19 in Ontario*. Ontario Chamber of Commerce. <https://occ.ca/wp-content/uploads/OCC-shecovery-final.pdf>
- 47 Yalniyan, A. (2021, Oct. 15). Is the ‘she-cession’ over? No. *First Policy Response*. <https://policyresponse.ca/is-the-she-cession-over-no/>

- 48 Ng, E., & Gagnon, S. (2020). *Employment gaps and underemployment for racialized groups and immigrants in Canada: Current findings and future directions*. Public Policy Forum, Future Skills Centre, Diversity Institute. <https://www.torontomu.ca/diversity/reports/Employment-gaps-and-underemployment.pdf>
- 49 Ng, E., & Gagnon, S. (2020). *Employment gaps and underemployment for racialized groups and immigrants in Canada: Current findings and future directions*. Public Policy Forum, Future Skills Centre, Diversity Institute. <https://www.torontomu.ca/diversity/reports/Employment-gaps-and-underemployment.pdf>
- 50 Ng, E., & Gagnon, S. (2020). *Employment gaps and underemployment for racialized groups and immigrants in Canada: Current findings and future directions*. Public Policy Forum, Future Skills Centre, Diversity Institute. <https://www.torontomu.ca/diversity/reports/Employment-gaps-and-underemployment.pdf>
- 51 Ng, E., & Gagnon, S. (2020). *Employment gaps and underemployment for racialized groups and immigrants in Canada: Current findings and future directions*. Public Policy Forum, Future Skills Centre, Diversity Institute. <https://www.torontomu.ca/diversity/reports/Employment-gaps-and-underemployment.pdf>
- 52 Ng, E., & Gagnon, S. (2020). *Employment gaps and underemployment for racialized groups and immigrants in Canada: Current findings and future directions*. Public Policy Forum, Future Skills Centre, Diversity Institute. <https://www.torontomu.ca/diversity/reports/Employment-gaps-and-underemployment.pdf>
- 53 Canadian Council for Aboriginal Business, Diversity Institute, & Future Skills Centre. (2020). *Digital differences: The impact of automation on the Indigenous economy in Canada*. [https://www.torontomu.ca/content/dam/diversity/reports/Digital Differences_EN.pdf](https://www.torontomu.ca/content/dam/diversity/reports/Digital%20Differences_EN.pdf)
- 54 Cukier, W., Elmi, M., Munro, D., Sultana, A. (2020). *Skills for the post-pandemic world*. Public Policy Forum, Diversity Institute, Future Skills Centre. https://ppforum.ca/wp-content/uploads/2020/12/SkillForThePostPandemicWord-ScopingPaper-PPF_Dec2020-2.pdf
- 55 Schrumm, A., Bell, S., & Smith, T. (2021). *Building bandwidth: Preparing Indigenous youth for a digital future*. RBC Thought Leadership. <https://royal-bank-of-canada-2124.docs.contently.com/v/building-bandwidth-preparing-indigenous-youth-for-a-digital-future-pdf>
- 56 Middleton, C. (2021). *Digital infrastructure for the post-pandemic world*. Public Policy Forum, Diversity Institute, Future Skills Centre. <https://www.torontomu.ca/diversity/reports/Digital-Infrastructure-for-the-Post-Pandemic-World.pdf>
- 57 Innovation, Science and Economic Development Canada. (2019). *High-speed access for all: Canada's connectivity strategy*. [https://www.ic.gc.ca/eic/site/139.nsf/vwapj/ISED19-170_Connectivity_Strategy_E_Web.pdf/\\$file/ISED19-170_Connectivity_Strategy_E_Web.pdf](https://www.ic.gc.ca/eic/site/139.nsf/vwapj/ISED19-170_Connectivity_Strategy_E_Web.pdf/$file/ISED19-170_Connectivity_Strategy_E_Web.pdf)
- 58 Schrumm, A., Bell, S., & Smith, T. (2021). *Building bandwidth: Preparing Indigenous youth for a digital future*. RBC Thought Leadership. <https://royal-bank-of-canada-2124.docs.contently.com/v/building-bandwidth-preparing-indigenous-youth-for-a-digital-future-pdf>
- 59 Canadian Disability Participation Project. (2020). *COVID-19 disability survey: Report for data collected up to December 18, 2020*. https://abilitiescentre.org/Abilities/media/Documents/Covid-survey-report-Dec-18_1.pdf
- 60 Statistics Canada. (2020). *Impacts of COVID-19 on persons with disabilities*. <https://www150.statcan.gc.ca/n1/daily-quotidien/200827/dq200827c-eng.pdf>
- 61 Statistics Canada. (2020). *Table 13-10-0757-01: Industry of employment for persons with and without disabilities aged 25 to 64 years, by sex*. <https://www150.statcan.gc.ca/t1/tbl1/en/tv.action?pid=1310075701>
- 62 Statistics Canada. (2020). *Table 13-10-0752-01: Occupations of persons with and without disabilities aged 25 to 64 years, by sex*. <https://www150.statcan.gc.ca/t1/tbl1/en/tv.action?pid=1310075201>
- 63 Tompa, E., Samosh, D. & Boucher, N. (2020). *Skills gap, underemployment, and equity of labour-market opportunities for persons with disabilities in Canada*. Public Policy Forum, Future Skills Centre, Diversity Institute. <https://ppforum.ca/wp-content/uploads/2020/01/SkillsGap-Disabilities-PPF-JAN2020-Feb6.pdf>
- 64 Statistics Canada. (2020). *Impacts of COVID-19 on persons with disabilities*. <https://www150.statcan.gc.ca/n1/daily-quotidien/200827/dq200827c-eng.pdf>

