ADAPTING to the CHANGING WORLD of WORK:

Final Report from the 2020 Survey on Employment and Skills

SEPTEMBER 2020

Environics Institute For Survey Research

Future Skills Centre

TED ROGERS SCHOOL OF MANAGEMENT

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The Future Skills Centre 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 is a partnership between: Ryerson University, The Conference Board of Canada and Blueprint ADE.

The Future Skills Centre is funded by the Government of Canada's Future Skills Program.

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The opinions and interpretations in this publication are those of the author and do not necessarily reflect those of any of the project partners or of the Government of Canada.

Canada

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Executive summary

The 2020 Survey on Employment and Skills explores the perspectives and experiences of Canadians relating to education, skills and employment, including perceptions of job security, the impact of technological change, and the value of different forms of training. Conducted by the Environics Institute for Survey Research, in partnership with the Future Skills Centre and the Diversity Institute at Ryerson University, the survey of 5,000 Canadians 18 years and older in all jurisdictions across Canada was conducted between February 28 and April 4, 2020.

The survey began prior to the onset of the COVID-19 pandemic in Canada, at a time of comparatively low unemployment but growing concern about the changing nature of work, including technology-driven disruptions, increasing insecurity and shifting skills requirements. The survey finds that Canadians tend to have a positive assessment of both the impact of technological change and the value of the post-secondary education and skills training that they have received. At the same time, many are also concerned about job security for themselves or their family, and have either recently experienced unemployment or know someone close to them who has.

Employment and unemployment

The unemployment rate is a key indicator of the health of the economy, but it does not capture the full extent of Canadians' experiences with and concerns about unemployment. While fewer than one in ten were unemployed at the time of the survey, an additional eight percent of the labour force was under-employed in the sense of working only part-time, as they are unable to find the full-time work they prefer. And 17 percent of the labour force were employed on a temporary, seasonal or casual basis. Racialized Canadians are twice as likely as those who identify as white to be employed on a temporary rather than a permanent basis, and the same is true for recent immigrants compared to those born in Canada to Canadian-born parents. Among those who are employed, one in four has personally experienced a period of unemployment in the last 12 months; this proportion is higher among younger Canadians, immigrants and racialized Canadians.

The impact of new information and computer technologies

Most Canadians say that new information or computer technologies have changed the way they do their jobs. More notably, on the whole, this change is seen as being more positive than negative: majorities report that these changes have made their job more enjoyable and easier, and three in ten say it made them better paid and more secure. Only minorities indicate that these changes have made their job less enjoyable, more difficult, less well paid or less secure. Despite this overall positive assessment, there is some evidence that the effect of new technologies in the workplace may be to widen already existing gaps. For instance, men are more likely than women to report that the changes caused by new information or computer technologies have made their jobs better paid; the same is true of those in executive positions compared to sales and retail workers. Racialized Canadians, however, are more likely to have seen *both* positive and negative changes due to new information or computer technologies in the workplace (and less likely to have seen no change). This underlines the importance of not overgeneralizing about the experiences of different types of workers, including racialized workers, in Canada.

While few Canadians feel that technological change has had a negative impact on the way they do their jobs, most acknowledge the potential connection between technological change and unemployment when asked about it directly. However, results from a similar survey conducted 35 years ago show that this association of new technology with unemployment is not new. When it comes to the wider benefits of new technologies, Canadians have become much more skeptical: the proportions saying that the introduction of more automation and new technology into the workplace will lead to a stronger Canadian economy or to lower prices for consumers have fallen significantly since 1985.

Education and training

Majorities of college and university graduates in all major fields of study report that their programs prepared them well for the jobs that they have worked in after graduation, although the proportion saying they were *very* well-prepared for their jobs is higher among those who graduated prior to 2000 than among those who graduated since. The reasons most commonly cited by those who said they were not very or not at all prepared for the job market relate to the program not aligning with their career path, or a lack of jobs or opportunities in their chosen field; the next most likely group of reasons relates to lack of hands-on experience or the program being too classroom-based or too theoretical. Graduates' assessments of how well their program of study prepared them for the job market are related to more positive employment outcomes.

Many of those who have completed their formal education and who are in the labour force access different forms of skills training. The most common of these is a skills training course provided by the employer; in the past five years, one in two participated in this form of skills training. Those who access skills training courses have a very positive view of their value. At the same time, there is evidence to suggest that skills training opportunities are generally less likely to be accessed by those workers who may need or benefit from them the most, such as those who are less securely employed or unemployed.

The most common way for Canadians in the labour force to personally learn new work-related skills is by learning from co-workers on the job. This suggests that one potential barrier to greater participation in skills training is the opportunity cost – particularly the income lost from time away from work. Governments have attempted to address this barrier by providing grants and tax credits for skills training. The survey shows that, currently, only two in five Canadians (excluding those who are retired) think it's likely that they would receive a grant from the government to help pay for training so they can improve their work-related skills; a slightly higher proportion thinks it's unlikely.

Finally, when Canadians think about what is needed to succeed in the modern workplace, they have in mind a broad range of skills that extend beyond technical know-how. This is reflective of the contemporary nature of work, which across all occupations requires teamwork, problem-solving and communication skills.

Acknowledgements

This research was made possible with the support from a number of organizations and individuals. The Environics Institute would like to thank the Future Skills Centre and the Diversity Institute at Ryerson University for their support of the project; and in particular Noel Baldwin, Pedro Barata, Wendy Cukier, Kelly Gallagher-Mackay, Alexandra Macdonald, Karen McCallum and Michael Urban for their contributions to the conception and management of the project, the elaboration of research questions, and the interpretation of results. The study partners would also like to acknowledge the contributions of: Keith Neuman from the Environics Institute for Survey Research for assistance with question development and analysis; John Otoo of the Environics Research Group and Rick Lyster at Elemental Data Collection Inc. for leading the data collection; Saif Alnuweiri for research assistance; and Steve Otto and Cathy McKim for their work in designing and producing this report. Finally, we express our sincere thanks to the 5,000 Canadians who took the time to participate in the survey.

About the 2020 Survey on Employment and Skills

The 2020 Survey on Employment and Skills was conducted by the Environics Institute for Survey Research, in partnership with the Future Skills Centre and the Diversity Institute at Ryerson University. The survey explores the experiences of Canadians relating to education, skills and employment, including perceptions of job security, the impact of technological change, and the value of different forms of training. A total of 5,000 respondents 18 years and older in all jurisdictions across Canada were interviewed using both online (provinces) and telephone (territories) methodologies between February 28 and April 4, 2020. Results are weighted by age, gender, region and education to ensure that they are representative of the Canadian population.

This report was preceded by a preliminary report released in May 2020.[1]

[1] Environics Institute for Survey Research, *Canadians' Shifting Outlook on Employment: 2020 Survey on Employment and Skills – Preliminary Report* (Toronto: Environics Institute for Survey Research, 2020); https://www.environicsinstitute.org/projects/project-details/canadians-shifting-outlook-on-employment-changement-du-point-de-vue-des-canadiens-sur-l-emploi

A. Introduction

The last decade was a positive one overall for employment growth in Canada. Following the loss of 282,000 jobs between 2008 and 2009 in the wake of the financial crisis, Canada gained 2.3 million jobs in the 10 years that followed. By 2019, the unemployment rate had fallen to 5.7 percent.[2]

Yet, during this same period, concern about employment was growing, for several reasons. Rapid technological change, and advances in robotics, automation and artificial intelligence, threatened to eliminate or transform countless jobs. These changes also facilitated, through mechanisms such as online platforms, the rise of less secure forms of piece work or task-based jobs performed, not by full-time employees, but by self-employed contractors working unpredictable hours for less pay and fewer benefits. The economy's increasing reliance on the rapid exchange and analysis of information also shifted the types of skills in greatest demand in the workplace, with a growing emphasis being placed on communication, collaboration and critical thinking.

These developments raised questions about whether the encouragingly low unemployment rate was an adequate measure of how workers are faring in the labour market. Many who remain employed nonetheless may face greater insecurity or worsening conditions. And many others face the prospect of navigating changes in the nature of work, and growing demand for skills that are not necessarily the ones most readily acquired in school, college or university. These uncertainties were present even before the COVID-19 pandemic emerged to reverse the employment gains made since 2009.

The 2020 Survey on Employment and Skills addresses these issues by exploring the experiences of Canadians relating to employment, education and training, including perceptions of job security, the impact of technological change, and the value of skills training.

The survey finds that most Canadians have seen their jobs impacted by new information and computer technologies, but in ways that are more likely to be viewed as positive than negative. Canadians also generally have had positive experiences with education and training. Most college and university graduates say their programs of study prepared them well for future employment, and most of those who have participated in skills training courses say they were useful in helping them develop the skills they needed to succeed at work.

For many, however, these generally positive views co-exist with some degree of insecurity about employment. While the unemployment rate remained comparatively low at the time of the survey, one in four of those who are employed have recently experienced unemployment themselves; an even greater proportion know someone close to them who has. And overall, almost one in two Canadians are worried about themselves or a member of their family finding or keeping a stable, full-time job.

Further skills training to prepare Canadians for a changing labour market is one way to alleviate some of this insecurity. But only one in two workers have accessed an employer-provided skills training course in the past five years, and only two in five think it's likely that they would receive a grant from the government to help pay for training so they can improve their work-related skills. And the survey suggests that, as is often the case, skills training opportunities are generally less likely to be accessed by those workers who may need or benefit from them the most, such as those who are less securely employed or unemployed.

Many of these experiences relating to employment and unemployment vary noticeably among different demographic groups. For instance, younger Canadians, immigrants and racialized peoples are more likely to have personally experienced a period of unemployment in the last 12 months. Racialized Canadians are twice as likely as those who identify as white to be employed on a temporary rather than a permanent basis, and the same is true for recent immigrants compared to those born in Canada to Canadian-born parents. Among those who say the way

[2] Statistics Canada, Table 14-10-0023-01: Labour force characteristics by industry, annual.

they do their jobs has changed due to new information or computer technologies in the workplace, men are more likely than women to report that these changes have made their jobs better paid. Importantly, however, the patterns are not always one-sided. For instance, racialized workers are more likely to have seen *both* positive and negative changes due to new information or computer technologies in the workplace, and less likely to have seen no change. This underlines the importance of not overgeneralizing about the experiences of different types of workers, including racialized workers, in Canada.

The remainder of this report will present these results in detail, organized around three main themes: employment and unemployment; the impact of new information or computer technologies; and education and training.

A note on terminology

The survey includes a question asking Canadians which racial or cultural categories best describe them. The options provided were drawn largely from a similar census question, and includes: white; South Asian (e.g., East Indian, Pakistani, Sri Lankan, etc.); Chinese; Black; Filipino; Latin American; Arab; Southeast Asian (e.g., Vietnamese, Cambodian, Laotian, Thai, etc.); West Asian (e.g., Iranian, Afghan, etc.); Korean; Japanese; Indigenous (First Nations, Métis or Inuk (Inuit)); and other. Respondents could also decline to answer. Respondents could select more than one category.

In the census, information about Indigenous identity is gathered through a separate question. In consultation with Ryerson University's Ethics Review Board, however, a separate question on Indigenous identity was not included in this survey. For this reason, respondents were provided the option to identify as Indigenous in the question about racial or cultural identity.

Overall, 22 percent of those surveyed did *not* include the category of "white" as one of their racial or cultural identities. This matches the proportion of the Canadian population identifying as a "visible minority" in the 2016 census.

In this report, the term "racialized" will be used to refer to these respondents – that is, all respondents who do not identify as white. It should be noted that this includes both those identifying as a member of racialized group (e.g., South Asian, Chinese, Black) and those identifying as Indigenous. On occasion, results for specific racialized groups (e.g., those who identity as Black) will be shown separately.

B. Employment and unemployment

The unemployment rate is one of the most closely watched economic indicators in Canada. Until the onset of the COVID-19 pandemic in March 2020, the rate's trajectory since the 2008 financial crisis had been encouraging, falling steadily from 8.3 percent in 2009 to 5.7 percent in 2019.[3] Tracking data from Focus Canada shows that the salience of unemployment as an issue for the public also declined at the same time. At the time of previous recessions in the early 1980s and 1990s, one in two Canadians said that unemployment was the most important problem facing the country. This declined to less than five percent in the early 2000s, before rising to 15 percent in the spring of 2009. But by 2019, the proportion has fallen to only four percent.[4]

In the contemporary economy, however, the issue may not be so much the number of jobs available, but overall security of employment, including how many times workers need to change jobs, whether jobs are full-time and permanent, and whether broad trends such as globalization and technological change will bring further disruptions to the labour market. The 2020 Survey on Employment and Skills addressed these issues by asking Canadians about both their current jobs and their experiences of unemployment.

Experiences with employment and unemployment

While fewer than one in ten Canadians were unemployed at the time of the survey, many of those who were employed had recently experienced a transition in their employment status, while others were under-employed. Between one in four and one in three Canadians also know someone who has experienced a period of unemployment in the last 12 months.

At the time the 2020 Survey on Employment and Skills began in late February 2020, the unemployment rate in Canada remained low by historical standards; it began to rise in March as the COVID-19 pandemic took hold.[5] Overall, eight percent of respondents in the labour force said they were currently unemployed and looking for work at the time they completed the survey.

The survey shows, however, that the unemployment rate only scratches the surface in terms of experiences with unemployment. While fewer than one in ten were unemployed, many of those who were employed had recently experienced a transition in their employment status, while others were under-employed. Specifically:

- Among those in the labour force, 18 percent are employed part-time; of these, 42 percent say they would prefer to work full-time. Thus, approximately eight percent of the labour force is under-employed in the sense of working only part-time as they are unable to find the full-time work they prefer. Younger part-time workers are more likely than their older counterparts to prefer to work full-time, as are men who work part-time compared to women, and racialized part-time workers compared to those who identify as white.
- Four in five employed workers (83%) – excluding those who are self-employed – are employed on a permanent basis, while 17 percent are employed on a temporary (7%), seasonal (5%) or casual (4%) basis. Racialized employed workers (10%) are twice as likely as those who identify as white (5%) to be employed on a temporary basis; the same is true for recent immigrants (13%) compared to those born in Canada to Canadian-born parents (6%).

[3] Statistics Canada, Table 14-10-0023-01: Labour force characteristics by industry, annual.

[4] Data from the Environics Institute for Survey Research. Originating in 1976, Focus Canada is the longest running and most comprehensive public opinion research program on public policy issues in Canada. In 2010, Focus Canada was converted to a public interest research program conducted on a not-for-profit basis by the Environics Institute for Survey Research.

[5] The survey began on February 28, at which point the unemployment rate was 5.6 percent. The rate rose to 7.8 percent in March, and 13.0 percent in April (Statistics Canada, Table 14-10-0287-02 Labour force characteristics by age group, monthly, seasonally adjusted). Two-thirds of the survey responses in the 10 provinces were collected prior to March 10, and 80 percent were collected prior to March 16. Survey responses on the three territories were collected in late March and early April.

- Among those who are employed, one in four (24%) have personally experienced a period of unemployment in the last 12 months lasting for two weeks or longer.[6] This figure is much higher among younger workers (43% among those age 18 to 24, compared with 23% for those between the ages of 25 and 54, and 13% for those age 55 and older), among part-time workers (39%), among those who did not attain a certificate, diploma or degree after high school (34%), among recent immigrants (45%),[7] and among racialized workers (30%). It is especially high among racialized recent immigrants (55%).[8]
- Among all Canadians, between one in four and one in three also know someone who has experienced a period of unemployment in the last 12 months, including 28 percent who know someone in their immediate family, such as their spouse, child or parent, who has recently been unemployed; and 32 percent who have a close friend in the same situation (see Table 1).

Table 1
Experiences with unemployment among family and friends

	Yes, total	Yes, currently in the labour force
Someone in your immediate family, such as your spouse, child or parent	28	31
Someone in your extended family, such as a cousin, niece or nephew, or uncle or aunt	25	27
A close friend	32	36

Q.21
Thinking about the following types of people whom you may know, have any of them experienced a period of unemployment in the last 12 months that lasted for two weeks or longer? By unemployment, we mean that they wanted to work but could not find a job at that time.

[6] The survey question specifies that "by unemployment, we mean that you wanted to work but could not find a job at that time."

[7] For the purposes of this survey, recent immigrants are defined as those who have lived in Canada for ten years or less.

[8] The unweighted sample size for this group is 132.

Concern about job security

About one in two Canadians say that they are worried about themselves or a member of their immediate family finding or keeping a stable, full-time job. The most common reasons for being worried relate to the general conditions of the labour market or the economy. Very few are worried for reasons relating to a lack of education or skills, the impact of new technologies, or the effects of immigration.

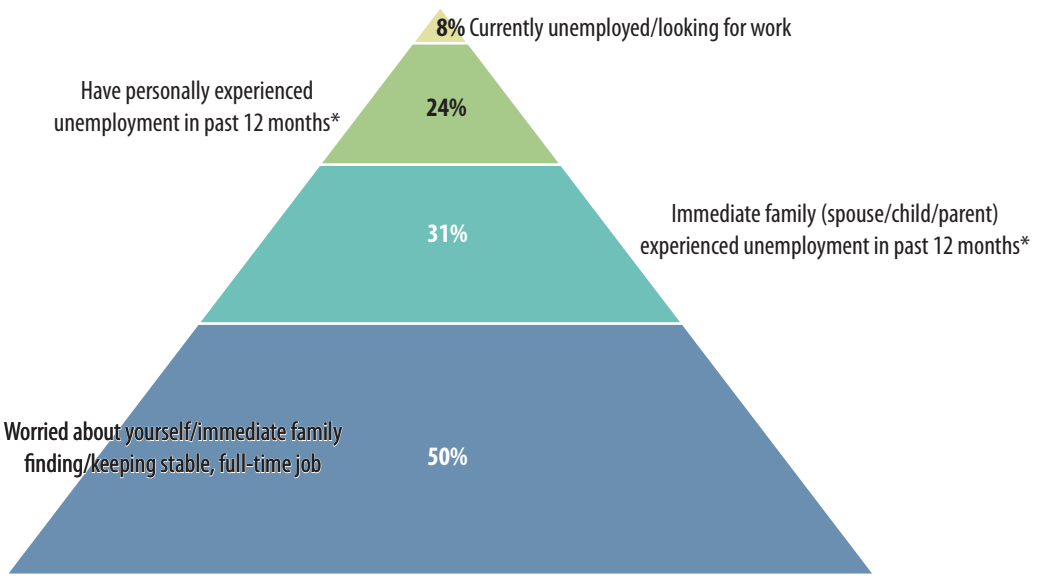
In addition to these current or past experiences with unemployment, many Canadians are worried that they or their family members could experience unemployment in the future. The survey shows that the comparatively low unemployment rate (prior to the COVID-19 pandemic) did not necessarily translate into a feeling of insulation from the prospect of unemployment for a significant proportion of the population – including many who were employed on a full-time, permanent basis.

About one in two Canadians (47%) say that they are very (15%) or somewhat (32%) worried about themselves or a member of their immediate family finding or keeping a stable, full-time job; a similar proportion (48%) is not very (27%) or not at all worried (21%).[9] Those employed part-time (54%) or who are self-employed (54%) are slightly more likely to be worried than those employed full-time (46%), but the latter figure almost reaches one in two. The same is true when considering the permanence of employment: naturally, those who are employed on a temporary basis are more worried about job security for themselves or a family member (66%), but among those who are permanently employed, almost one in two (47%) are also worried.

CHART 1

Experiences of unemployment

Subsample: Those in the labour force



* Lasting two weeks or longer

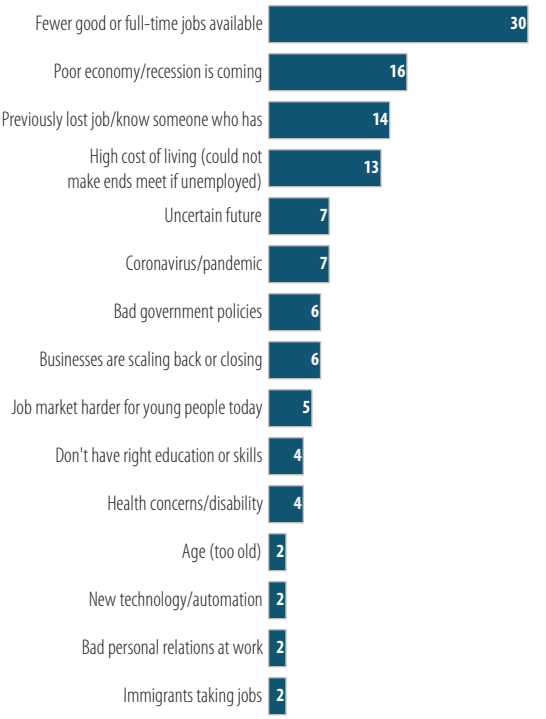
9 This figure was not unduly influenced by the onset of the pandemic, though it did rise slightly over the period during which the survey data was collected. A similar Environics Institute survey conducted in January, prior to the pandemic, produced a comparable result.

Those who are worried were asked a follow-up question asking them to say why they feel this way. This was an open-ended question, and multiple answers were permitted. The most common responses relates to the general conditions of the labour market or the economy: 30 percent mention a reason relating to the lack of good jobs, and 16 percent mention a reason relating to a downturn in the economy. The next most common answers are those related to recent experiences of unemployment (14%), or concerns about the high cost of living and the challenge of making ends meet in the event of job loss (13%). Seven percent mention general uncertainty about the future, and the same proportion mentions the COVID-19 pandemic, which was just emerging in Canada as the survey was taking place.

It's not surprising that Canadians who are worried about job security express the reasons for their concern in general terms relating to poor economic or labour market conditions, previous job loss, financial pressures (in terms of the high cost of living) and general uncertainty. But these responses are nonetheless revealing, in part because of the reasons that are *not* mentioned, at least not frequently. For instance, relatively few of those who are worried about themselves or a member of their immediate family finding or keeping a stable, full-time job mention a reason related to issues that will be explored later in this report, namely a lack of the right education or skills (4%), or technological change, such as new computer or information technologies replacing workers (2%). It is also notable, given the comparatively high proportion of Canada's population that is composed of people born outside of the country, that only two percent of those worried about job security mention immigration as a reason.

CHART 2

Reasons for concern about job security



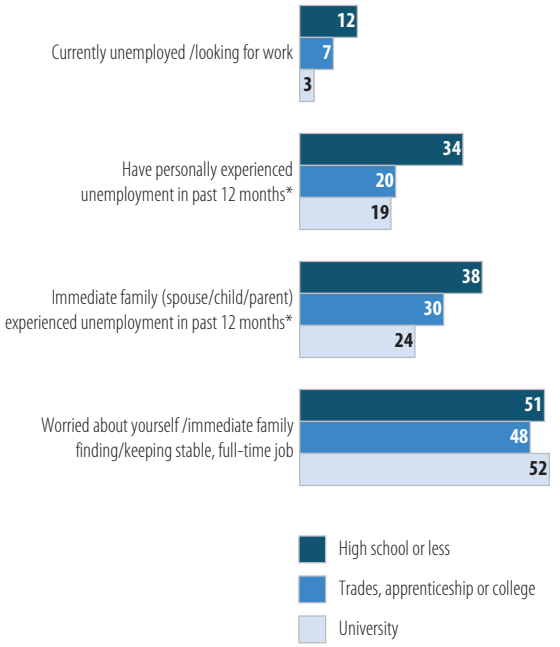
Q.19
Why are you worried?

Subsample: Those who are worried about themselves or a family member finding or keeping a stable, full-time job

CHART 3

Experiences of unemployment

By educational attainment



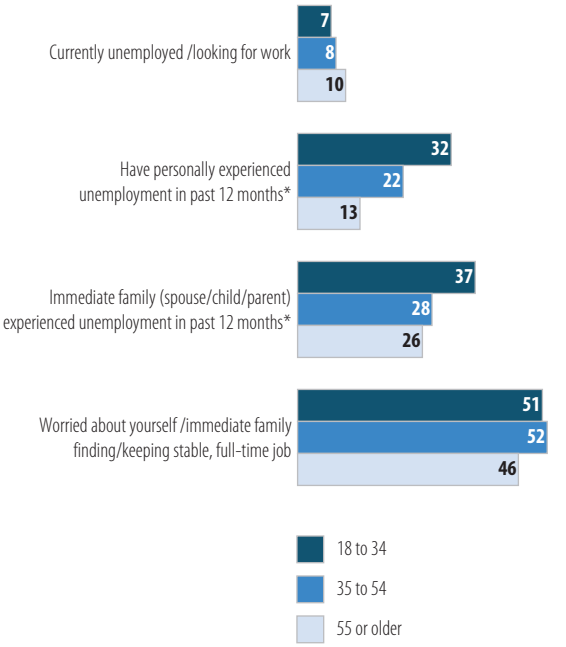
* Lasting two weeks or longer

Subsample: Those in the labour force

CHART 4

Experiences of unemployment

By age group



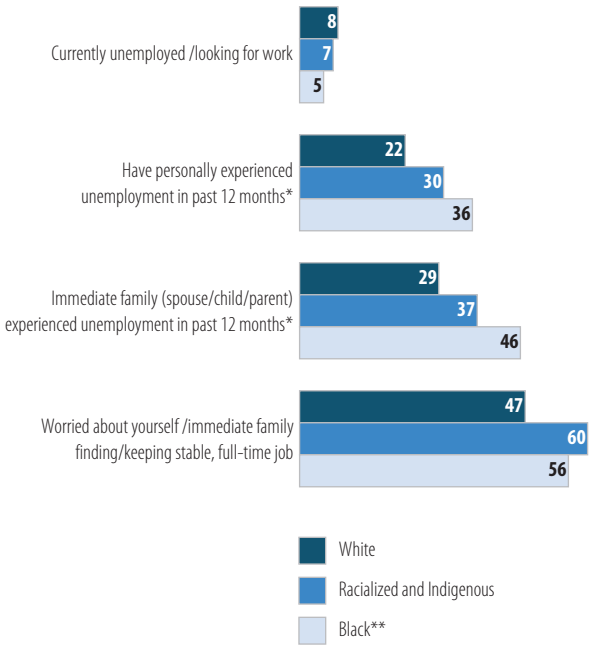
* Lasting two weeks ot longer

Subsample: Those in the labour force

CHART 5

Experiences of unemployment

By racial identity



* Lasting two weeks or longer

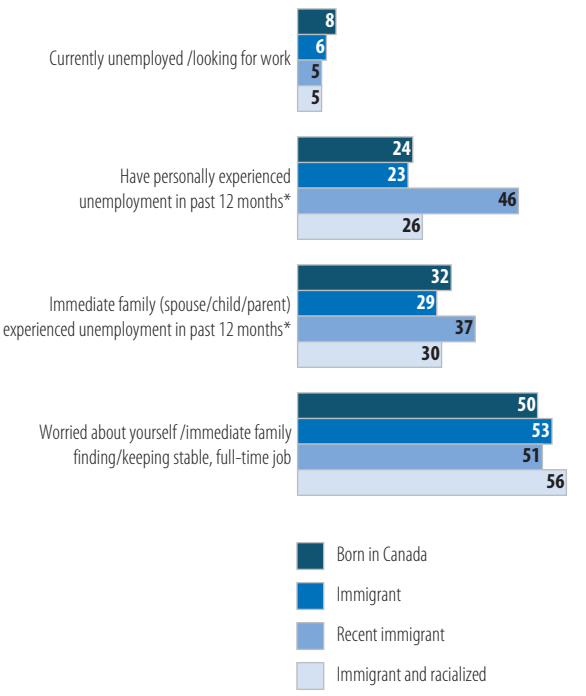
** Survey participants who identity as Black are also included in the responses for those who are racialized and Indigenous. The responses for those identifying as Black are shown separately because they are distinct, and this distinction is statistically significant (even though the sample size of 107 is relatively small).

Subsample: Those in the labour force

CHART 6

Experiences of unemployment

By immigration status and racial identity



* Lasting two weeks or longer

Subsample: Those in the labour force

C. The impact of new information and computer technologies

In recent years, countless reports have addressed the potential impact of new information and computer technologies on employment. Some have predicted dramatic job losses, while others have concluded that workers will quickly adapt and that employment opportunities in new high-tech businesses will outweigh losses in those that become obsolete. The absence of consensus is striking. As a recent review prepared for the Future Skills Centre and the Diversity Institute noted, "there is still significant disagreement on just how vulnerable workers are to automation… The inherent unpredictability of technological progress means that within this growing literature, the proportion of jobs in developed countries projected to be at high risk of automation ranges widely, from 6% to 59%... The time frames within which these impacts are predicted to occur are similarly broad, ranging from 10 to 50 years."[10]

The latest Statistics Canada study of the issue produces estimates of the risk of "automation-related job transformation" that fall within this range. The study concludes that "the majority of workers faced at least some risk," including 10.6 percent who are at high risk and 29.1 percent at moderate risk.[11] Among occupational categories, office support workers are the most at risk of automation-related job transformation, while professionals are the least. Men and women are equally likely to face a high risk, and older workers are more likely to face a high risk than those between the ages of 25 and 54. Additionally, "more highly educated workers faced a lower risk."[12] However, the study's authors stress that "transformation" is not the same as job loss, and some of those affected may find new employment.[13]

While experts will continue to debate the likely impact of new technology on work, the purpose of the 2020 Survey on Employment and Skills was to explore how Canadians see the issue, particularly from their perspectives as workers experiencing changes in the workplace first-hand.

[10] Michael Crawford Urban and Sunil Johal, *Understanding the Future of Skills: Trends and Global Policy Responses* (Ottawa: The Public Policy Forum, January 2020), pp. 5 and 1; https://ppforum.ca/wp-content/uploads/2020/01/UnderstandingTheFutureOfSkills-PPF-JAN2020-EN.pdf.

[11] Marc Frenette and Kristyn Frank, *Automation and Job Transformation in Canada: Who's at Risk?* (Ottawa: Statistics Canada, 2020); https://www150.statcan.gc.ca/n1/pub/11f0019m/11f0019m2020011-eng.htm, p. 12.

[12] Frenette and Frank, *Automation and Job Transformation in Canada*, pp. 14-16.

[13] Frenette and Frank, *Automation and Job Transformation in Canada*, p. 19.

Technology and work

Most Canadians say that new information or computer technologies have changed the way they do their jobs; and, on the whole, this change is seen as being more positive than negative. Despite this overall positive assessment, there is some evidence that the impact of new technologies in the workplace may be to widen already existing gaps. For instance, men and those in executive positions are more likely to report that the changes caused by new information or computer technologies have made their jobs better paid, while women, and sales and retail workers, are less likely to do so.

Most Canadians say that new information or computer technologies have changed the way they do their jobs; and, on the whole, this change is seen as being more positive than negative.

Two-thirds (65%) of Canadians in the labour force say that, over the past five years, new information or computer technologies have changed the way they do their jobs to a great (22%) or some (43%) extent.[14] Fewer than one in three (31%) say these technologies had very little (20%) or no (11%) effect on the way they do their job.

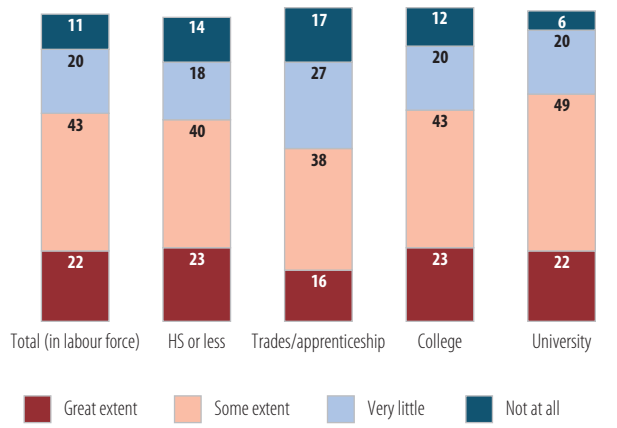
Generally speaking, most Canadians, regardless of background, have felt the impact of new information or computer technologies. However, some groups are more likely than others to say that, over the past five years, these technologies have changed the way they do their jobs.

- **Age.** Younger workers are more likely than their older counterparts to say that, over the past five years, new information or computer technologies have changed the way they do their jobs: 76 percent of those between the ages of 18 and 24 are of this view, compared to 54 percent of those age 55 and over.
- **Education**. Those who completed apprenticeship or trades training (54%) are the least likely to say that new technologies have changed the way they do their jobs, while those who completed a university degree (71%) are the most likely to say so.

CHART 7

Impact of new information/computer technologies on work

By educational attainment



Q.22
Over the past five years, to what extent have new information or computer technologies changed the way you do the main job you have now?

- **Occupation**. Those who work in transportation (44%) or as manual labourers (56%) are the least likely to say that new technologies have changed the way they do their jobs, while those with executive or managerial jobs (74%), professionals (73%), office workers (70%), and those working in retails or sales (70%) are the most likely to say so.
- **Immigration**. Immigrants (70%), and in particular recent immigrants (75%), are more likely than second (66%) or third (63%) generation Canadians to say that new technologies have changed the way they do their jobs.

[14] The survey referred to "the main job you have now;" in the case of respondents who are currently unemployed, the survey referred to "the main job you had before you became unemployed."

- **Race**. Racialized Canadians (73%) are more likely to say that new technologies have changed the way they do their jobs, compared to those who identify as white (62%).

Gender is not a significant factor, as men and women are equally likely to say that new information or computer technologies have changed the way they do their jobs.

The survey also sheds light on the question of whether the changes brought about by new information or computer technologies have made things better or worse. For instance, those whose jobs have changed report greater job satisfaction, as well as more favourable views of new technologies themselves. Specifically:

- Those who say the way they do their jobs has been changed by new technologies (83%) are somewhat more likely to be satisfied with their jobs than those who have seen little or no change (75%).
- Those who say the way they do their jobs has been changed by new technologies (82%) are more likely to agree that they are "excited by the possibilities presented by the new technologies," than those who have seen little or no change (72%).

More directly, the survey asked a series of follow-up questions to those who said that new information or computer technologies had changed the way they do their jobs to a great or some extent. Most of these workers say that that the changes caused by new information or computer technologies had either a positive or a neutral effect on their jobs. Majorities say these changes had made their job more enjoyable and easier, and three in ten say it made them better paid and more secure (see Table 2). Only minorities say these changes had made their job less enjoyable, more difficult, less well paid or less secure.

There are a number of variations in responses among different groups of workers. Some of these are to be expected. For instance, those between the ages of 25 and 34 are more likely than those in other age groups to say that, as a result of new technologies, their jobs have become more enjoyable, better paid and more secure. This is likely a life-cycle effect, as many 25 to 34-year-olds are advancing in their careers from entry-level jobs to more stable and interesting ones. Those who are more satisfied with their incomes or less worried about job security also have a more positive assessment of the impact of technology on their jobs, but this may simply reflect their more positive outlook on their jobs as a whole.

TABLE 2
Impact of changes caused by new technologies in the workplace

	More enjoyable	**Neither**	**Less enjoyable**
More enjoyable for you personally, or less enjoyable?	55	25	18
	Easier	**Neither**	**More difficult**
Easier for you to perform, or more difficult?	59	22	17
	Better paid	**Neither**	**Less well paid**
Better paid for you personally, or less well paid?	30	46	21
	More secure	**Neither**	**Less secure**
More secure for you personally, or less secure?	32	36	28

Q.23
Would you say that the changes caused by new information or computer technologies made your job … ?

Subsample: Those who said that new information or computer technologies had changed the way they do their jobs to a great or some extent.

More notable variations include the following:[15]

Employment status. Self-employed workers (62%) are more likely to say that new technologies have made their jobs more enjoyable, compared to full-time (55%) or part-time (48%) employees. Part-time employees are slightly more likely than average to say that their jobs have become more difficult and less well-paid.

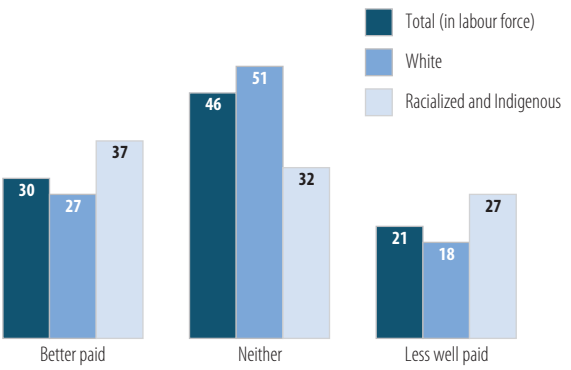
Occupation. Those who work in executive or managerial positions are more likely than average to say that the changes caused by new information or computer technologies have made their jobs more enjoyable, easier and better paid. Those who work in a skilled trade are also more likely to say that their jobs have become better paid and more secure. Those who work in sales or retail jobs are more likely to report that new technologies have led to their jobs becoming less well-paid.

Immigration. Immigrants in general, and recent immigrants in particular, are more likely than Canadian-born workers to report positive changes at work as a result of new technologies. For instance, 42 percent of recent immigrants say that the changes caused by new information or computer technologies have made their jobs better paid, compared with 29 percent of non-immigrants; the respective proportions saying their jobs have become more secure are 44 and 32 percent.

Race. Racialized workers are more likely than those who identify as white to have seen *both* positive and negative changes, and less likely to have seen no change. For instance, those who are racialized are more likely than those who identify as white to say that, as a result of the changes caused by new information or computer technologies, their jobs have become better paid and more secure, and also more likely to say they have become less well paid and less secure – whereas those who identify as white are more likely to say that no change has occurred. This pattern holds for both full-time and part-time workers. This underlines the importance of not overgeneralizing about the experiences of racialized workers in Canada.

CHART 8

Impact of new information/computer technologies on work

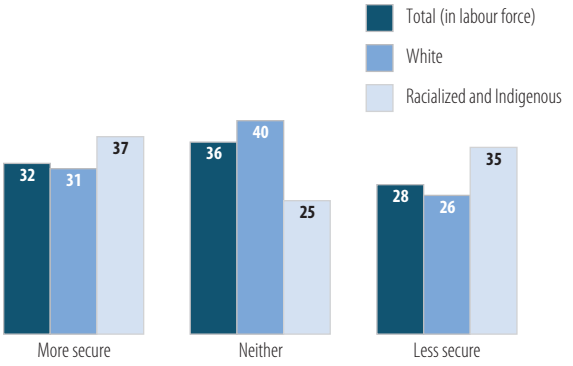


Q.23c
Would you say that the changes caused by new information or computer technologies made your job better paid for you personally, or less well paid?

Subsample: Those saying jobs have changed to a great or some extent

CHART 9

Impact of new information/computer technologies on work



Q.23d
Would you say that the changes caused by new information or computer technologies made your job more secure for you personally, or less secure?

Subsample: Those saying jobs have changed to a great or some extent

[15] Recall that these questions were only asked of those who said that new information or computer technologies had changed the way they do their jobs to a great or some extent.

Gender. Men and women are *equally likely* to say the new technologies have made their jobs more enjoyable and easier, but men are *more likely* than women to say their jobs have become better paid and more secure. One in three men (34%) say that the changes caused by new information or computer technologies have made their jobs better paid, compared to one in four (25%) women. In the case of jobs becoming more secure, the figures are 37 and 28 percent, respectively. These differences between men and women are greater among younger workers and part-time workers.

The patterns relating to both race and gender combine in interesting ways. For instance, racialized men (40%) are more likely than non-racialized men (32%), racialized women (32%) or non-racialized women (22%) to say that the changes caused by new technologies in the workplace made their job better paid. But at the same time, racialized men (28%) are also more likely than non-racialized men (19%), racialized women (26%) or non-racialized women (16%) to say the result was that their jobs were less well-paid. In other words, racialized men are more likely to experience both positive and negative outcomes, and non-racialized women are least likely to experience both.

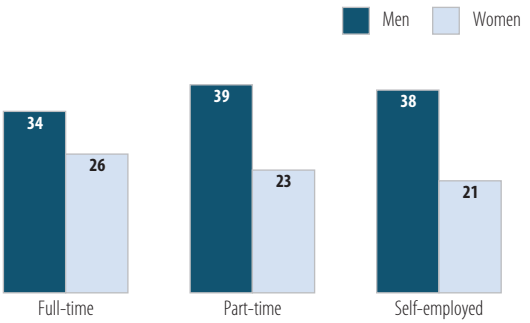
These findings make it difficult to draw a single conclusion. There is some evidence to suggest that the impact of new technologies may be to widen already existing gaps. For instance, men and those in executive positions are more likely to report that the changes caused by new information or computer technologies have made their jobs better paid, while women, and sales and retail workers, are less likely to do so. At the same time, however, it's not simply the case that those already further ahead benefit the most: recent immigrants and those who work in a skilled trade are also more likely to feel that technology-driven changes at work have led to better pay. The fact that racialized Canadians are more likely to report both positive and negative outcomes (and less likely to report neutral ones) again illustrates the unevenness of the impact of new technologies in the workplace.

That said, the fact that some groups may be more or less likely to see benefits from new technologies should not take away from the overall finding that, on the whole, the experiences of a majority of workers from all backgrounds are at least neutral, if not positive.

CHART 10

Impact of new information/computer technologies on work

Better paid, by gender



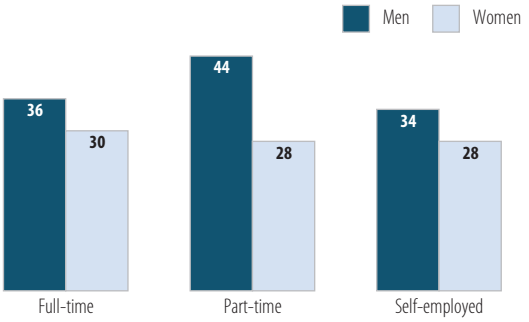
Q.23c
Would you say that the changes caused by new information or computer technologies made your job better paid for you personally, or less well paid?

Subsample: Those saying jobs have changed to a great or some extent

CHART 11

Impact of new information/computer technologies on work

More secure, by gender



Q.23d
Would you say that the changes caused by new information or computer technologies made your job more secure for you personally, or less secure?

Subsample: Those saying jobs have changed to a great or some extent

Technology and the causes of unemployment

While very few Canadians mention automation and new technology, unprompted, when describing the reasons for their concern about job security, most agree with the proposition that automation and new technology might be a cause of unemployment in Canada generally. But Canadians' level of concern about the consequences of new technologies for employment has not increased over time.

As mentioned earlier, numerous reports have highlighted the possibility that new technologies such as robotics or artificial intelligence will lead to job losses, either in particular sectors or across the economy as a whole. In this context, the 2020 Survey on Employment and Skills explored the question of whether Canadians considered these technologies to be an important cause of unemployment.

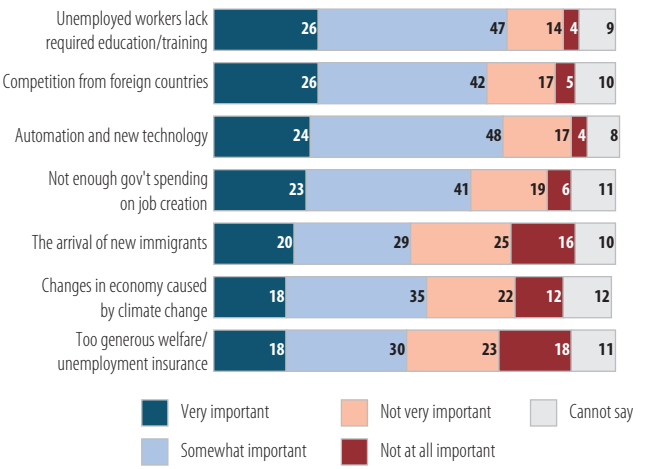
On the one hand, technological change is not a top-of-mind issue for those who are worried about job security for themselves or for their family. As mentioned previously, about one in two Canadians (47%) say that they are very or somewhat worried about themselves or a member of their immediate family finding or keeping a stable, full-time job. When asked a follow-up question as to why, only two percent of those who are worried mentioned a reason directly related to technological change, such as automation replacing workers.

It is possible that some of those who mention reasons related to the lack of good jobs or worsening economic conditions might agree that technological change could be at least partly responsible for these developments. Yet, very few choose to highlight the issue of technological change when answering in their own words.

On the other hand, Canadians do acknowledge the potential connection between technological change and unemployment when asked about it directly. Seven in ten (71%) say that automation and new technology is currently a very (24%) or somewhat (48%) important cause of unemployment in Canada. In other words, while very few Canadians mention automation and new technology, unprompted, when describing the reasons for their concern about job security for themselves or their family, most agree with the proposition, when it is put to them, that automation and new technology might be a cause of unemployment in Canada generally.

CHART 12

Causes of unemployment



Q.40
Would you please tell me if you think each of the following is currently an important or not an important cause of unemployment in Canada?

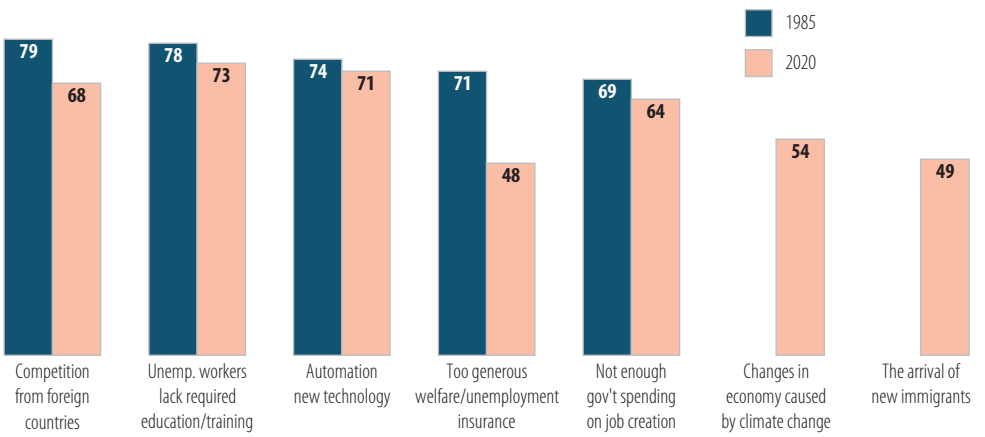
Canadians were also asked about six other possible causes of unemployment. Along with automation and new technology, roughly seven out of ten also say that a lack of the required education or training for unemployed workers (73%), and competition from foreign countries (68%) are very or somewhat important causes of unemployment in Canada. Somewhat fewer agree that not enough government spending on job creation (64%) and changes in the economy caused by climate change (54%) are important causes; and about one in two say that the arrival of new immigrants (49%), and too generous welfare and unemployment insurance (48%) are important causes.

Overall, then, automation and new technology is seen by Canadians as one of the most important causes of unemployment, even if it's not top-of-mind when they think about the reasons for their concern about their own job security. Results from a similar survey conducted 35 years ago, however, show that this association of new technology with unemployment is nothing new. In a 1985 Focus Canada survey, a similar proportion of Canadians as in 2020 (74%) said that automation and new technology is currently an important cause of unemployment in Canada. The proportion saying it's a very important cause (and not either very or somewhat) was higher: 36 percent in 1985 compared to 24 percent in 2020.[16] It is fair to say, therefore, that despite the attention paid recently to "disruptive" new technologies such as artificial intelligence, Canadians' level of concern about their consequences for employment has not escalated over time.

CHART 13

Causes of unemployment, changes since 1985

1985 – 2020 Very/somewhat important



Q.40
Would you please tell me if you think each of the following is currently an important or not an important cause of unemployment in Canada?

[16] This may be partly because unemployment itself was a bigger problem in 1985 (the unemployment rate was 10.5% compared to 5.7% in 2019); for each of the items asked about in both surveys, the proportion saying it's a very important cause of unemployment was higher in 1985, while the proportion saying it's a somewhat important cause was lower.

Technology, employment and the economy

Canadians have become much more skeptical about the wider economic benefits of new technologies. The proportions agreeing that the introduction of more automation and new technology into the workplace will lead to a stronger Canadian economy and to lower prices for consumers have fallen since 1985.

Further evidence that Canadians are not growing more concerned that the adoption of new technologies will lead to more unemployment comes from a second question that was asked both in the 1985 Focus Canada survey and in the 2020 Survey on Employment and Skills.

In 1985, 66 percent of Canadians said that the introduction of more automation and new technology into the workplace will lead to higher unemployment, while 25 percent said it will not, and nine percent said it will make no difference or offered no opinion. In 2020, the responses were broadly similar, with 61 percent saying that the introduction of more automation and new technology into the workplace will lead to higher unemployment, 22 percent saying it will not, and 17 percent offering no opinion. Again, while a majority of Canadians draw a link between new technology and unemployment, these results suggest this is a longstanding, and not a recent, concern.

Views on the link between the introduction of new technology into the workplace and higher unemployment are widely shared, with little difference between those with more or less stable employment, higher or lower incomes, or more or less education. In 2020, however, the sense that the introduction of more automation and new technology into the workplace will lead to higher unemployment is somewhat higher among those working in clerical, administrative or office support positions (68%), and those working in the sales or retails sector (65%), and somewhat lower among those with executive or managerial jobs (59%), and professionals (56%).

Views are also associated with attitudes toward technology in general and to experiences with technology-driven change, but only to a limited extent. For instance, those who *agree* that they are excited by the possibilities presented by the new technologies are only slightly *less likely* than those who disagree to think that the introduction of these technologies in the workplace will lead to higher employment. Similarly, those who say that the changes caused by new technologies have made their job l*ess secure* are *more likely* to connect new technologies in the workplace with higher employment overall, but a slight majority of those who say that their jobs have become more secure also hold this view. Thus, even a majority of those who are "pro-technology" or who have benefited from new technologies believe that the introduction of more automation and new technology into the workplace will lead to higher unemployment.

TABLE 3

The link between new technologies in the workplace and unemployment

		Think, in the next 10 years, the introduction of more automation/new technology into workplace will/will not lead to higher unemployment?		Think automation/new technology is currently an important/not an important cause of unemployment in Canada?	
		Will	Will not	Very/ somewhat important	Not very / not at all important
I am excited by the possibilities presented by the new technologies	**AGREE**	61	23	74	21
	DISAGREE	69	19	70	23
New technologies are causing more problems than they are solving	**AGREE**	70	19	77	17
	DISAGREE	57	26	69	25
In general, would you say that things are changing too fast these days, are changing at about the right pace,or are not changing quickly enough?	**TOO FAST**	69	18	77	17
	NOT QUICKLY ENOUGH	63	20	65	27
Would you say that the changes caused by new information or computer technologies made your job…*	**BETTER PAID**	54	31	82	16
	LESS WELL PAID	70	24	74	24
Would you say that the changes caused by new information or computer technologies made your job…*	**MORE SECURE**	53	31	79	18
	LESS SECURE	75	19	77	20

Q.24b
Do you think that, in the next 10 years, the introduction of more automation and new technology into the workplace will or will not lead to higher unemployment?

Q.40a
Would you please tell me if you think each of the following is currently an important or not an important cause of unemployment in Canada? Automation and new technology

* Subsample: those who said that new information or computer technologies had changed the way they do their jobs to a great or some extent.

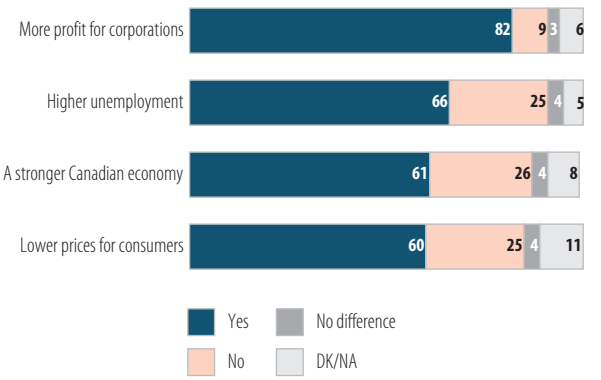
It is not simply the case, however, that all opinions about the impact of new technologies have remained static. On the one hand, as we have seen, similar proportions of Canadians in 1985 and 2020 feel that the introduction of more automation and new technology into the workplace will lead to higher unemployment; this is also the case when it comes to corporate profits. In 1985, a large majority of Canadians felt that the introduction of more automation and new technology into the workplace will lead to more profit for corporations; the same is true in 2020, though the proportion holding this view has edged down slightly, to 71 percent.

When it comes to the wider benefits of new technologies, however, Canadians have become much more skeptical. While in 1985, 61 percent said that the introduction of more automation and new technology into the workplace will lead to a stronger Canadian economy, only half as many (32%) feel that way in 2020. Similarly, in 1985, 60 percent said that the adoption of new technology in the workplace would lead to lower prices for consumers, compared to only 26 percent in 2020.

CHART 14

Impact of automation/computers on unemployment

1985

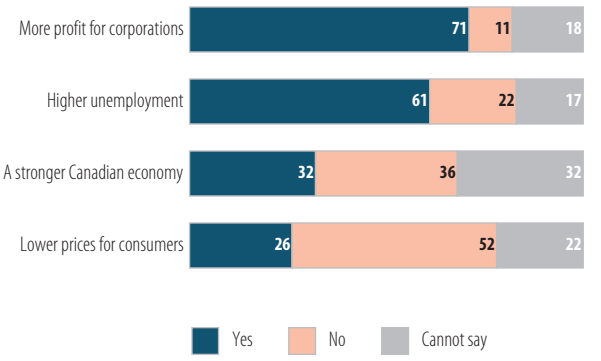


Focus Canada 1985-5 Q.60
Do you think that the introduction of more automation and new technology into the workplace will or will notlead to ... ?

CHART 15

Impact of automation/computers on unemployment

2020



Q.24
Do you think that the introduction of more automation and new technology into the workplace will or will notlead to ... ?

D. Education and training

While the precise implications of technological change on job creation and elimination way be difficult to predict, there is broader agreement that education and skills training will continue to be the keys to workers' success. At the same time, the nature of education and training itself may need to evolve. "What is certain," argue the authors of a review prepared for the Future Skills Centre and the Diversity Institute, "is that workers will need to learn new skills and develop new competencies to adapt to whatever changes are on their way."[17] A growing number of jobs are expected to require what is varyingly referred to as "cross-cutting" or "transferable" skills: skills that are not tied to specific subject areas but that enable workers, regardless of their field of work, to manage increased complexity and uncertainty. These skills include those related to the processing of information (analytical and problem-solving skills), those related to collaboration and teamwork, and those related to communication.

Doubts remain, however, as to whether Canada's education and training institutions are adept at this type of skills development. As the Diversity Institute's Wendy Cukier has argued, though the nature of skills and tools is constantly evolving, "the purveyors of skills – post-secondary institutions and community employment organizations – while important, have historically been slow to anticipate change."[18] This is echoed in the previously cited review, which notes that "Canada has traditionally lagged behind peer countries when it comes to public investment in skills training and active labour market policies" and that "current approaches to skills training for adults in Canada are underfunded [and] deliver uneven outcomes."[19]

These issues were explored in the 2020 Survey on Employment and Skills by asking Canadians about the types of skills that are important to their success in the workplace, and about their experiences with post-secondary education and skills training.

[17] Urban and Johal, *Understanding the Future of Skills*, p. 1.

[18] Wendy Cukier, *Skills: The Currency of the 21st Century* (June 5, 2020); https://thefutureeconomy.ca/op-eds/wendy-cukier/.

[19] Urban and Johal, *Understanding the Future of Skills*, pp. 26 and 2.

Which skills are most important?

When Canadians think about what is needed to succeed in the modern workplace, they have in mind a broad range of skills and not just technical know-how.

The 2020 Survey on Employment and Skills asked Canadians about what types of skills are important to them and how they are best acquired.

The results show that a variety of different skills are considered important both in people's current jobs, and in the event that they were to seek a promotion or a better job.[20] Of the seven types of skills mentioned in the survey, none is favoured by more than one in four.

The skills most likely to be mentioned as important to getting one's current job are technical know-how or knowledge of a specific subject related to the job (24%), followed by communication skills (18%). Five other types of skills are each mentioned by roughly one in ten: the ability to collaborate with others and to work in teams (12%); leadership or management skills (11%); the ability to solve problems (11%); the ability to stick with a task until it's done (9%); and the ability to adapt quickly to change (8%).

When asked about the skills that are the most important in applying for a promotion or a better job, the responses are broadly similar, with the exception that leadership or management skills are mentioned slightly more frequently (18%).

In addition, all Canadians were asked about which skills will be the most important in helping younger people just starting out in their careers be successful at work. Again, the responses are broadly similar, with technical know-how being mentioned most frequently (24%), followed by communication skills (16%) and the ability to collaborate with others (15%). The ability to adapt quickly to change (15%) was mentioned more frequently in the case of younger people just starting out in their careers than in the other scenarios mentioned.

TABLE 4
Most important types of skills

	A The main job you currently have	B For a promotion or for a better job than you have now	C For younger people just starting out in their careers
Technical know-how or knowledge of a specific subject related to the job	24	25	24
Communication skills	18	15	16
The ability to collaborate with others and to work in teams	12	10	15
Leadership or management skills	11	18	4
The ability to solve problems	11	11	10
The ability to stick with a task until it is done	9	5	8
The ability to adapt quickly to change	8	7	15
Cannot say	6	9	7

Note: The survey asked: Which of the following which of the following skills were the most important, in each of the three different scenarios. Question A was asked to those in the labour force and those who are retired. Those unemployed and retired were asked about the last job they held. Question B was asked to those in the labour force. Those unemployed were asked about applying for a new job. Question C was asked to all Canadians.

[20] See the note accompanying Table 4 for information about the subsamples for each question.

These results suggest that when Canadians think about what is needed to succeed in the modern workplace, they have in mind a broad range of skills and not just technical know-how. This is arguably reflective of the contemporary nature of work, which across all occupations requires teamwork, problem-solving and communication skills. It also serves to underscore the challenge of providing ongoing skills training, since the focus of that training needs to be no less wide-ranging.

Most important skills: comparing the views of employers and employees

When it comes to thinking about the types of skills that are most important for success at work, employers and employees in Canada seem to be largely on the same page.

This can be illustrated by comparing the answers from the 2020 Survey on Employment and Skills with those from the 2020 skills survey of 86 leading Canadian employers, conducted by the Business Council.[21] In order to provide for the most direct comparison, the question selected from the Survey on Employment and Skills is one that refers to a person's first job after completing their formal education. Unlike the other questions discussed in the main text in this report, this question allowed survey participants to provide more than one answer.

Keeping in mind that the survey questions and response options are worded slightly differently, it's nonetheless notable that both employers and employees agree on the importance of teamwork, communication, problem-solving skills and adaptability (or resilience). The only difference between the two groups of survey results is that technical skills or knowledge of a specific subject ranks higher up in the list of most important skills for employees than it does for employers.

Survey:	2018 Business Council Skills Survey	2020 Survey on Employment and Skills
Sample:	86 leading Canadian employers	Canadians currently working full-time (n=2,336)
Question:	When evaluating entry-level candidates, which of the following skills and capabilities are most important for your organization?	Thinking about the first job you got after you left high school/ finished your apprenticeship or trades training /completed your post-secondary education, which of the following skills were the most important when it came to getting that job?

Rank (top mentions)	Skill	Rank (top mentions)	Skill
1	Collaboration/teamwork	1	Communication skills
2	Communication skills	2	The ability to solve problems
3	Problem-solving skills	3	Technical know-how
4	Resiliency	4	The ability to collaborate with others
5	Analytical capabilities	5	The ability to adapt quickly to change

Based on its results, the Business Council notes that "collaboration, teamwork, and relationship building top the wish list for both mid-level and entry-level hiring. And for entry-level employees, there is an expectation that they can also bring strong abilities in communication, problem solving, and resiliency to the workplace."

[21] See The Business Council of Canada, *Investing in a Resilient Canadian Workforce: 2020 Business Council of Canada Skills Survey* (Summer 2020), pp. 12 and 1; available at https://thebusinesscouncil.ca/publications/2020-business-council-of-canada-skills-survey/. The survey was conducted in 2019. See also: The Business Council of Canada, *Navigating Change: 2018 Business Council Skills Survey* (Spring 2018); available at https://thebusinesscouncil.ca/publications/2018skillssurvey/; see especially p. 10.

The value of post-secondary education

Majorities of college and university graduates in all major fields of study say that their programs prepared them well for the jobs that they have worked in after graduation. However, the proportion of graduates saying they were *very* well-prepared for their jobs has declined over time.

More than one in two (56%) Canadians surveyed have obtained an education or training credential beyond a high school diploma.[22] This includes 10 percent who have earned an apprenticeship or trades training certificate, 21 percent who have earned a college diploma, and 27 percent who have earned a university undergraduate or post-graduate degree. (These three figures add to slightly more than 56 percent because some Canadians have earned both a college diploma and a university degree.)

The labour market benefits of a post-secondary education are well-established, and evident in this survey as well. Those who continued their education past high school, for instance, are more likely to be satisfied with their incomes and less likely to have recently experienced a period of unemployment.

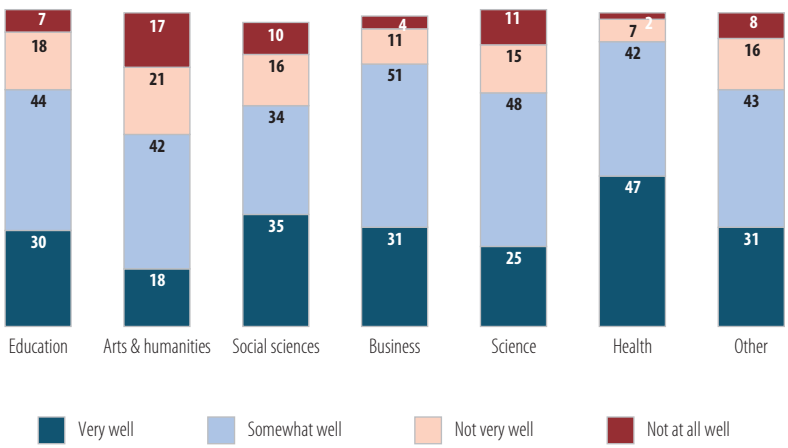
Given this, it's perhaps not surprising that college and university graduates have a positive view of the value of their education. Three in four (75%) post-secondary graduates say that their college or university program of study prepared them very (31%) or somewhat (44%) well for the jobs that they have worked in after graduation. Only 22 percent say they were either not very well (15%) or not at all (8%) prepared for the job market.

Those who completed only a college diploma (78%) are slightly more likely than university graduates (73%) to say their program prepared them very or somewhat well for employment. Male (76%) and female (75%) graduates are equally likely to feel their programs prepared them well. There is no significant difference between the views of racialized graduates (73%) and those who identify as white (76%).

CHART 16

How well did PSE prepare you for labour market?

Total college/university, by field of study



Q.29
Thinking about the last diploma or degree that you obtained, how well did your program of study prepare you for the jobs that you have worked in after graduation?

[22] Note that this is based on the weighted sample, and education was one of the weighting factors.

Majorities of graduates in all major fields of study say that their programs prepared them well for the jobs that they have worked in after graduation. This view is more pronounced among graduates from health and related programs (89%, including 47% who say they were very well-prepared), and business, management and public administration programs (82%, including 31% who say they were very well-prepared). This perception is less pronounced among graduates from social science programs (69%, including 35% who say they were very well-prepared), and from humanities and arts programs (60%, including 18% who say they were very well-prepared).

Female graduates from health and related programs are especially likely to say their post-secondary programs prepared them well for the jobs they held after graduation (90%, including 51% who say they were very well-prepared), while male graduates from humanities and arts programs are among those least likely to hold this view (55%, including 16% who say they were very well-prepared).

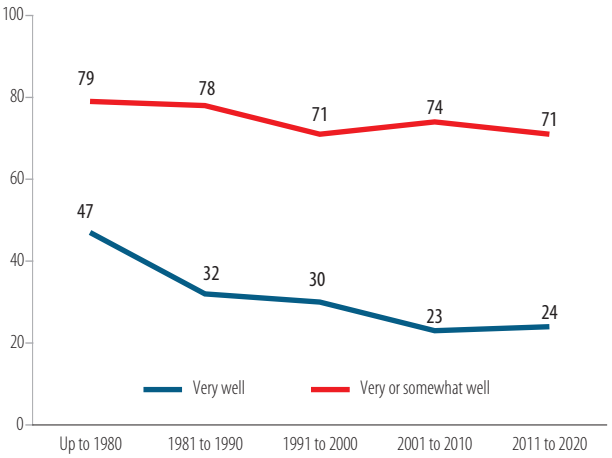
While the proportion of college and university graduates saying they were *either very or somewhat well-prepared* for their jobs has held relatively steady over time, the proportion saying they were *very* well-prepared has declined: from 45 percent for those graduating in or before 1980, to 27 percent for those graduating in or after 2011. The drop is somewhat more pronounced among university graduates (from 47% to 24%). It is also more pronounced for male graduates (from 52% to 25%) than female graduates (from 38% to 29%).

Those who said their they were not very or not at all prepared for the job market were asked in what ways their program did not prepare them (this was an open-ended question). The most commonly cited reasons relate to the program not aligning with their career path (21%), or a lack of jobs or opportunities in their chosen field (17%). The next most likely group of reasons relates to a lack of hands-on experience or the program being too classroom-based (15%), or the program being too academic or theoretical (12%). Only six percent cite the poor quality of their program or of the teaching they received.

CHART 17

How well did university prepare you for labour market?

By graduation year (university)

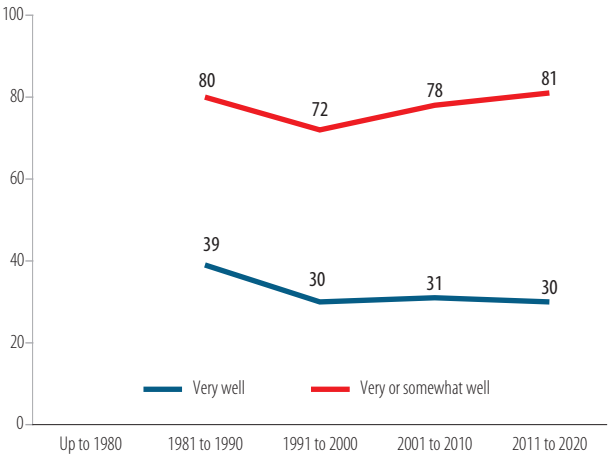


Q.29
Thinking about the last diploma or degree that you obtained, how well did your program of study prepare you for the jobs that you have worked in after graduation?

CHART 18

How well did college prepare you for labour market?

By graduation year (college)



Q.29
Thinking about the last diploma or degree that you obtained, how well did your program of study prepare you for the jobs that you have worked in after graduation?

Compared to university graduates, college graduates are less likely to cite reasons related to lack of hands-on or practical learning, but are slightly more likely to cite reasons related to poor quality of the program (see Table 5).

Finally, there is a relationship between graduates' assessment of how well their program of study prepared them for the job market, and various measures related to employment outcomes. For instance, compared to those who say they were not well-prepared, those who say they were well-prepared are more likely to be employed full-time, less likely to have been unemployed in the past year, less worried about job security, more likely to be satisfied with their incomes, and more likely to be satisfied with their jobs. However, the survey cannot say definitely that better PSE programs *caused* these outcomes; it's possible that better outcomes prompt graduates to retrospectively view their programs more positively. And both the assessment of programs and labour market outcomes could themselves be related to other factors, including field of study and year of completion.

TABLE 5

Reasons why college or university program did not prepare graduates for jobs

	Total (n=489)	College graduates* (n=149)	University graduates (n=338)
Program was in a different field from the one I ended up working in	21	16	25
Not many jobs in my field/very few opportunities	17	24	13
No hands-on experience in school/too classroom-based	15	9	18
Program was too academic or theoretical/not practical/not connected to "real world"	12	7	16
No help from the college/university to find a job/no co-op program	6	7	6
Poor quality of program/bad teachers or professors	6	11	2
Teaching was based on outdated knowledge	5	9	3
What I learned was not related to what I do at work	5	6	4
My program was too broad/general	3	1	4
I chose the wrong program/not the right field for me	2	2	1
Did not teach anything I could use to get a job	2	1	2

* "College graduates" refers to those who received a college diploma, but not a university degree. Some university graduates may also have received a college diploma.

Q.30
In what ways did your program not prepare you that well?
Subsample: Those who said that they were not very or not at all prepared for their jobs

Education, training and unemployment

A majority of Canadians say the lack of the required education or training for unemployed workers is currently an important cause of unemployment in Canada. However, the proportion holding this view has not changed significantly over time.

As mentioned previously, the 2020 Survey on Employment and Skills asked about why some Canadians are worried about themselves or a member of their family finding or keeping a stable, full-time job. The most common responses relate to the general conditions of the labour market or the economy. Very few (4%) mention a reason related to the lack of enough education or right kinds of skills, or a lack of access to skills training. The figure is somewhat higher among those who are currently unemployed (10%). While the proportions of men and women that mention this reason are small, women (6%) are more likely to mention it than men (2%).

At the same time, Canadians were asked directly whether the lack of the required education or training for unemployed workers is currently an important cause of unemployment in Canada. In this case, a majority (73%) say that it's either a very (26%) or a somewhat (47%) important cause. In fact, the lack of the required education or training for unemployed workers is more likely to be seen as an important cause of unemployment in Canada than any of the other six potential causes mentioned in the survey.

Among those currently unemployed, the lack of the required education or training for unemployed workers (70%) is seen as the second most important cause of unemployment (among the seven potential causes mentioned in the survey), after not enough government spending on job creation (74%).

More generally, the sense that a lack of education or training is an important cause of unemployment is broadly shared among Canadians, regardless of their own experience either in education or in the labour market. It does not vary significantly, for instance, between those who did or did not attain a post-secondary education, or between those who do or do not think that their post-secondary education prepared them well for the labour market. It also does not vary significantly between those who are more or less concerned about job security, or who have or have not recently experienced a period of unemployment. It varies only slightly between those who have or have not participated in employer-provided skills training in the past five years.

It is also notable that the perception that a lack of education or training is an important cause of unemployment does not appear to have grown over time. When this question was asked previously in a Focus Canada survey in 1985, a similar proportion (78%) said that the lack of the required education or training for unemployed workers is currently an important cause of unemployment in Canada.

Taken together, these results suggest that, while many Canadians believe it's reasonable to assume that those facing unemployment might benefit from more education or skills training, far fewer relate their concerns with their own job security or personal experiences with unemployment to a lack of education or skills training for themselves.

Experiences with skills training

In the past five years, one in two Canadians in the labour force participated in a work-related training course to improve their skills that was provided by their employer. Skills training opportunities are generally less likely to be accessed by those workers who may need or benefit from them the most, such as those who are less securely employed or unemployed.

The 2020 Survey on Employment and Skills asked Canadians who are in the labour force about their experiences with training to improve their skills.

The most common form of training among adults for those already in the labour force is that provided by an employer. In the past five years, one in two (51%) Canadians in the labour force participated in a work-related training course to improve their skills that was provided by their employer. Less common are training courses *not* provided by an employer, but that are taking while working (30%); training courses that are taken when taking time off from work (21%); and training courses that are taken while unemployed (20%).

Those who are employed full-time (57%) are the most likely to have participated in an employer-provided training course, while those who are self-employed are the least likely to have done so (20%). Those employed part-time (27%) are somewhat more likely than average to participate in training courses when taking time off from work. Naturally, those who are unemployed (29%) are more likely to participate in training courses while unemployed, but notably, only about three in ten of those currently unemployed have done so.

TABLE 6
Participation in skills training

	Total	Employed full-time	Employed part-time	Self-employed	Unemployed
A training course that was provided by your employer	51	57	54	20	36
A training course that was *not* provided by your employer, but that you took while you were working	30	32	30	26	19
A training course that you took when you took time off from work	21	21	27	18	14
A training course that you took while you were unemployed	20	19	24	17	29

Q.35
In the past five years, have you participated in any of the following forms of work-related training to improve your skills?

Other notable variations in responses include the following:

- Residents of the Territories (76%),[23] Newfoundland and Labrador (69%), Saskatchewan (65%) and Nova Scotia (60%) are more likely than average to have participated in a skills training course provided by their employer in the past five years.
- Compared to their older counterparts, younger Canadians are more likely to have participated in each of the four types of training.
- Union members (65%) and more likely to have participated in a skills training course provided by their employer in the past five years than non-members (48%).
- Those working in professional, executive or managerial positions are more likely to than average to have participated in skills training courses provided by their employer (58%), as well as in courses not provided by their employer, but taken while working (40%).
- Those with a university education (38%) are more likely than average to have taken a skills training course not provided by their employer, but taken while working.
- Immigrants (29%) and recent immigrants (29%) are more likely than average to have taken a skills training course while taking time off work. Recent immigrants (31%) are more likely than average to have taken a skills training course while unemployed.
- Those who are racialized are more likely than those who identify as white to have participated in a skills training course not provided by their employer but taken while working (38% for racialized workers vs. 27% for non-racialized), while taking time off work (33% vs. 18%), and while unemployed (28% vs. 18%).
- Gender is not a significant factor, as men and women are equally likely to have participated in most forms of training, with one partial exception: men (24%) are slightly more likely than women (19%) to have taken a skills training course while taking time off work.

Taking all of these into account, the following patterns emerge. In the case of courses taken while working (whether employer-provided or not), those more securely employed have greater access, including: full-time workers; professionals, executives and managers; and those with a university education. Training courses taken either while taking time off from work or while unemployed are, not surprisingly, accessed more frequently by those less regularly employed, such as part-time or unemployed workers, or recent immigrants. Nevertheless, these forms of training are accessed by only a minority of these types of workers (typically, fewer than one in three). And access to all forms of training also declines with age. These patterns suggest that skills training opportunities are generally less likely to be accessed by those workers who may need or benefit from them the most, such as those who are less securely employed or unemployed.

It is also notable that those cases where both immigrants and racialized workers are *more likely* than average to participate – such as skills training course taken while taking time off work – are those that are less likely to be paid for or subsidized by their employer.[24] In other words, in cases where these workers are more likely to participate, it's also more likely to be at their own cost.

At the same time, it's worth emphasizing that those who do access skills training courses have a very positive view of their value. Nine in ten (90%) of those who participated in a skills training course provided by their employer in the past five years say that it was very (46%) or somewhat (43%) useful in helping them develop the skills they needed to succeed at work. A similar proportion say the same of a training course *not* provided by their employer, but that they took while they were working. In the case of the two other types of courses mentioned, just over four in five felt they were useful.

While majorities of those from all backgrounds found their skills training courses to be useful in helping them to succeed at work, there are some notable variations in responses.

[23] Figures for the Territories, when reported separately, are unweighted.

[24] This is a reasonable assumption, but it should be noted that the survey question did not specify or ask about who paid for the cost of training.

In the case of skills training course provided by employers:

- While workers from Newfoundland and Labrador[25] were *more likely* than average to have participated in a skills training course provided by their employer, they are *less likely* to have found them useful: 23 percent of participants in that province say the course was not very or not at all useful (more than twice the national average).
- While older workers were *less likely* than average to have participated in a skills training course provided by their employer, they are *more likely* to have found them to be *very* useful: 57 percent of those age 55 and older found their course very useful, compared to 41 percent of those between the ages of 25 and 54.
- Almost all (96%) recent immigrants[26] who participated in a skills training course provided by their employer say they found it very or somewhat useful.
- Union members, who are more likely than non-members to have participated in a skills training course provided by their employer, are also somewhat more likely to have found it to be *very* useful (52%, compared to 45% for non-members).

In the case of a training course taken while taking time off from work or while unemployed, a different pattern emerges: while majorities of all types of workers find them useful, those who are more likely to participate in them or who potentially have more to benefit from additional training – namely part-time workers and unemployed workers – are slightly *less likely* to see them as useful. In the case of courses taken while taking time off from work, 74 percent of part-time workers, compared to 88 percent of those working full-time, found them very or somewhat useful in helping them develop the skills they needed to succeed at work; while 22 percent of part-time workers, compared to 11 percent of those working full-time, found them to be not very or not at all useful.[27] In the case of a training course taken while unemployed, 64 percent of those currently unemployed found them to be very or somewhat useful, and 27 percent found them to be not very or not at all useful.[28]

TABLE 7
Value of skills training

	Very/somewhat useful	**Very ueful**	**Somewhat useful**	**Not very/not at all useful**
A training course that was provided by your employer	*90*	46	43	10
A training course that was *not* provided by your employer, but that you took while you were working	*89*	44	44	11
A training course that you took when you took time off from work	*82*	44	38	15
A training course that you took while you were unemployed	*84*	48	37	12

Q.36
How useful was this course in terms of helping you develop the skills you needed to succeed at work?
Subsample: Those who participated

[25] As this question was only asked of those who participated, the unweighted sample size for this province is 107.

[26] As this question was only asked of those who participated, the unweighted sample size for this group is 106.

[27] As this question was only asked of those who participated, the unweighted sample size for part-time workers is 156.

[28] This result should be treated with caution, as the unweighted sample size for unemployed workers who participated in this form of training is 92.

Learning new skills

The most popular way for Canadians in the labour force to learn new work-related skills is by learning from co-workers on the job. This speaks to the importance of taking into account the opportunity cost of different forms of skills training.

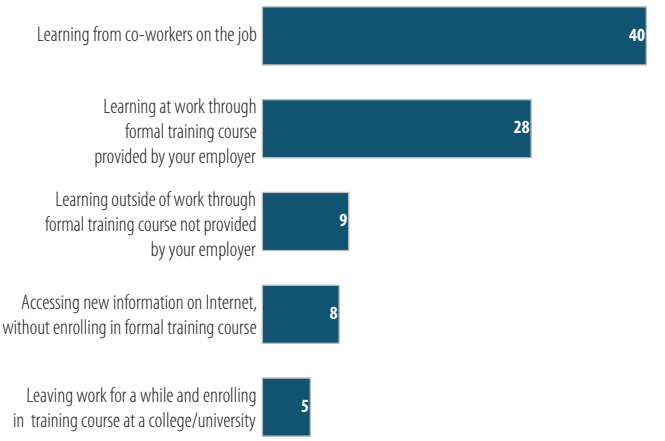
While most Canadians who participate in skills training courses find them valuable, it's also the case that only a minority say that enrollment in such courses is their preferred way to learn new work-related skills. The most popular way for Canadians in the labour force to learn new work-related skills is by learning from co-workers on the job (40%). Almost as many (37%) prefer a formal training course, whether it's provided by their employer (28%) or taken outside of work (9%). About one in ten (8%) prefer to learn new work-related skills simply by accessing new information on the Internet; and five percent prefer the option of leaving work for a while and enrolling in the training course at a college or university.

Preferences for different types of training do not differ much among different groups within the labour force – with some exceptions.

- Those who are self-employed are naturally less likely to favour learning new skills from co-workers on the job (28%) or through formal employer-provided training courses (23%), and more likely to opt for self-directed learning by accessing new information on the Internet (16%).
- Immigrants (35%), and especially recent immigrants (41%), are more likely than average to favour learning new skills through formal employer-provided training courses.
- Not surprisingly, those who have participated in an employer-provided skills training course in the past five years and who found it useful are twice as likely (35%) to favour this way of learning new skills than are those who participated and found it not useful (17%) – although both groups are still more likely to prefer to learn new skills from co-workers on the job.

CHART 19

Best way to learn new work-related skills



Q.37
In your opinion, what is the best way for you personally to learn new work-related skills?

Subsample: Those in the labour force

Overall, the responses to this question speak to the importance of taking into account not just the direct cost of different forms of skills training (such as course fees), but the opportunity cost as well. An opportunity cost is the cost of what is given up in order to gain something else; in the case of skills training, the opportunity cost could be the cost of losing income by leaving work to enroll in a training course. That a plurality favours learning new skills from co-workers on the job can be explained both by the fact that this entails no direct costs, unlike training courses or post-secondary programs, and by the fact that this does not take time away from paid work. The fact that so few say the best way to learn new skills is by leaving work for a while and enrolling in the training course at a college or university is also likely a reflection of the difficulty of forgoing paid employment in order to re-enroll in a formal education program. It is therefore not necessarily a reflection of a negative view of the value of college or university programs – indeed, as seen previously, most graduates see their programs as valuable.

That said, it's also possible that many Canadians continue to see post-secondary institutions more as the end-point of the formal education that takes place prior to entry into the labour force, rather than an option for ongoing skills training and support once they have embarked on their careers. This is illustrated by asking about which types of institutions Canadians would turn to for assistance in finding employment should they lose their job.

Only one in three (34%) Canadians,[29] for instance, are very (10%) or somewhat (24%) confident that their local college or university would be able to help them to find a new job, should they find out they were about to become unemployed. This figure is lower among those currently unemployed (23%), but higher among those who are currently students (51%).

TABLE 8

Sources of support in finding a new job

	Very/somewhat confident	**Very confident**	**Somewhat confident**	**Not very/not at all confident**
A government employment centre in your community	*51*	15	36	41
Your current employer	*38*	13	25	49
Your local college or university	*34*	10	24	51
A charitable organization in your community	*33*	9	24	50

Q.39
If you found out that you were about to lose your job, how much confidence do you have that the following people or agencies would be able to help you find a new one?
Subsample: Excluding those who are retired.

[29] This question was not asked to those who are retired.

Training grants

Two in five Canadians think it's likely that they would receive a grant from the government to help pay for training so they can improve their work-related skills. Canadians at the earlier stages of their careers are more likely to hold this view than are older workers.

Governments can encourage greater participation in skills training through grants or tax credits that subsidize the direct cost of training courses and offset the loss of income stemming from time away from work.[30] Take-up of these incentives, however, depends at least in part on workers being aware that they are available.

The survey shows that two in five (42%) Canadians[31] think it's very (15%) or somewhat (27%) likely that they would receive a grant from the government to help pay for training so they can improve their work-related skills, while a slightly higher proportion (46%) thinks it's somewhat (22%) or very (24%) unlikely. Men (45%) are more likely than women (38%) to say it's very or somewhat likely that they would receive such a grant; Canadians at the earlier stages of their careers are also more likely to hold this view compared to older workers (the figures are 49% for those between the ages of 25 and 34, compared to 27% for those age 55 and older). Those employed full-time (46%) are more likely to think they would be eligible for such a grant than those who are self-employed (25%) or unemployed (36%). Immigrants (51%), especially recent immigrants (57%), are more likely to think they would be eligible than are non-immigrants (39%).

Interestingly, expectations of receiving a government grant to help pay for training to improve work-related skills is related to preferences about how to learn new skills. Forty-four percent of those who say it's likely that they would receive such a grant say that they prefer to learn new skills through a formal training course, whether provided by their employer or taken outside of work. This compares to 33 percent of those who do not think it's likely they would receive a grant. These results suggest that it's possible that addressing the opportunity cost issue could help to encourage more participation in skills training.[32]

[30] This is the rationale for programs such as the Canada Job Grant and the Canada Training Benefit, the latter being a new federal program announced in 2019 designed to promote skills upgrading among employed Canadians through a combination of tax credits, income support during training and protected leave from work. See https://www.canada.ca/en/employment-social-development/news/2019/05/backgrounder-canada-training-benefit.html.

[31] This question was not asked to those who are retired.

[32] The survey, however, cannot say whether the expectation of receiving a grant *causes* a greater preference for formal skills training, only that there is a relationship between the two views.

Conclusion

The 2020 Survey on Employment and Skills provides a more complete picture of Canadians' attitudes and experiences as they relate to a more technologically intensive society and a rapidly changing world of work. The results provide grounds for concluding that Canadian workers, on the whole, are looking to the future with some confidence: for instance, most tend to have a positive assessment of the impact of technological change, and those who have accessed post-secondary education or skills training tend to feel these experiences have prepared them for success at work. Despite this, many are concerned about job security for themselves or their family, and have either recently experienced unemployment or know someone close to them who has. Experiences of less secure employment and of unemployment are higher among some groups, including immigrants and racialized Canadians.

The survey also highlights the challenge of ensuring that those most in need can access available support. For instance, skills training courses taken while working are more likely to be accessed by those who are more securely employed, including full-time workers; professionals, executives and managers; and those with a university education. While training courses provided outside of work are accessed more frequently by those less regularly employed, such as part-time or unemployed workers, or recent immigrants, they typically only reach about three in ten of these types of workers. And the survey shows that only two in five Canadians think it's likely that they would receive a grant from the government to help pay for training so they can improve their work-related skills; a slightly higher proportion thinks it's unlikely.

These results reflect the situation prior to the full onset of the COVID-19 pandemic in Canada. In the months that followed, the employment situation worsened dramatically. The need to adapt to new challenges – ranging from working on the health and social services frontlines, to juggling work-from-home and family responsibilities in the absence of schools and child care, to experiencing loss of work hours or unemployment – will test the resiliency of the Canadian workforce. Regardless of how long the pandemic endures and how quickly workplaces reopen, the impact on how Canadians view the world of work and the importance of training may endure and should be closely monitored.

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