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Education-Job Match among University Graduates in Quebec: A Favourable Record, Persistent Inequalities

BRAHIM BOUDARBAT
Full Professor at the School of Industrial Relations,
Université de Montréal;
CIRANO Researcher and Fellow

FRANÇOIS VAILLANCOURT
Professor Emeritus in the Department of Economics,
Université de Montréal;
CIRANO Researcher and Fellow

Quebec invests heavily in its universities, and the evidence suggests that this investment is paying off. Compared with graduates in other Canadian provinces, university graduates in Quebec are more likely to hold jobs that match their educational qualifications, report greater job satisfaction and say they would make the same educational choices again. However, a CIRANO study (Boudarbat and Vaillancourt, 2026) shows that this generally favourable picture masks significant disparities. Immigrants, particularly those who belong to a visible minority, as well as persons living with a disability, remain far less likely than the majority population to hold a skilled job, even when they possess the same degree.

In Quebec, a growing share of the population is pursuing university studies. In 2021, 29.5% of people aged 25 to 64 held a bachelor's degree or higher, an increase of 17 percentage points from 1991 (Statistics Canada, 1993; 2022). Among people in the same age group who are part of the labour force, the share of university degree holders is even higher and rising sharply — from 15% in 1990 to 37% in 2025 in Quebec (Statistics Canada, 2026a).

In this context, the match between education and employment is a central issue for public policy, particularly with regard to maximizing the social return on investment in education. At the individual level, a mismatch between education and employment is generally associated with a wage penalty, lower job satisfaction and weaker job attachment. At the macroeconomic level, it can result in an inefficient allocation of human resources and an underutilization of the available human capital.

This situation must also be analyzed in a context of ongoing calls from the private sector to increase immigration targets for skilled workers. Before agreeing to increase these targets, it is important to assess the extent to which the skills and qualifications of people already in Quebec are being fully put to use.

Quebec fares well among Canadian provinces

We carried out a series of analyses using microdata from the Labour Force Survey (LFS) for covering the period 2006–2024 period, as well as from the National Graduates Survey (NGS), conducted in 2023 on the 2020 cohort. A skilled job is defined as a job that usually requires a university degree. We examined several indicators to compare how Quebec's university system performs in matching education to jobs with those of the other Canadian provinces.

As shown in the first table on the following page, Quebec had the highest proportion of university graduates working in a job that matches their level of education in 2024 (66.4%). This proportion exceeds the Canadian average (61.5%) by 5 percentage points and Ontario's (61.9%) by 4.5 points.

When we limit the analysis to Canadian-trained university graduates who earned their degrees in 2020, Quebec stands out even more. In 2023, 73.8% of these graduates held a skilled job in Quebec — nearly three graduates of four — compared with 64.1% in Ontario and 66.6% across Canada.

Our data also make it possible to assess the job-education match using a subjective measure, based on graduates' own perceptions of how well their qualifications align with the requirements of their jobs. Here again, Quebec stands out: It has the highest proportion of university graduates in Canada who consider themselves adequately qualified for their jobs. Among graduates from the 2020 cohort, this proportion reached 78.5% in Quebec in 2023, compared with 76.4% in Ontario and 77.1% for Canada as a whole. Thus, relatively few graduates in Quebec consider themselves overqualified for their job than elsewhere in Canada.

Job satisfaction is another indicator of employment quality. In 2023, 86.7% of university graduates from the 2020 cohort in Quebec reported being satisfied or very satisfied with their jobs, compared with 80.6% in Ontario and 82.3% across Canada. This relatively high level of satisfaction suggests that the Quebec labour market meets the expectations of the vast majority of graduates by providing working conditions they perceive as favourable.

Quebec also stands out for its higher proportion of graduates who would make the same choice

In Quebec, 77.2% of university graduates indicated that they would choose the same field of study again, compared with 68.2% in Ontario and 71.6% across Canada. These results could indicate that Quebec's university system better meets graduates' expectations, or that students there receive more sustained support in their choice of studies, notably through more effective guidance services. However, other institutional and individual factors may also contribute to these differences. For example, Quebec's CEGEP system may play an important role by allowing students to explore different fields of interest before entering university, potentially helping them make more informed educational choices.

Indicators	Quebec	Ontario	Canada
Skilled job in 2024, all university graduates (LFS)	66.4%	61.9%	61.5%
Skilled job in 2023, 2020 graduates trained in Canada (NGS)	73.8%	64.1%	66.6%
Graduates who consider themselves adequately qualified for their job (NGS)	78.5%	76.4%	77.1%
Job closely related to the program of study (NGS)	66.9%	56.0%	60.4%
Graduates satisfied or very satisfied with their job (NGS)	86.7%	80.6%	82.3%
Graduates who would make the same choice of field of study (NGS)	77.2%	68.2%	71.6%

Education-job match indicators, Quebec, Ontario and Canada

Source : Authors' calculations based on microdata from the 2020 National Graduates Survey, conducted in 2023, and microdata files from the Labour Force Survey, 2006 to 2024

Provinces (ref. = Quebec)	Adjusted gap
Newfoundland and Labrador	–2.5 points
Prince Edward Island	–5.1 points
Nova Scotia	–7.2 points
New Brunswick	–4.0 points
Ontario	–3.2 points
Manitoba	–6.5 points
Saskatchewan	–5.2 points
Alberta	–4.1 points
British Columbia	–3.9 points

Results of the estimation of the probability that a university graduate holds a skilled job, ordered probit model

Source: Authors' estimates based on microdata files from the Labour Force Survey, 2006 and 2024

Quebec's performance as revealed by the descriptive analyses is confirmed by the multivariate analyses

All else being equal, Quebec is the province where the probability that a university graduate holds a skilled job is the highest in Canada, both for all graduates (LFS) and for recent graduates (NGS). In other words, even after controlling for several characteristics of graduates, their programs of study and their jobs, Quebec remains the province where the probability of holding a skilled job is the highest in Canada.

Compared with Quebec, the probability of holding a skilled job is 3.2 percentage points lower in Ontario, 7.2 points lower in Nova Scotia, and 6.5 points lower in Manitoba, after accounting for these characteristics. The improvement in Quebec's labour market over the past two decades has likely contributed to this performance: Quebec's unemployment rate, which had been 1.9 percentage points higher than Ontario's in 2006 rallied over the next two decades, with a 2025 rate 2.1 points below that of its neighbouring province.

Data and methods

Our analyses rely on two data sources. The Labour Force Survey (LFS), conducted monthly by Statistics Canada among approximately 65,000 households, makes it possible to track changes in the skill level of the jobs held by all university graduates. The LFS began collecting data on immigrant status in 2006.

The second database is the National Graduates Survey (NGS), conducted in 2023 and drawing on the 2020 cohort. The NGS provides more detailed information on recent graduates, including their field of study, whether they completed an internship, their job satisfaction and their own assessment of the match between their education and their job.

The skill level of a job is measured using the TEER variable (training, education, experience and responsibilities) of the 2021 National Occupational Classification (NOC). A university graduate is considered adequately qualified when their occupation falls into category 0 (management occupations) or 1 (occupations usually requiring a university degree). When the occupation falls into a TEER category higher than 1, the graduate is considered overqualified.

We carried out a series of descriptive and multivariate analyses. Our multivariate analyses (ordered probit models) estimate *adjusted* gaps, that is, the gaps that would be observed if the groups being compared (for example, immigrants and the Canadian-born, or graduates in Quebec and those in Ontario) had similar characteristics (age, gender, level of degree, industry, etc.). These gaps make it possible to verify whether differences persist once these factors are controlled for.

Degree level, field of study and internship: important determinants

Field of study is one of the most important determinants of education-job match. Compared with graduates in education and teaching, the probability of holding a skilled job is significantly higher among graduates in medicine, nursing, pharmacy, mathematics, computer science and law, all other factors being equal. Graduates in public administration have, by far, the lowest probability. Descriptively, in the field of "arts and humanities," in 2023, only 61% of 2020-cohort graduates managed to obtain a job matching their level of education, compared with 73.8% for the entire 2020 cohort in Quebec.

Two other determinants emerge from our analyses. One of them is the pursuing of studies beyond a bachelor's degree. In Quebec, master's graduates have a probability of holding a skilled job that is 18.1 percentage points higher than those with a bachelor's degree, all other factors being equal. PhD graduates have a probability of holding a skilled job that is 14.5 percentage points higher than those with a bachelor's degree. The other determinant is the completion of an internship as part of the program of study. This significantly increases this probability (+7.7 points in Quebec and +6.5 points in Canada). These findings suggest that programs incorporating internships may better prepare graduates for the transition into the labour market.

Job and employer characteristics also play a role. Jobs in the education sector are those that offer the best fit with studies. At the other end of the spectrum, retail trade, transportation and warehousing, real estate and rental and leasing, and accommodation and food services show the lowest probabilities for graduates to hold a skilled job. These sectors nevertheless offer employment opportunities to university graduates, even though the jobs on offer do not always match their level of education. It is interesting to note that the probability of holding a skilled job rises with employer size: in Quebec, it is 8.4 points lower when the employer has fewer than 20 employees than when the employer has more than 500 employees.

Persistent inequalities in access to skilled employment

While the overall record of education-job match in Quebec appears favourable, it masks the significant disparities experienced by immigrants, members of a visible minority group and those with a disability — disparities that persist even when the other characteristics of graduates are controlled for.

Among all university graduates (LFS), immigrants are less likely than Canadian-born graduates to hold skilled jobs, all else being equal. This disadvantage is approximately twice as large for immigrants from non-Western countries (–22.2 points) as for those from other countries (–11.3 points). A similar pattern is observed across Canada, although the gaps are somewhat smaller than in Quebec.

Obtaining a Canadian degree is an important pathway to better employment opportunities for immigrants, particularly for those who face difficulties having their foreign credentials recognized. Indeed, earning a university degree in Canada significantly increases an immigrant's chances of holding a skilled job (+12.7 points in Quebec and +14.8 points in Canada).

Among recent university graduates (NGS, 2020 cohort), no statistically significant difference is observed between Canadian-born members of a visible minority, on the one hand, and Canadian-born persons who are not members of a visible minority (the reference group), on the other. Nor is there any statistically significant difference between immigrants who do not belong to a visible minority and the reference group. By contrast, immigrants and temporary residents who do belong to a visible minority have a lower probability of holding a skilled job.

These results suggest that belonging to a visible minority is a disadvantage in the Quebec labour market, including for individuals who earned their degree in Quebec or elsewhere in Canada.

The situation of temporary residents who are members of a visible minority — whose estimated disadvantage is about three times greater than that of immigrants who are members of a visible minority — is of particular interest for selection policies favouring candidates trained in Quebec. It indicates that earning a Quebec degree does not guarantee, for some groups, full professional integration. This result must nevertheless be interpreted with caution, given the relatively small number of respondents with temporary resident status and possible selection bias.

Finally, in Quebec, university graduates living with a disability have a lower probability of holding a skilled job than other graduates, all other factors being equal. This result highlights the existence of structural barriers likely to impede their labour market integration.

Groups	Adjusted gap – Quebec	Adjusted gap – Canada
Immigrant, Western country (all graduates, LFS) (ref. = Canadian-born)	–11.3 points	–10.3 points
Immigrant, non-Western country (all graduates, LFS) (ref. = Canadian-born)	–22.2 points	–19.3 points
University degree earned in Canada (immigrants, LFS) (ref. = university degree earned abroad)	+12.7 points	+14.8 points
Immigrant who is a member of a visible minority (2020 graduates, NGS) (ref. = Canadian-born non-member of a visible minority)	–9.9 points	not significant
Temporary resident who is a member of a visible minority (2020 graduates, NGS) (ref. = Canadian-born non-member of a visible minority)	–26.9 points	–8.8 points
Graduate living with a disability (2020 graduates, NGS) (ref. = graduate without a disability)	–5.0 points	not significant

Results of the estimation of the probability that a university graduate holds a skilled job, ordered probit model

Source : Authors' estimates based on microdata from the 2020 National Graduates Survey, conducted in 2023, and microdata files from the Labour Force Survey, 2006 to 2024.

Continuing to invest, reducing inequalities

With the share of jobs requiring university studies rising from 26.8% in 2006 to 31.8% in 2024 (nearly one job in three), it is important for Quebec to continue investing in university education.

Although Quebec leads Canadian provinces in education-job match and graduates' satisfaction with their jobs and fields of study, this generally favourable picture masks significant disparities.

Many immigrants, particularly those from non-Western countries or holding a degree earned abroad, as well as members of visible minorities and persons living with disabilities, remain less likely to hold jobs that match their educational qualifications. Educational institutions, employers and governments all have important roles to play in addressing these disparities. Potential measures include expanding access to internships within university programs, strengthening career guidance and job placement services, encouraging and facilitating immigrants' investment in a Canadian degree, and promoting more inclusive recruitment and workplace management practices.

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