



Labour Market and Immigration Outcomes of Ontario International Students Outside the Public Postsecondary System

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HEQCO researchers Khadijat Babatunde and Elizabeth Agoe were international students and studied at publicly assisted institutions in Ontario.

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Over the past decade, international student enrollment increased across Ontario's postsecondary sector. These increases resulted from policies and initiatives developed from Canada's 2014 international education strategy, which focused on attracting international students to support Canada's economic and immigration goals (Government of Canada, 2014). International postsecondary students in Ontario studied at publicly assisted colleges and universities, or at private institutions. Of those who received their Ontario study permit between 2010 and 2020, 144,260 (21%) did not attend public postsecondary institutions, most opting for private colleges, universities or language schools.¹ Some reasons international students may opt for a private education over public institutions include program availability and flexibility, location and a preference for market-driven programs suitable for adults looking to make career transitions (Li & Jones, 2015; Milian & Hicks, 2014). Little is known about the outcomes of those in the private postsecondary system.

Beginning in January 2024, the federal government announced several changes to Canada's international education framework, including a cap on study permit applications (Government of Canada, 2024). Each province now receives an allocation of study permit applications and decides how to distribute them among institutions. In 2024, Ontario announced that 96% of its study permit applications would go to public colleges and universities, and the remaining 4% to language schools and private universities² (Ministry of Colleges, Universities, Research Excellence and Security [MCURES], 2024). Ontario private career colleges did not receive any permits.

As part of HEQCO's Consortium on International Education, the Social Research and Demonstration Corporation (SRDC) tracked the postsecondary pathways and outcomes of international students in Ontario who received a study permit between 2010 and 2020.³ This brief uses SRDC's findings to examine labour market and immigration

¹ This count includes students enrolled at private colleges or universities in Ontario, those who did not arrive in Canada, those in public institutions who did not report data to PSIS, and those who did not enroll in postsecondary education at all. International students who attended Public College – Private Partnerships (PCPPs) are classified as public attendees and are excluded from this count.

² Ontario's Ministry of Colleges, Universities, Research Excellence and Security (MCURES) distributed permit applications to colleges and universities according to a number of criteria, including previous international student enrollment levels and programming in high-demand fields (MCURES, 2024).

³ SRDC's findings for international students enrolled at Ontario's public colleges and universities [are available here](#).



outcomes of international students not enrolled in the public sector to inform ongoing discussions about Canada's and Ontario's international education strategies.

Enrollment Trends for Private-attending International Students in Ontario

From 2010 to 2019, the number of international students issued their first Ontario study permit more than doubled, from 48,600 in 2010 to 114,000 in 2019 (Appiah et al., 2025). Most international students in Ontario who received their study permits between 2010 and 2020 (682,530 or 79%) enrolled in a publicly assisted college or university. Data on the remaining 144,260 (21%) who pursued education outside the public postsecondary system is limited. While some insights are available through media outlets,⁴ no centralized source tracks their potential pathways.⁵

International students in the private sector could have enrolled at one of Ontario's private universities or private language schools that have Designated Learning Institution (DLI)⁶ status,⁷ or at a private career college (PCC).⁸ Most international private enrollees held study permits for PCCs.⁹ These independent institutions provide specialized, career-focused training in various fields such as trades, vocational studies, healthcare and technology.¹⁰ As of December 2023, there were 780 PCC campuses in

⁴ According to a Globe and Mail investigation, nearly 50,000 student permit holders were "no-shows" at the Canadian colleges and universities they were expected to be enrolled in during early 2024 (Woolf, 2025). However, not all these individuals abandoned their studies altogether — some may have chosen to enroll in a different institution than the one listed on their permit.

⁵ International students outside the public postsecondary system could have pursued their studies at a private institution in Ontario, may be missing entirely in institutional reporting, or may have received study permit but did not arrive in Canada at all.

⁶ A Designated Learning Institution in Canada has been approved by a provincial or territorial government to enroll international students.

⁷ Eighteen of 29 private universities in Ontario have DLI status. Thirty of 40 private language schools in Ontario have DLI status.

⁸ By law, career colleges offering vocational programs must be registered under the Ontario Career Colleges Act, 2005 and have their programs approved by the superintendent of career colleges. The term "career colleges" is used to describe these institutions in Ontario but varies by province. We use the term "Private Career Colleges" or "PCCs" throughout this report to refer to the broad group of institutions and to ensure it is clear that we are talking about the private sector.

⁹ See Appendix, Table 8 for private international permit holder information. It should be noted that many students attended language schools.

¹⁰ Career colleges are distinct from Public College-Private Partnerships (PCPPs), a model used in Ontario



Ontario (576 registered PCCs if all campuses are counted as a single entity), 291 of which held DLI status.

Research Questions and Methodology

This brief addresses the following research questions:

1. What are the labour market outcomes of international students outside the public PSE system in Ontario by study level, up to five years after receiving their initial study permit?
2. What are their transition rates to permanent residency (PR), up to eight years after receiving their initial study permit?

SRDC's analysis used Statistics Canada's Education and Labour Market Longitudinal Platform (ELMLP), a secure data integration system of anonymized records from college and university students and registered apprentices. Through linked datasets, the ELMLP enables researchers to track students' educational and career pathways over time. SRDC linked three data sources in the ELMLP: the Longitudinal Immigration Database (IMDB), the Postsecondary Student Information System (PSIS) and the T1 Family File (T1FF).

The PSIS contains public college and university enrollment records from across Canada, with most institutions providing complete information from the 2009-10 academic year onward. To explore the outcomes of international students outside Ontario's public postsecondary system, SRDC analyzed data of study permit holders who were not present in the PSIS.

The IMDB data captured every individual who was issued a study permit but did not appear in public institutions' enrollment records, including students enrolled at a private college or university in Ontario, those who did not arrive in Canada, those in public institutions who did not report data to PSIS and those who did not enroll in postsecondary education at all. It is not possible to confirm which students captured in

to expand the capacity of public colleges by partnering with a third party, usually private institutions located in the Greater Toronto Area (Colyar et al., 2024).



the IMDB studied at private institutions because private institutions do not report enrollment data to the Ontario government or consistently share data publicly. For convenience and to most clearly distinguish these learners from those in the public system, we refer to students included in this study as “private” attenders, though we acknowledge that this label is not completely accurate.

Outcome Variables

The descriptive results¹¹ of three variables were analyzed: annual tax-filing rate, annual earnings and transition rate to PR. Tax-filing rate was derived by examining international students not enrolled in Ontario’s public system who filed taxes in Canada up to five years after receiving their study permit. The average annual earnings data was compiled from students who filed taxes and reported positive earnings. Data from the IMDB allowed us to track which students became permanent residents up to eight years after they were issued their initial Ontario study permit.

Explanatory Variables

Results on post-graduate labour market and immigration outcomes were analyzed using students’ level of study associated with their initial Ontario study permit.¹² Level of study included English as a Second Language (ESL) program, college certificate, college diploma, trade or vocational programs, applied bachelor’s degree, bachelor’s degree, master’s degree, PhD or other credentials.

¹¹ Regression analyses were completed for all descriptive results to understand how the findings change when adjusted for multiple explanatory variables. Regression tables can be found in the [Appendix and SRDC’s full technical report](#) and are noted only when results differ from descriptive findings.

¹² There are no enrollment data available to confirm whether these study permit holders were in fact enrolled, much less enrolled at the study level identified on their initial study permit. In addition, any changes in study permit level are not accounted for in this study.



Findings

Tax Filing Outcomes

Observing private attenders' tax record filings was key to this analysis for two reasons: 1) to help identify the number of permit holders who were most likely living in Canada; and 2) to provide insights into students' labour market outcomes.¹³

Labor market outcomes were analyzed by using the subset of participants who held a study permit and had reported earnings on their taxes. These findings reinforced that international students enrolled at private institutions worked and contributed to the economy. Many did so shortly after receiving their study permits — that is, likely during their studies. Of those who received a study permit between 2010 and 2020, 31,220 or 22% of private attenders filed taxes one year after their study permit was issued.

Establishing a work history in Canada is important for international students who plan to seek PR in Canada. The Canadian Experience Class program (under the Canadian Express Entry System) and Provincial Nominee Program (PNP)¹⁴ directly tie applicants' labour market experiences to the chance of being selected for PR. Through the Comprehensive Ranking System (CRS), those seeking PR are assigned points based on education and work experience, with additional points assigned for Canadian education, paid work experiences in Canada and paid work experiences outside of academic programming in Canada. International students who attended PCCs in Ontario were typically ineligible for a Post-Graduation Work Permit (PGWP), even before the 2024 policy changes, and had to pursue alternative work permits to gain Canadian work experience.¹⁵

¹³ While tax data is a proxy for students' labour market participation, some international students file taxes even without an income. Multiple institutions recommend filing and claiming education deductions, as this can reduce future tax liability when students begin working through co-ops, placements or other employment. Some students also work and do not file taxes.

¹⁴ Canadian provinces or territories can nominate people to immigrate to Canada based on their skills, education and work experience.

¹⁵ International students who attended PCPPs or private universities were eligible for a PGWP.



Figure 1 below shows that international students with study permits associated with private college certificates, college diplomas, applied degrees¹⁶ and master's degree programs filed taxes at higher rates than those associated with other programs (PhD, bachelor's degree, trades credential or ESL certificate) in their first year.¹⁷ By year five, tax filing rates declined among several credential groups, except for college certificate, diploma and applied degree students. The decline in tax filing could be explained by the changing underlying population of students each year, which is affected by out migration. Increases between years one and five for college certificate and college diploma permit holders may be related to shorter program duration (which moves graduates into the labour market quickly) and students' interest in staying in Canada and seeking PR.

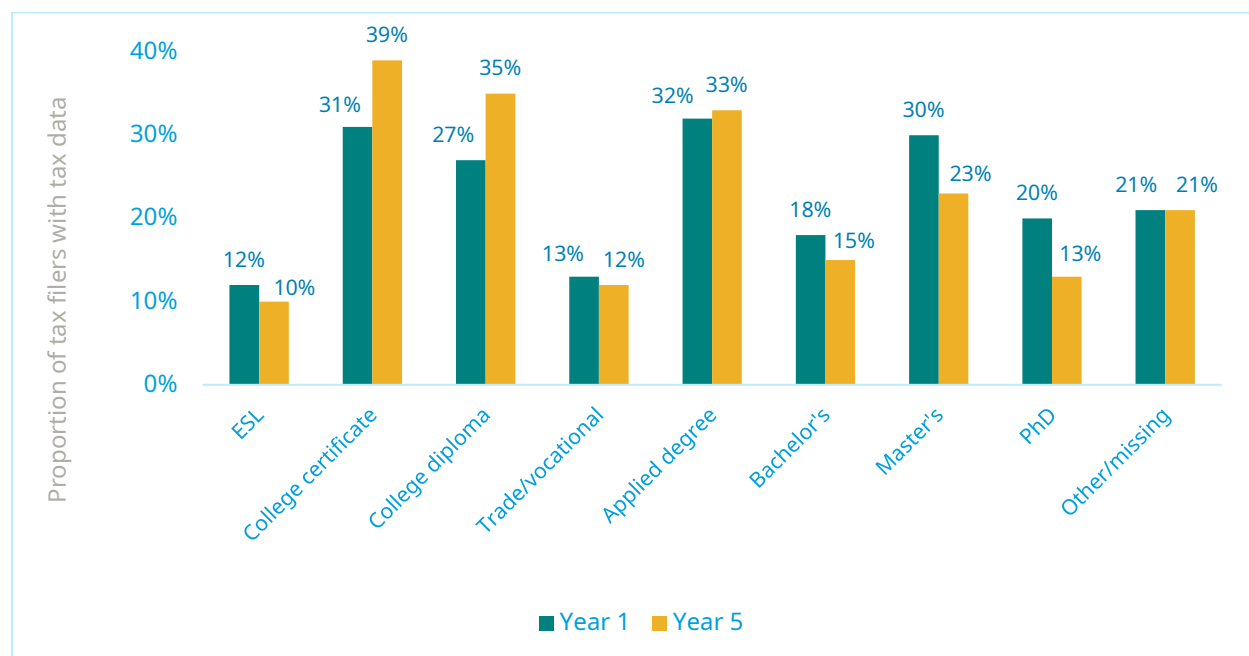
¹⁶ Applied degree in this report refers to the college-level applied degree while bachelor's refers to university-level bachelor's degree.

¹⁷ The regression analysis showed that in all years, compared to bachelor's degree permit holders, trade/vocational permit holders were significantly more likely to file taxes, and PhD permit holders were significantly less likely to do so. See Appendix Table 2.



Figure 1

Proportion of Private-Attending Study Permit Holders with Tax Data by Study Level (2010–2020 Cohorts)



Source: IMDB, T1FF.

Note: This figure shows private-attending study permit holders with tax data by study level. First-year post-graduate proportions use all 11 cohorts. For the five-year post-graduation rates, 2010-2016 cohorts are used. “Private” international enrollees are defined as individuals who were issued a study permit but did not appear in public institutions’ enrollment records, including students enrolled at a private college or university in Ontario, those who did not arrive in Canada, those in public institutions who did not report data to PSIS and those who did not enroll in postsecondary education at all.

Earnings Outcomes

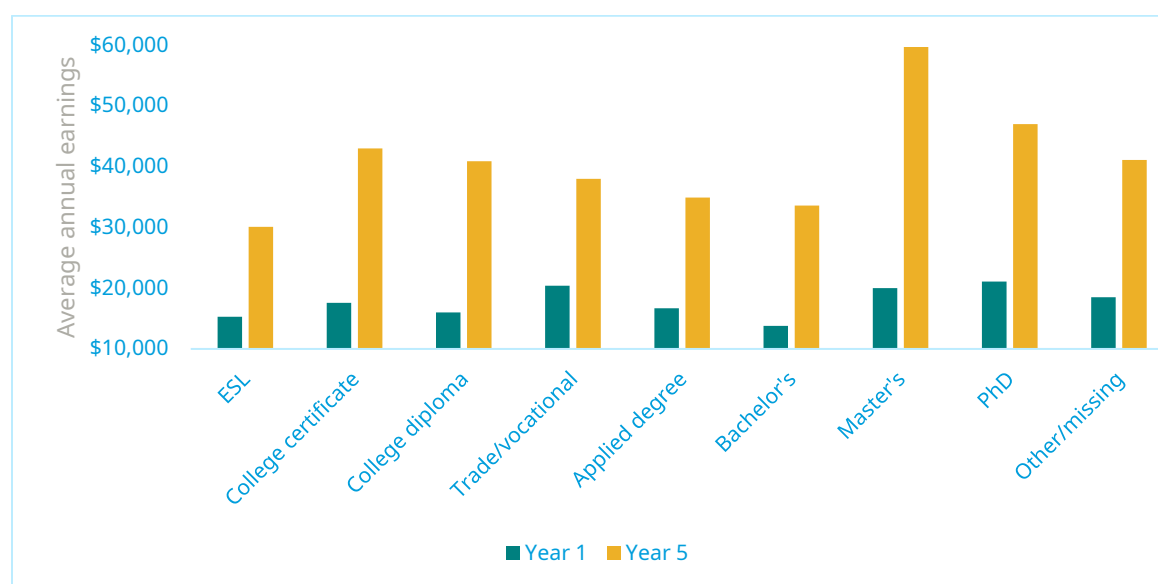
Private attenders who reported earnings in their tax filings ($n=24,380$ or 78% of filers in year one) earned an average of \$17,000 in the first year following their permit issuance, which increased to \$40,500 five years later ($n=12,300$ or 85% of filers in year five). In the first year, these students earned more than those who attended public colleges and universities (approximately \$1,500 more), but starting in year two, private attenders earned consistently less than public attenders and the difference increased to approximately \$6,000 by year five (Appiah et al., 2025). Figure 2 shows the distribution of private attenders’ earnings by study level.



Differences by study level were not substantial in year one, but by year five, master's degree and PhD permit holders had higher earnings (\$59,700 and \$47,000) compared to all other permit holders.¹⁸ These findings mirror existing literature that highlights the earnings advantage tied to advanced academic qualifications (Finnie et al., 2019; Ostrovsky & Frenette, 2014; Statistics Canada, 2021). Increases across permit levels noted in year five may be due to work experience students gain over the time period or may be associated with students completing their intended training or credentials.

Figure 2

Average Annual Earnings of Private-Attending Study Permit Holders by Study Level (2010–2020 Cohorts)



Source: IMDB, T1FF.

Note: This figure shows average annual earnings of private-attending study permit holders by study level for all cohorts from 2010 to 2020, one and five years after graduation. “Private” international enrollees are defined as individuals who were issued a study permit but did not appear in public institutions’ enrollment records, including students enrolled at a private college or university in Ontario, those who did not arrive in Canada, those in public institutions who did not report data to PSIS, and those who did not enroll in postsecondary education at all.

The lower five-year earnings reported by bachelor's degree permit holders (\$33,600) in comparison to college certificate (\$43,000) and diploma (\$40,900) permit holders may

¹⁸ In the regression analysis, only the master's degree results remained (see Appendix Table 4). This result may be linked to PhD students still being in school in year five.



be attributed to program duration.¹⁹ Five years after receiving their study permit, college certificate and diploma graduates may have already completed their programs, which are typically one or two years. More time and experience in the labour market with a completed credential may have translated to higher earnings.

Immigration Outcomes

PR attainment rates were small for all international permit holders who attended private institutions two years after issuance, especially when compared to attainment rates observed four or six years after issuance. This is expected given Canada's PR eligibility requirements. Applicants through the Canadian Experience Class need at least one year of full-time work to be eligible for PR (Government of Canada, 2025).

PR transition rates for international students attending private institutions were lower than PR rates for those in the public sector. Differences grew over time: six years after international students received a study permit, 8,400 private attenders (16%) had transitioned to PR status,²⁰ compared to 42% of public attenders (71,316).²¹ Lower PR transition rates among graduates from private institutions may reflect less interest in staying in Canada, but a key barrier is their ineligibility for a PGWP. Although international students may have chosen private institutions for their flexible, short-duration programs, those enrolled in private colleges or ESL programs were not eligible for a PGWP, making it difficult to gain the Canadian work experience needed to earn sufficient CRS points for permanent residency.

¹⁹ The earnings reported by all permit holders may have been earned during their studies or after graduation.

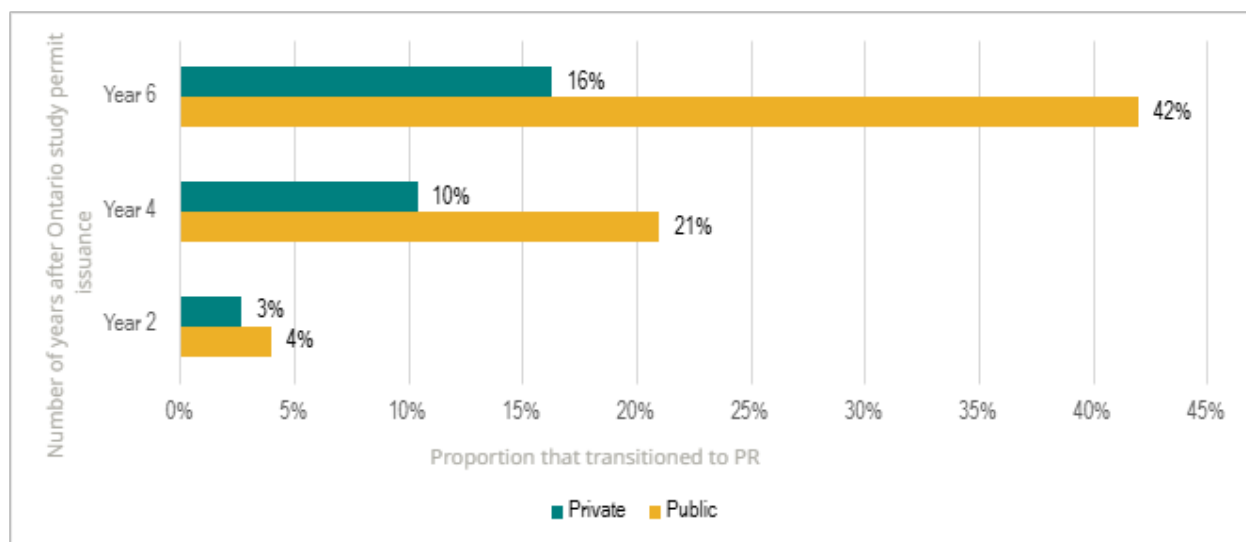
²⁰ The underlying cohorts included in each yearly analysis differ (e.g., only people who were issued a permit between 2010 and 2014 are included in the six-year outcome model). Recent cohorts do not yet have available information in the IMDB dataset. Longer-term migration outcomes will likely differ for more recent cohorts. See [SRDC's full technical report for further detail](#).

²¹ [SRDC's findings for international students enrolled at Ontario's public colleges and universities are available here.](#)



Figure 3

Proportion of Study Permit Holders Who Transitioned to PR: Private vs Public Attenders (2010–2018 Cohorts)



Source: IMDB.

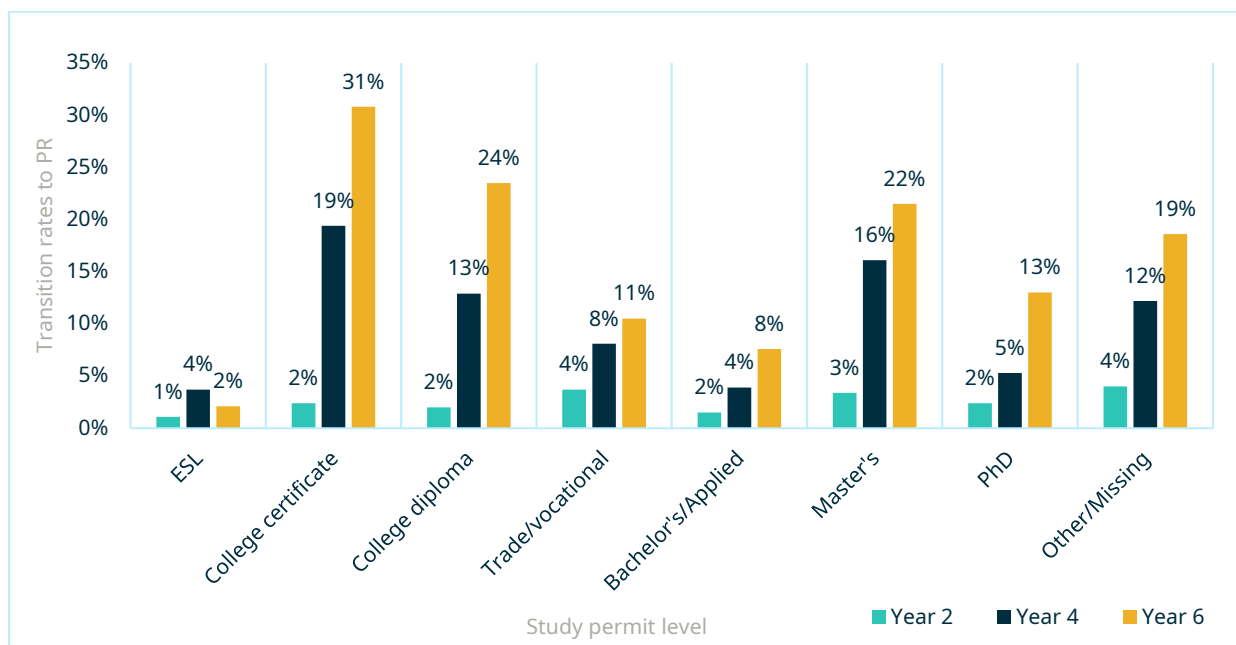
Note: This figure shows the proportion of study permit holders enrolled at public and private institutions who transitioned to permanent residency two (2010–2018 cohorts), four (2010–2016 cohorts) and six (2010–2014 cohorts) years after a study permit was issued. “Private” international enrollees are defined as individuals who were issued a study permit but did not appear in public institutions’ enrollment records, including students enrolled at a private college or university in Ontario, those who did not arrive in Canada, those in public institutions who did not report data to PSIS, and those who did not enroll in postsecondary education at all.

Figure 4 illustrates that ESL students were the least likely of private attenders to transition to PR six years after permit issuance (2%). These students may have been primarily motivated to improve their language skills before enrolling in further studies or returning to their home country. In contrast, study permit holders in college certificates, college diplomas and master’s degrees programs transitioned to permanent residence six years after their study permit was issued at higher rates (31%, 24% and 22% respectively).



Figure 4

Transition Rates to PR for Private Attenders by Study Level (2010–2018 Cohorts)



Source: IMDB.

Note: This figure shows the proportion of private attender study permit holders who transitioned to PR by study level for all cohorts from 2010 to 2018, two, four and six years after graduation. “Private” international enrollees are defined as individuals who were issued a study permit but did not appear in public institutions’ enrollment records, including students enrolled at a private college or university in Ontario, those who did not arrive in Canada, those in public institutions who did not report data to PSIS, and those who did not enroll in postsecondary education at all.

Higher rates of transition to PR for private college certificate, college diploma and master's degree study permit holders may be due, in part, to their shorter programs (which enabled faster labour market entry) or may reflect their motivations to study in Canada as an immigration pathway.

Conclusion

Prior to the 2024 federal policy changes, Ontario experienced a period of rapid growth in international student enrollment. The majority of these learners held permits to study at publicly assisted colleges and universities, but more than 20% were not enrolled in public institutions. This report offers a snapshot of their labour market and immigration outcomes.



Many international students studying at private institutions worked during and after their studies. On average, more than 20% filed taxes one year after receiving their permit; one-year tax-filing rates were even higher for students in college certificate (31%) and diploma programs (27%), applied degree programs (32%) and master's programs (30%). Six-year transition-to-PR rates were also highest for private enrollees in college certificate and diploma programs (31% and 24%). But international students in the private sector transitioned to PR at lower rates compared to their public sector peers. Lower PR rates may be due to the fact that students enrolled at private colleges were not eligible for PGWPs, which could have constrained their ability to secure employment after graduation to support their PR ambitions. Ideally, students chose private institutions for the educational experiences, fully aware of the limited immigration pathways, but media suggests that this wasn't always the case (Baksh et al., 2022).

Understanding students' pathways and outcomes in the public and private PSE sectors is important for shaping and supporting federal and provincial strategies around international education and immigration. Moving forward, research and policy should work together to ensure students can make informed decisions — whether they remain in Ontario to support labour market needs or settle elsewhere and serve as ambassadors for Ontario and Canada. A well-defined vision for international education can also guide Ontario's private postsecondary institutions and help them understand how they can effectively contribute to the province's labour market needs.



References

- Appiah, A., Pullman, A., Dubois, M., & Ford, R. (2025). *Postsecondary pathways and outcomes of international students in Ontario – Phase 2*. Social Research and Demonstration Corporation.
- Baksh, N., Ellenwood, L., Kelley, M., & Aulakh, S. (2022, October 13). International students enticed to Canada on dubious promises of jobs and immigration. *CBC*. <https://www.cbc.ca/news/canada/international-students-canada-immigration-ontario-1.6614238>
- Colyar, J., Brumwell, S., & MacFarlane, A. (2024). *Public college-private partnerships: Lessons learned for Ontario's postsecondary education system*. Higher Education Quality Council of Ontario. <https://heqco.ca/pub/public-college-private-partnerships-lessons-learned-for-ontarios-postsecondary-education-system/>
- Finnie, R., Miyairi, M., Dubois, M., Bonen, T. & Amery, B. (2019). *How much do they make? New evidence on the early career earnings of Canadian post-secondary education graduates by credential and field of study*. Education Policy Research Initiative and Labour Market Information Council. https://lmic-cimt.ca/wp-content/uploads/2020/02/LMIC_How-Much-Do-They-Make-Research-Report.pdf
- Government of Canada. (2014). *Canada's international education strategy: Harnessing our knowledge advantage to drive innovation and prosperity*. <https://www.international.gc.ca/education/assets/pdfs/overview-apercu-eng.pdf>
- Government of Canada. (2024). *Canada to stabilize growth and decrease number of new international student permits issued to approximately 360,000 for 2024*. <https://www.canada.ca/en/immigration-refugees-citizenship/news/2024/01/canada-to-stabilize-growth-and-decrease-number-of-new-international-student-permits-issued-to-approximately-360000-for-2024.html>
- Government of Canada. (2025). *Express entry: Canadian experience class*. <https://www.canada.ca/en/immigration-refugees-citizenship/services/immigrate-canada/express-entry/who-can-apply/canadian-experience-class.html>



- Li, S. & Jones, G.A. (2015). The “invisible” sector. Private higher education in Canada. In K. M. Joshi & S. Paivandia (Eds.), *Private higher education: A global perspective* (pp. 1–33). Delhi, India: B. R. Publishing.
- Millian, R. P., & Hicks, M. (2014). *Ontario Private Career Colleges: An Explanatory Analysis*. Higher Education Quality Council of Ontario.
<https://heqco.ca/pub/ontario-private-career-colleges-an-exploratory-analysis/>
- Ministry of Colleges, Universities, Research Excellence and Security. (2024, March 27). *Ontario allocating international student applications to support labour market needs* [News Release]. <https://news.ontario.ca/en/release/1004360/ontario-allocating-international-student-applications-to-support-labour-market-needs>
- Ostrovsky, Y. & Frenette, M. (2014). *The cumulative earnings of postsecondary graduates over 20 years: Results by field of study*. Statistics Canada.
<https://www150.statcan.gc.ca/n1/en/pub/11-626-x/11-626-x2014040-eng.pdf?st=6GNWclia>
- Statistics Canada. (2021). *Table 37-10-0086-01: Postsecondary enrolments, by status of student in Canada, country of citizenship and gender*.
<https://doi.org/10.25318/3710008601-eng>
- Woolf, M. (2025, January 15). Nearly 50,000 foreign students listed as ‘no-shows’ by Canadian schools. *The Globe and Mail*.
<https://www.theglobeandmail.com/politics/article-international-students-school-attendance-data/>



Appendix

Enrollment Trends for Private- attending International Students in Ontario



Table 1*Descriptive Analysis: Tax Filing in Years Following Study Permit Issuance*

Observations	Year 1 % with tax data	Year 2 % with tax data	Year 3 % with tax data	Year 4 % with tax data	Year 5 % with tax data
N=	31,220	29,730	24,700	19,940	14,480
Permit study level					
ESL	0.12	0.13	0.13	0.12	0.10
College certificate	0.31	0.33	0.36	0.40	0.39
College diploma	0.27	0.27	0.31	0.35	0.35
Trade or vocational	0.13	0.12	0.12	0.12	0.12
Applied degree	0.32	0.35	0.36	0.32	0.33
Bachelor's	0.18	0.19	0.17	0.16	0.15
Master's	0.30	0.30	0.29	0.28	0.23
PhD	0.20	0.25	0.14	0.14	0.13
Other/missing	0.21	0.21	0.21	0.21	0.21

Source: IMDB, T1FF.

Notes: This table shows private-attending study permit holders with tax data by study level. First year post-graduate proportions use all 11 cohorts. For the five-year post-graduation rates, 2010-2016 cohorts are used. "Private" international enrollees are defined as individuals who were issued a study permit but did not appear in public institutions' enrollment records, including students enrolled at a private college or university in Ontario, those who did not arrive in Canada, those in public institutions who did not report data to PSIS, and those who did not enroll in postsecondary education at all.

Table 2*Regression Analysis: Tax Filing in Years Following Study Permit Issuance*

Observations	Year 1 % with tax data	Year 2 % with tax data	Year 3 % with tax data	Year 4 % with tax data	Year 5 % with tax data
N=	31,220	29,730	24,700	19,940	14,480
Permit study level (Bachelor's)					
ESL	-0.075*** (0.0049)	-0.051*** (0.0052)	-0.014* (0.0058)	0.0050 (0.0064)	-0.0023 (0.0072)
College certificate	-0.0066 (0.0063)	-0.017* (0.0066)	0.027*** (0.0079)	0.062*** (0.0097)	0.056*** (0.013)
College diploma	0.0037 (0.0050)	-0.019*** (0.0053)	0.015* (0.0063)	0.041*** (0.0074)	0.036*** (0.0093)
Trade or vocational	0.020*** (0.0061)	0.018** (0.0060)	0.034*** (0.0062)	0.040*** (0.0065)	0.042*** (0.0067)
Applied degree	0.029 (0.017)	0.045* (0.018)	0.058** (0.022)	0.026 (0.027)	0.050 (0.034)
Master's	0.0018 (0.0083)	-0.0049 (0.0085)	0.0070 (0.0092)	0.011 (0.010)	-0.013 (0.011)
PhD	-0.13*** (0.011)	-0.17*** (0.010)	-0.16*** (0.011)	-0.14*** (0.012)	-0.14*** (0.014)

Other/missing	0.035*** (0.0041)	0.026*** (0.0043)	0.039*** (0.0046)	0.047*** (0.0049)	0.046*** (0.0051)
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Source: IMDB, T1FF.

Notes: This table shows private-attending study permit holders with tax data by study level. First year post-graduate proportions use all 11 cohorts. For the five-year post-graduation rates, 2010-2016 cohorts are used. The table presents the results of a linear probability model examining if a student declared tuition deductions on their tax return (1=yes) one to five years following Ontario study permit issuance. The explanatory variables included in the model are categorical and the reference group for each variable is in parentheses next to the bolded variable title. Robust standard errors are in parentheses under each coefficient. * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$. "Private" international enrollees are defined as individuals who were issued a study permit but did not appear in public institutions' enrollment records, including students enrolled at a private college or university in Ontario, those who did not arrive in Canada, those in public institutions who did not report data to PSIS, and those who did not enroll in postsecondary education at all.

Table 3

Descriptive Analysis: Annual Mean Earnings in Years Following Study Permit Issuance (\$)

Observations	Year 1 Mean earnings	Year 2 Mean earnings	Year 3 Mean earnings	Year 4 Mean earnings	Year 5 Mean earnings
N=	24,380	24,990	21,180	17,150	12,310
Permit study level					
ESL	15,300	20,700	25,000	27,400	30,100
College certificate	17,600	28,000	36,800	40,800	43,000
College diploma	16,000	23,400	32,900	38,300	40,900
Trade or vocational	20,400	28,100	34,400	37,300	38,000
Applied degree	16,700	21,200	30,600	34,100	34,900
Bachelor's	13,800	18,400	24,300	29,100	33,600
Master's	20,000	34,400	47,200	54,200	59,700
PhD	21,200	26,500	31,200	39,300	47,000
Other/missing	18,500	28,000	35,000	38,600	41,100

Source: IMDB, T1FF.

Notes: This table shows average annual earnings of private-attending study permit holders by study level for all cohorts from 2010 to 2020, one and five years after graduation. "Private" international enrollees are defined as individuals who were issued a study permit but did not appear in public institutions' enrollment records, including students enrolled at a private college or university in Ontario, those who did not arrive in Canada, those in public institutions who did not report data to PSIS, and those who did not enroll in postsecondary education at all.

Table 4*Regression Analysis: Annual Mean Earnings in Years Following Study Permit Issuance*

Observations	Year 1 Mean earnings	Year 2 Mean earnings	Year 3 Mean earnings	Year 4 Mean earnings	Year 5 Mean earnings
N=	24,380	24,990	21,170	17,150	12,300
Permit study level (Bachelor's)					
ESL	-1031.5 (454.1)	-1642.3** (613.3)	-4338.3*** (982.3)	-8148.1*** (1307.8)	-9724.6*** (2045.5)
College certificate	1500.5** (463.8)	3749.9*** (569.4)	2154.5* (915.3)	-1443.5 (1291.7)	-3216.3 (2225.0)
College diploma	763.2* (379.1)	1316.4** (454.4)	226.3 (792)	-2738.2* (1145.3)	-3846.3 (1850.8)
Trade or vocational	2161.2* (912.7)	1606.4 (1103.0)	3.50 (1500.8)	-964.7 (1697.1)	-3922.1* (1938.4)
Applied degree	879.3 (983.0)	530.8 (1299.8)	713.0 (2199.9)	-2527.3 (2690.8)	-5225.1 (3922.7)
Master's	4018.8** (854.3)	10952.5*** (1033.9)	14674.0*** (1422.4)	15408.8*** (1959.4)	16705.7*** (3103.3)
PhD	3193.7 (2165.2)	4552.1 (2413.0)	2855.3 (2878.4)	3215.0 (4686.0)	5983.0 (4671.5)

Other/missing	1268.9* (496.2)	2806.9*** (601.4)	672.5 (921.0)	-1260.9 (1173.1)	-2417.1 (1547.6)
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Source: IMDB, T1FF.

Notes: This table shows average annual earnings of private-attending study permit holders by study level for all cohorts from 2010 to 2020, one and five years after graduation. The table presents the results of separate LPM models examining CIP adjusted log earnings (excluding those who earned \$0) one to five years following Ontario study permit issuance. The explanatory variables included in the model are categorical and the reference group for each variable is in parentheses next to the bolded variable title. Robust standard errors are in parentheses under each coefficient. * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$.

“Private” international enrollees are defined as individuals who were issued a study permit but did not appear in public institutions’ enrollment records, including students enrolled at a private college or university in Ontario, those who did not arrive in Canada, those in public institutions who did not report data to PSIS, and those who did not enroll in postsecondary education at all.

Table 5:*Descriptive Analysis: Migration Outcomes in Years Following Study Permit Issuance*

Observations	Year 1 % transition to PR	Year 2 % transition to PR	Year 3 % transition to PR	Year 4 % transition to PR	Year 5 % transition to PR	Year 6 % transition to PR	Year 7 % transition to PR	Year 8 % transition to PR
<i>N</i> =	509,530	419,690	338,930	266,660	210,090	169,800	138,610	102,450
Public attenders	0.01	0.04	0.09	0.21	0.33	0.42	0.49	0.54
<i>N</i> =	135,540	111,770	91,260	72,620	60,130	51,620	42,970	32,640
“Private” attenders	0.010	0.027	0.060	0.104	0.139	0.163	0.180	0.199

Source: IMDB.

Notes: This table shows the proportion of study permit holders enrolled at public and private institutions who transitioned to permanent residency two (2010–2018 cohorts), four (2010–2016 cohorts) and six (2010–2014 cohorts) years after graduation. “Private” international enrollees are defined as individuals who were issued a study permit but did not appear in public institutions’ enrollment records, including students enrolled at a private college or university in Ontario, those who did not arrive in Canada, those in public institutions who did not report data to PSIS, and those who did not enroll in postsecondary education at all.

Table 6*Descriptive Analysis: Migration Outcomes in Years Following Study Permit Issuance*

Observations	Year 1 % transition to PR	Year 2 % transition to PR	Year 3 % transition to PR	Year 4 % transition to PR	Year 5 % transition to PR	Year 6 % transition to PR	Year 7 % transition to PR	Year 8 % transition to PR
Permit study level								
ESL	0.003	0.011	0.026	0.037	0.027	0.021	-	-
College certificate	0.007	0.024	0.079	0.194	0.268	0.308	-	-
College diploma	0.007	0.020	0.046	0.129	0.222	0.235	-	-
Trade or vocational	0.020	0.037	0.061	0.081	0.097	0.105	0.116	0.126
BA & Applied degree	0.007	0.015	0.027	0.039	0.051	0.076	0.099	0.117
Master's	0.014	0.034	0.096	0.161	0.189	0.215	0.231	0.215
PhD	0.013	0.024	0.031	0.053	0.086	0.130	0.154	0.179
Other/missing	0.017	0.040	0.079	0.122	0.163	0.186	0.202	-
*Other/missing + ESL, college certificate & diploma	-	-	-	-	-	-	-	0.229

Source: IMDB.

Notes: This table shows the proportion of private attender study permit holders who transitioned to PR by study level for all cohorts from 2010 to 2018, two, four and six years after graduation. “Private” international enrollees are defined as individuals who were issued a study permit but did not appear in public institutions’ enrollment records, including students enrolled at a private college or university in Ontario, those who did not arrive in Canada, those in public institutions who did not report data to PSIS, and those who did not enroll in postsecondary education at all.

Table 7*Regression Analysis: Migration Outcomes in Years Following Study Permit Issuance*

Observations	Year 1 % transition to PR	Year 2 % transition to PR	Year 3 % transition to PR	Year 4 % transition to PR	Year 5 % transition to PR	Year 6 % transition to PR	Year 7 % transition to PR	Year 8 % transition to PR
Permit study level (Bachelor's)								
Trade or vocational	0.011*** (0.0047)	0.025*** (0.0039)	0.050*** (0.0055)	0.074*** (0.0069)	0.084*** (0.0074)	0.064*** (0.0077)	0.047*** (0.0083)	0.044*** (0.0095)
Master's	-0.0011 (0.0018)	0.0029 (0.003)	0.024*** (0.0049)	0.052*** (0.0071)	0.054*** (0.0085)	0.041*** (0.01)	0.025* (0.011)	-0.0032 (0.013)
PhD	-0.0056** (0.0017)	-0.012*** (0.0028)	-0.022*** (0.0042)	-0.030*** (0.006)	-0.034*** (0.0081)	-0.035** (0.011)	-0.053*** (0.013)	-0.064** (0.016)
Other/missing	0.0023 (0.0014)	0.011*** (0.0021)	0.031*** (0.0031)	0.053*** (0.0041)	0.071*** (0.0046)	0.064*** (0.0053)	0.048*** (0.0059)	0.047*** (0.0071)

Source: IMDB.

Notes: This table shows the proportion of private attender study permit holders who transitioned to PR by study level for all cohorts from 2010 to 2018, two, four and six years after graduation. The table shows the average marginal effects produced through a set of multinomial logistic regression models that measure migration outcomes after a student's initial Ontario study permit was issued. Each column represents the three categorical outcomes that are possible in this model. The explanatory variables included in the model are categorical and the reference group for each variable is in parentheses next to the bolded variable title. Robust standard errors are in parentheses under each coefficient. * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$.

"Private" international enrollees are defined as individuals who were issued a study permit but did not appear in public institutions' enrollment records, including students enrolled at a private college or university in Ontario, those who did not arrive in Canada, those in public institutions who did not report data to PSIS, and those who did not enroll in postsecondary education at all.

Table 8*Descriptive Analysis: Credential Distribution Among Private Study Permit Holders*

Observations	All years	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
N=	144,260	11,590	10,560	10,490	10,330	8,660	8,510	12,490	18,640	20,520	23,760	8,730
Permit study level												
ESL	15.5	-	-	-	-	11.0	33.0	30.3	24.8	23.8	17.0	14.7
College certificate	7.7	-	-	-	-	1.5	5.1	9.5	13.0	12.2	13.0	15.1
College diploma	26.8	-	-	-	-	3.8	15.2	35.6	43.8	43.0	47.4	50.5
Trade or vocational	4.2	19.1	15.3	12.6	5.9	1.4	0.1	0.1	0.1	0.2	0.2	0.6
Applied degree	0.5	-	-	-	-	0.2	0.7	0.8	0.6	0.8	0.8	0.7
Bachelor's	9.3	10.6	11.3	10.3	10.1	6.4	10.7	10.3	5.8	8.1	10.6	9.5
Master's	2.6	2.2	2.5	2.7	2.8	1.6	3.2	3.5	2.5	2.8	2.4	1.8
PhD	1.1	0.9	0.7	1.0	1.1	0.8	1.4	1.4	1.1	1.3	1.2	0.9

Other/missing	32.4	67.4	70.2	73.5	80.2	73.2	30.8	8.5	8.2	7.8	7.6	6.3
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Source: IMDB.

Notes: This table shows the percentage distribution of private attenders by credential across all cohorts from 2010 to 2020. "Private" international enrollees are defined as individuals who were issued a study permit but did not appear in public institutions' enrollment records, including students enrolled at a private college or university in Ontario, those who did not arrive in Canada, those in public institutions who did not report data to PSIS, and those who did not enroll in postsecondary education at all.