Academic and Socioeconomic Experiences of International Students in Atlantic Canada

A Research Project Report prepared

By

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EXECUTIVE SUMMARY

Although Atlantic Canada's population has increased quite markedly over the past few years, reversing decades of stagnation or decline, there are still concerns about how the population is aging, and its impact on economic development. Strategies for growth in the region embody demand for a well-educated and skilled labour force, to encourage the right kind of development. This is more difficult to sustain with an aging population.

Development strategies are based on a labour force that can sustain continuous growth, including increasing the number of international students at the region's universities and colleges, and encouraging them to seek permanent resident status at the end of their studies and join the labour force. Having studied in Canada, international students do not face the foreign credential barriers, are fluent in one or both official languages, and are familiar with the Canadian culture. However, their plans to stay in the region can be affected by the experiences they acquire socially and academically during the period of their initial stay in Canada.

This project sought to assess the experiences of international students in Atlantic Canada by means of a survey. Such an assessment is important to direct future actions that will help attract international students to the region and help retain them in the region if they want to stay in Canada.

The target population for the survey was almost 69,000 students enrolled at Atlantic institutions between 2017 and 2023. There were 3,584 valid responses to the questionnaire, roughly equally split between males and females and over a wide range of ages. Students from the top six countries of citizenship comprised 46% and came from India, Nigeria, China, Bangladesh, Philippines and Cameroon.

In general, respondents to the survey have had a positive experience, in such areas as educational performance, use of campus services, social interactions on campus and within the wider community, employment, and the immigration process. But there are areas of concern.

About 60% had received their study permit within three months of application. About a quarter encountered delays in their studies due to processing delays of their visas. A quarter of those who experienced student visa application process of other countries found the Canadian application process to be more complex and stressful. Overall, the Canadian visa application process is comparable to, if not easier than, those in other countries. However, given that

Atlantic Canada receives fewer international students than rest of Canada and that it strives to attract more, visa delays and complexity of process should be addressed at the policy level.

About half of respondents said they learned about Atlantic Canada as a place to study through family and friends, with one in five citing a recruitment agency or social media, suggesting a greater role for personal relationships in increasing recruitment, through alumni, for example. Cost of living, tuition fees, academic reputation, value of qualification, and flexibility and duration of programs were top reasons for choice of the region for study, but some said they faced unexpected hikes in tuition and accommodation costs once they had arrived. Advance information provided by institutions was generally less than satisfactory. Only about one in five respondents said it was accurate, although there was a wide range of reasons for dissatisfaction. Accuracy of pre-arrival information is essential for incoming students so that they do not encounter stress and frustration.

Survey data also show financial concerns as prominent in choice of institution, which brings into question the federal government's doubling of the cost-of-living requirements from the previous $10,000 to $20,635 plus annual cost of tuition (announced on December 17, 2023). At the same time the Province of Nova Scotia is requiring its post-secondary institutions to raise the tuition fee paid by international students entering in 2024-25 academic year by at least 9 percent. Atlantic Canada is promoted for its affordable quality of life and education.[1] The new monetary requirements are likely to affect the region's competitive position, relative to other regions, in attracting international students.

Almost 90% of students worked while they were studying, mostly part-time. More than 70% expressed satisfaction ("extremely" or "somewhat") with their work experience. Most of those not working said they had no time on top of their studies for work. Some had expected their incomes would cover living and tuition costs, not realizing that available employment is mostly low-paid jobs.

More than 70 percent were satisfied with their interactions with domestic students, although some admitted it was easier to make friends with other international students, and about one-third reported social isolation on campus, owing to cultural and language barriers. Staff and faculty at institutions can play important role in addressing this issue. About one quarter reported interaction with families off-campus, with most describing this experience as warm and

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[1] https://www.atlanticuniversities.ca/studying/studying-in-atlantic-canada/

welcoming. About half were satisfied with their accommodation experiences or choice of institution, but about two-thirds had difficulty in finding accommodation.

Almost three-quarters of international students accessed some kind of settlement service on-campus, mostly for academic or employment counselling. Only about one quarter used mental health services. Financial concerns were a major source of mental stress, which affects academic performance. Most respondents were satisfied with the academic counselling they received. In rating their teachers, passion for teaching was high as a source of satisfaction to them, although other reasons also ranked highly. Lack of utilization of campus services by some students need to be addressed by institutions.

More than 90% of students reported they had good to excellent grades, with over half of these as excellent. None had below "satisfactory" grades, which could be because those with below satisfactory performance may have either dropped out of school or chosen not to respond to the survey. There was no dominant factor affecting academic performance, although adjusting to a colder climate, adjusting to a new academic structure, difficulty of finding accommodation were all challenges; high-quality teaching was a positive effect.

Of those who completed their education programs, almost two-thirds found their first job in the province of study, although more than one in ten were unemployed. Over half were working in their field of study, and nearly two-thirds were permanently employed. Almost two-thirds found a job within three months of completing their studies. More than four in five found their employers to be flexible and supportive, although almost one in five thought they had suffered from discrimination or unfair treatment.

When analyzing data for each of the top six source countries, some variations in the results were found. For example, higher percentages of students from China, Cameroon and Nigeria wait longer than three months for their Canadian study permits to be processed than those from Bangladesh, India and Philippines. Recruitment agencies are more important sources of information for applicants in China and India than others. Just over a half of Chinese students work while studying while more than 90 percent from other countries do so. Bangladeshi, Chinese and Indian students are more likely to report social isolation on campus. Cultural and language disconnection is the more likely reason for Chinese in this regard while the financial concern is their least likely reason. Except for students from Cameroon and China more than a quarter do not access any settlement service on campus. Students from Philippines are the most successful in the job market than others.

The overall results of the survey are positive for Atlantic Canada as 70 percent of international students were satisfied with the services they received while pursuing their studies. College students were more likely to access campus settlement services than do university students and were also more likely to be satisfied with the services they received. But this still leaves a significant proportion who were dissatisfied. This proportion indicates that authorities should carefully examine the quality and delivery of services they provide.

The outbreak of Covid-19 had only a moderate effect on most services used on campus. Access to mental health support rose significantly after the of Covid-19 outbreak.

Some 70% of respondents said they would like to stay in the province where they studied, with Nova Scotia being particularly prominent in this regard. Issues to be addressed by institutions and governments include informing students of conditions before they arrive ("managing expectations"), especially regarding academic requirements, financial concerns, finding accommodation, cultural acceptance and so on. Lack of utilization of campus services by about 30 percent of the students should also be addressed.

INTRODUCTION

Atlantic Research Group on Economics of Immigration, Aging and Diversity (ARGEIAD) conducted a research project to study the satisfaction of international students at universities and colleges in Atlantic Canada. The project addressed the education they receive, campus services, social interactions, employment, and the immigration process. An in-depth analysis of their experiences is imperative to their retention in the region after finishing their studies. Their retention is important given the challenge of skills shortages faced by the region resulting from its aging population.

This report is based on a survey of international students who entered a post-secondary institution in Atlantic Canada between 2017 and 2023; who may have finished their education or are currently pursuing education; and may be living either in Atlantic Canada or rest of Canada. The survey targeted a population of 68,845 such students. About 94% of survey respondents were living in Canada. Detailed survey methodology is presented in Appendix 1.

For most of the past three decades population growth has been stagnant or declining in the Atlantic region as natural change (the difference between birth and death rates) and net migration was negative. Any growth in population over the period since the mid-1990s was due to positive international migration, and this was often slight as new arrivals left for other parts of Canada.

This has changed since about 2016, as population has increased markedly. Natural increase is still negative, but there has been a much better record of net migration, both international and from other parts of Canada. Part of this improved performance has been due to greatly increased efforts on the part of provincial governments to attract new international immigrants, through such mechanisms as Provincial Nominee Programs (PNPs), which have tried to match new immigrants' skills and experience with local labour market needs.

Population, Atlantic Provinces 1996-2023

Legend: NL ■ PE ■ NS ■ NB

Statistics Canada. Year-end data.
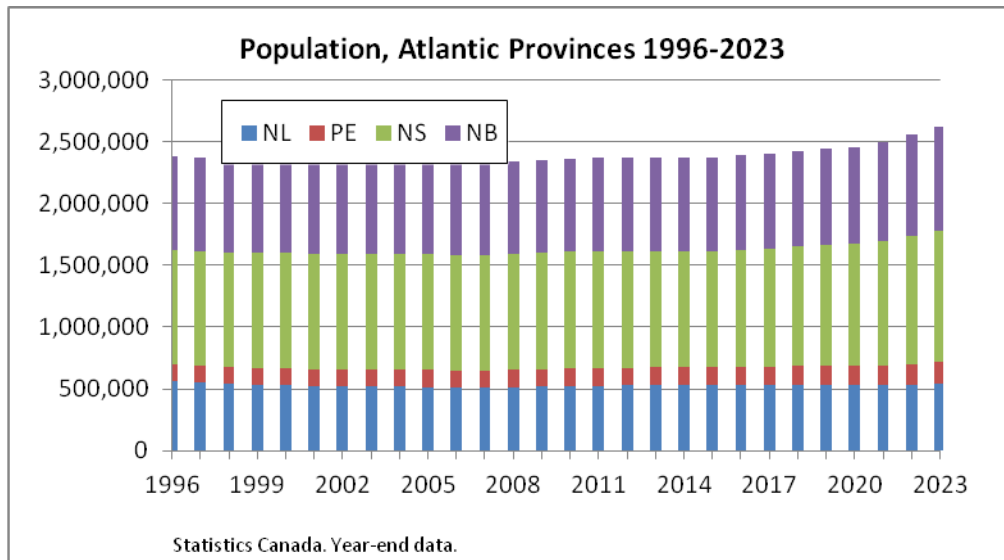
There are still concerns, however. Natural decline is resulting in an aging population. Currently one in five of Atlantic residents is aged 65 or older. The median age across Canada is 40.6 years. In Atlantic Canada it ranges from a low of 41.9 in Prince Edward Island to 48 in Newfoundland and Labrador. And, despite good population growth over the past decade or so, other parts of Canada have been increasing faster. The Atlantic share of national population in 1996 was 8%; in 2023 it was 6.5%.

Population dynamics, particularly aging, have several important economic consequences for the region, including labour markets, shrinking markets for goods and services, and demand for and provision of public services, particularly health care. These can have negative implications for regional economic growth. Regional economic policymakers are responding by adopting initiatives to counter these potential impacts.

The Atlantic Growth Strategy (AGS) is one such initiative, launched in July 2016 by the Government of Canada and the four provincial governments. The aim of AGS is to grow the region's economy, strengthen local communities, and grow innovative, world-class companies in the region. Fostering a skilled workforce is an important goal of the AGS. To achieve this goal, the strategy emphasizes attracting international migrants and increasing economic participation of under-represented groups such as older workers, indigenous peoples and persons with disabilities. The Atlantic Immigration Program (AIP), another federal-provincial initiative to attract and retain skilled workers and international graduates in Atlantic Canada, is linked to AGS. By providing evidence on the satisfaction and well-being of international students who come to Atlantic Canada, this research highlights any issues that need to be addressed to attract more international students to the region's universities and colleges.

Canadian immigration policy seeks to attract skilled immigrants to help grow the economy. However, studies have shown that skilled immigrants face barriers to integration in labour markets, especially a recognition of the human capital they bring from their home countries. Several initiatives have been undertaken by federal and provincial governments to address this issue. One such initiative is the attraction of international students, who are viewed as potential new immigrants; who are "young, with advanced English [and French] language skills, with fully recognized qualifications, locally relevant professional training and a high degree of acculturation".[2] These characteristics are believed to facilitate integration into both the labour market and the social sphere. Post-secondary educational institutions in Canada are also playing active roles in promoting such initiatives. According to the Canadian Bureau of International Education during 2017 to 2018 about 68% of prospective international students planned to apply for permanent resident status in Canada.[3]

Attracting international students and retaining them after graduation has also become the focal point of immigration strategies adopted by provincial governments in Canada, including those in Atlantic Canada where the impact of population aging on economic development is felt the most in the country. For example, several pathways to permanent residency status are available for international students in Nova Scotia including the Skilled Worker stream, Nova Scotia Experience stream and International Graduate Entrepreneur stream all under Nova Scotia PNP, and AIP. The provincial immigration strategy in Newfoundland and Labrador supports the efforts of post-secondary institutions and K-12 schools in attracting an increased number of international students. Memorial University is a key partner in that strategy. New Brunswick has also signed an agreement with the federal government that makes it easier for foreign graduates to gain an additional year of work experience in their field of study. This change is aimed at helping graduates who wish to apply for permanent residence status as skilled workers by providing them with additional points on the selection grid to reflect their expertise.

Besides addressing the broader economic development issue for the region, international students are also an important source of protecting the financial health of universities and colleges in the region, as they pay considerably higher tuition fees than do domestic students. There is also an economies of scale argument in favour of international students. In its 2023 report, Statistics Canada notes a decline in the domestic young adult population, resulting largely from decreases in the number of births throughout the 1990s and the early 2000s, has lowered domestic demand

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[2] Hawthorne, L. 2005. "Picking Winners: The Recent Transformation of Australia's Skill Migration Policy." International Migration Review, 39(2).

[3] Canadian Bureau of International Education. Retaining International Students in Canada – Post Graduation: Understanding the Motivations and Drivers of the Decision to Stay Intl-students-post-graduation-RiB-8-EN-1.pdf (cbie.ca)

for postsecondary programs[4]. Rough calculations conducted by this author based on Statistics Canada data reveal the major fixed components of university expenditures in Atlantic Canada comprised about 73% of total university expenditures in 2023 suggesting universities can also tap on significant economies of scale by admitting international students.[5]

The annual inflows of international students in Atlantic Canada more than doubled between 2010 and 2019 period (see chart). Each province had an increase over the period. Nova Scotia received more than half of the international students coming to the region. These rising trends are the results of deliberate attempts by post-secondary institutions in the region to attract more international students and also the various initiatives undertaken by provincial governments to retain them.

Source: Immigration, Refugees and Citizenship Canada.

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[4] https://www150.statcan.gc.ca/n1/pub/36-28-0001/2023009/article/00003-eng.htm
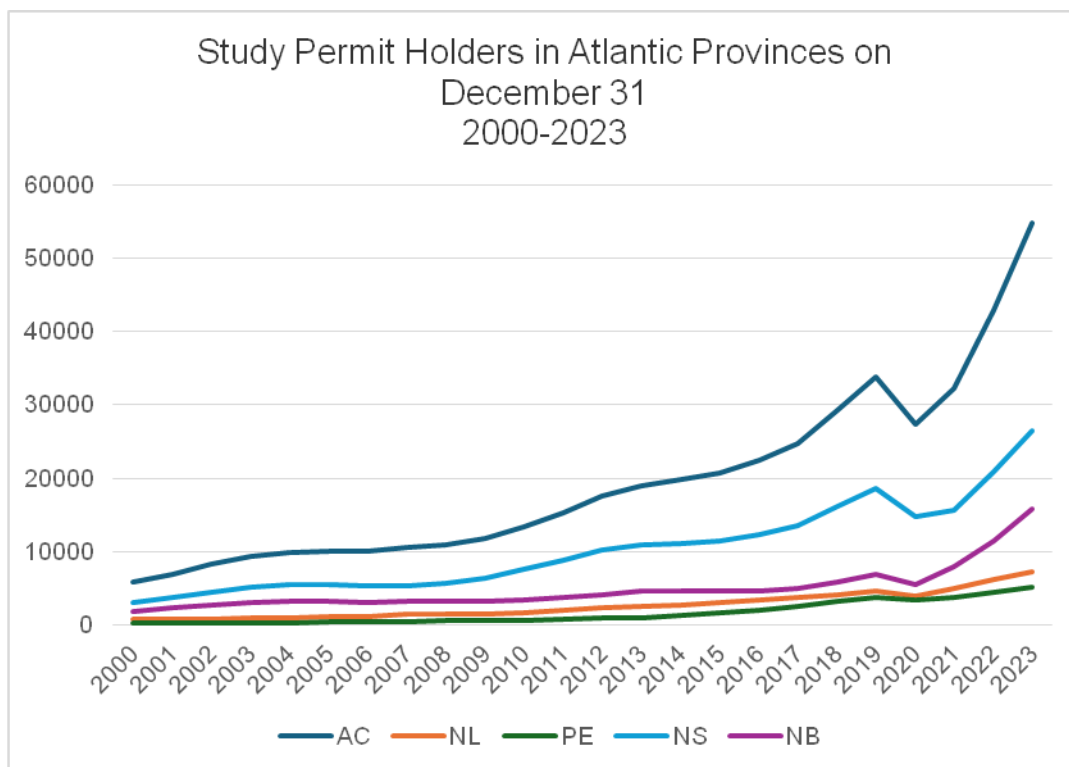
[5] Calculation based on Statistics Canada Table 37-10-0027-01 Expenditures of universities by type of expenditures and funds (in current Canadian dollars) (x 1,000). Fixed cost components used for calculation included salary and benefit, material and supplies, renovations and alterations, furniture and equipment, buildings, land and land improvements

While many initiatives are in place for attraction of international students in Atlantic Canada, little is known about their retention, although some studies suggest that it is low. An unpublished study showed only 11% of the students who graduated from Atlantic Canada universities and colleges were still in the province of their study one year after they became permanent residents[6]. Another recently completed survey-based study for Nova Scotia found that about a quarter of immigrants from 2011 to 2018 who had lived in Nova Scotia, but were now living in other provinces, were international students.[7]

As discussed above, one goal of initiatives to attract and retain international students is to mitigate skill shortages in the region. However, if this goal is to be met, reasons for their low retention must be understood and addressed. For this purpose, a detailed survey-based study on their living experiences is warranted. For future students the decision to study abroad will likely be reliant on their perceptions regarding their anticipated academic, social and cultural experiences. These perceptions are usually derived from the experiences of current and past students. Hence, an in-depth analysis of the level of satisfaction of current and past students with the support system on campus, employment opportunities to complement studies, interaction with domestic students and faculty, satisfaction with the quality of education, their academic performance and employer attitudes to hiring international students will be instructive for immigration and labour policies aimed at maintaining the supply of skilled labour force in Atlantic Canada. It will also generate valuable insights for university and college administrations in improving their service delivery for international students. Focus on retention of international students has become even more necessary considering the limits imposed on the admission of international students to Canada by Immigration, Refugees and Citizenship Canada (IRCC) announced on December 17, 2023. These limits are likely to affect post-secondary institutions more in Atlantic Canada than in rest of Canada which traditionally receives more immigrants and international students.

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[6] By Michael Haan of Western University, referred in The importance of international students to Atlantic Canada - Study International.

[7] Akbari, A.H. 2018. Who comes, who stays, who leaves Nova Scotia and why? A report prepared for Nova Scotia Office of Immigration. 1StayersandLeaversBackgroundReportFinal.pdf (smu.ca)

AN OVERVIEW OF SURVEY POPULATION BASED ON RESPONSE SAMPLE

The online survey of international students was conducted between December 13, 2023, and February 4, 2024. While most questions were of quantitative nature, where respondents were to choose from specific options, some were open-ended. Details of methods used, population characteristics, margin of error calculations, codifying of open-ended questions and calculations of survey weights are provided in Appendix 1. All analyses presented in this report are based on a population weighted sample, all percentages pertain to the target population and lie within the range of ± 1.56% with 95% confidence. While the main report analyzes data on the overall population of international students, some country specific data are analyzed in Appendix 1 appearing at the end of the report.

Based on the 3,584 valid responses to the survey, 94% of the survey population was living in Canada, 53% were male and 46% female. Ages varied - 27% were less than 26 years old, and 24% over 35. About 67% had completed their education with over 70% having graduated from a university. Only 7% of those who had graduated with one credential were pursuing another post-secondary education and most of them (59%) were attending an institution different from the one they previously attended. Sixty percent were studying in Atlantic Canada, and 28% had moved to Ontario. Most, 83%, could communicate only in English, 13% could communicate in both English and French and 3% in French only.

The top five institutions attended were Cape Breton University (17%), Dalhousie University (14%), Memorial University (12%), Saint Mary's University (9%) and New Brunswick Community College (8%). Together, they comprised 60% of the total survey population. Only 3% had acquired Canadian citizenship, 20% were permanent residents, 32% were on a work permit - half of whom had applied for permanent resident status and 40% were on a study permit. The top six countries of current citizenship were India (26%), Nigeria (9%), China (7%), Bangladesh (5%), Philippines (4%) and Cameroon (3%). Students from these countries were 52% of the total. Just under 10% of international students had studied in other Canadian Provinces.

Overview of survey population.

	Percentage
Sample size *(3,584)*	**100%**
Living in Canada	94%
Living outside Canada	6%
Gender (*sample size: 3,584*)	**100%**
Male	53%

Female	46%
Age *(sample size: 3,584)*	**100%**
under 26	27%
26-30	28%
31-35	20%
over 35	24%
Graduated *(sample size: 2,390)*	**100%**
From College	28%
From University	71%
From Academy	1%
Educational credentials obtained *(sample size: 2,390)*	**100%**
College certificate/diploma	28%
University certificate/diploma	35%
University degree	31%
Other	4%
Currently studying *(sample size: 1,194)*	**100%**
College	27%
University	73%
Program pursuing *(sample size: 1,194)*	100%
College certificate / diploma	24%
University degree	76%
Pursuing another post-secondary education *(sample size: 2,390)*	**100%**
Yes	7%
No	93%
Pursuing the new program at the same institution as before *(sample size: 153)*	**100%**
Yes	41%
No	59%
Province where pursuing the new program *(sample size: 91)*	**100**
Alberta	1%
British Columbia	1%
Manitoba	1%
New Brunswick	16%
Newfoundland & Labrador	6%
Nova Scotia	32%
Ontario	28%
Prince Edward Island	4%

Quebec	10%
Saskatchewan	1%
Languages spoken *(sample size: 3,584)*	**100%**
English only	85%
French only	3%
Both English and French	13%
Post-secondary institution attended/attending in Atlantic Canada *(sample size: 3,584)*	**100%**
Acadia University	2%
Cape Breton University (CBU)	17%
Collège Communautaire du Nouveau-Brunswick (CCNB)	4%
College of the North Atlantic (CNA)	2%
Dalhousie University	14%
Holland College	3%
Memorial University	12%
Mount Allison University	1%
Mount Saint Vincent University (MSVU)	2%
New Brunswick Community College (NBCC)	8%
Nova Scotia College of Art and Design (NSCAD)	1%
Nova Scotia Community College (NSCC)	6%
St. Francis Xavier University	1%
Saint Mary's University (SMU)	9%
Université Sainte-Anne	1%
Université de Moncton	3%
University of New Brunswick (UNB)	6%
University of Prince Edward Island (UPEI)	5%
Crandall University	2%
All others/No answer	1%
Year of completion of the most recent study *(sample size: 3,584)*	**100%**
2017	1%
2018	3%
2019	5%
2020	8%
2021	12%
2022	13%
2023	21%
Studies ongoing for first credential	38%

Current status in Canada *(sample size: 3,584)*	100%
Canadian citizen	3%
Permanent resident	20%
On a work permit, have applied for permanent resident status	15%
On a work permit, have not applied for permanent resident status	17%
On a Study Permit, have applied for permanent resident status	2%
On a study permit, have not applied for permanent resident status	38%
Not living in Canada	5%
Top six countries of current citizenship *(sample size: 3,584)*	**100%**
India	26%
Nigeria	9%
China	7%
Bangladesh	5%
Philippines	4%
Cameron	3%
All other	54%
Studied outside Atlantic Canada before coming here *(sample size: 344)*	**100%**
Alberta	6%
British Columbia	15%
Manitoba	4%
New Brunswick	5%
Newfoundland	2%
Northwest Territories	0%
Nova Scotia	6%
Ontario	37%
Prince Edward Island	1%
Quebec	22%
Saskatchewan	2%

Percentages in this Table, and all Tables that follow, are reported for the target population of 68, 845.

EXPERIENCE WITH THE IMMIGRATION PROCESS

Most (59%) reported having obtained their study permit in less than three months. The rest took longer with a small percentage taking longer than a year.

Less than a month	11%
Between 1-3 months	48%
Between 4-6 months	26%
More than 6 months but less than a year	10%
A year or more	5%

Sample size: 3,584. *Respondents were asked: How long did it take for your first Canadian study permit application to be processed?*

About three quarters experienced no delay in starting their program due to a delay in processing their study permits, with most of the remainder having to delay by a few months to a year.

Yes, by a month	5%
Yes, by a few months	15%
Yes, by one academic year	6%
Yes, more than one academic year	1%
No	74%

Sample size: 3,584. Respondents were asked: Did you delay starting your program of study due to a processing delay in your visa?

One-fifth of the respondents had applied for post-secondary education in another country. A quarter of them found the Canadian study permit application to be overall the same in terms of complexity and stressfulness as the other country. About an equal proportion found the process "less complex and less stressful", and another quarter or so "highly complex and more stressful". Overall, these responses appear positive with regards to the Canadian application process. However, because of selection bias, these numbers may overstate satisfaction with Canadian visa application process if prospective students who find the application process self-select out of studying in Canada. Such students may either study in their home country or head to other popular destinations such as Australia, United States, or other countries.[8]

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[8] The survey did not ask what other countries a respondent had applied for visa besides Canada.

Less complex and less stressful	26%
Less complex and more stressful	13%
Highly complex and more stressful	23%
Overall, the same	25%
Did not apply to other countries	13%

Sample size: 722. *Those who had applied to another country for post-secondary education were asked: What is your opinion on the Canadian Study Permit application process compared to the other country?*

The percentages of students reporting delays in obtaining their study permits may not appear to be significant. But given that the region receives fewer international students than rest of Canada, and that it strives to attract more, this delay should be addressed at the policy level.

It should also be noted that over the 2017-2023 period, incoming students from China and India accounted for about 15% and 26% of international students entering Atlantic Canada while the acceptance rates of their study permit applications in 2021 (latest rate reported by IRCC) was 84% and 60%, respectively.[9] Furthermore, a recent article appearing in *The Economist* reported more Indian students going abroad to pursue higher education than Chinese students. They also tend to enrol in smaller institutions because of their lower purchasing power than Chinese.[10] Both are important information for institutions in Atlantic Canada to suggest improving efforts to attract students from China due to higher visa acceptance rates and from India because of their greater sensitivity to living and study costs. From the policy perspective, expediting of application processing from these countries is recommended.

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[9] Composition of student population is reported in the Technical Appendix appearing at the end of this report. The visa acceptance rates in 2021, published by IRCC, for the top six source countries of survey respondents were: India 60%; Nigeria 34%; China 84%; Bangladesh 46%, Philippines 37%, Cameroon 20%. All of these rates and the overall average visa acceptance rate of 60%, were very close to their pre-pandemic rate.
https://www.canada.ca/en/immigration-refugees-citizenship/corporate/transparency/committees/cimm-feb-15-17-2022/student-approval-rates.html#wb-auto-7

[10] "Brainy students are piling into western universities." The Economist June 25th, 2024.

STUDENTS' EXPERIENCES IN ATLANTIC CANADA

Atlantic Canada as a place to study

About half of the students surveyed reported learning about Atlantic Canada as a place to study through family and friends. Less than 20% reported recruitment agency or social media as their source of information.

Family or friend	48%
Social media	17%
Recruitment agency in my home country/ Education fair	17%
A university or college representative	14%
Internet search	8%
Other online marketing	7%
Permanent resident program information	6%
My former school's education advisor	6%
An event held in my home country	5%
Other (please specify:)	2%

Sample size: 3,584. *Respondents were asked: How did you first become aware of Atlantic Canada as a place of study?*

The fact that most students learn about their institution through family and friends suggests expanding the role of student recruiting agents to include alumni networks for promotion. Country-specific social media campaigns may also be organized through recruiting agents.

The top five reasons for choosing the institution to attend were cost of living, tuition fee, academic reputation of the institute, value of qualification from Canada, and flexibility and duration of programs. However, their importance varies slightly across countries as is revealed in Appendix table A1. These aspects may be emphasized in promotional materials prepared by institutions. Smaller programs appear to be becoming more popular among international students. For example, Cape Breton University has successfully attracted many international students to its one- and two-year certificate programs. Promotion of graduate programs (especially masters' programs) could also be emphasized as they tend to be of shorter length.[11] In their written responses, some students also mentioned that while they were attracted to their

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[11] The Economist article referred earlier also noted greater popularity of graduate programs among Indian students due to their shorter lengths.

institution of choice because of low cost of living and tuition, they faced unexpected hikes, especially in accommodation costs and tuition fees. These responses highlight the importance of financial aid in attracting students.

Cost of living compared to other locations in Canada	42%
Competitive tuition fees	42%
Academic reputation	36%
The value of qualification from Canada	29%
Flexibility and duration of programs	22%
The reputation of qualification from this institution	21%
Cost of living compared to other countries	20%
Opportunities for further education	19%
Simpler admission policies	19%
Scholarship	16%
Information received from a university or college representative	10%
Research opportunities	10%
Other (please specify:)	6%
Opportunities for Research Assistantship(s)	5%
Opportunities for Teaching Assistantship(s)	4%
Information received from my former school's education advisor	4%

Sample size: 3,584. *Respondents were asked: Why did you choose the institution you attended/attend in Atlantic Canada?*

Satisfaction with information received prior to coming to Atlantic Canada

Qualitative accounts under this topic were quantified and grouped under different categories. Less than a quarter expressed satisfaction with the information they had received. There was a wide range of reasons for dissatisfaction. Some indicated they were not prepared for the difficulty in finding accommodation and its cost. Some found their institution did not have adequate infrastructure (classrooms) to serve the number of students they had admitted. Relatively few responses expressed dissatisfaction with the overall environment of study or the quality of education.
Information on the challenges newcomers can face upon arrival should be more clearly provided in the welcoming package provided to students upon acceptance. This is especially important in the light of new regulations facing internationals students and an expected rise of their cost of living.

Accurate Information Satisfaction	22%
Don't know / No answer	15%
Satisfaction with Quality of Education and Faculty	14%
Miscellaneous / Uncategorized	11%
Accommodation and Cost of Living Dissatisfaction	9%
Supportive Academic and Social life/environment Satisfaction	8%
Misleading Information Dissatisfaction	7%
Job and Internship Opportunities availability Dissatisfaction	6%
Dissatisfaction with academic and social life/environment	6%
Program and Curriculum Alignment with Career Goals Satisfaction	4%
Quality of education Dissatisfaction	4%
Limited Interaction with Students/faculty/school officials Dissatisfaction	2%
Accommodation and Cost of Living Satisfaction	2%

Sample size: 3,584. *Respondents were asked: Explain if and why you have been satisfied or dissatisfied with the accuracy of the information you received about the post-secondary education and school before joining it. Some specific comments are in Appendix 2.*

Work while studying

About 86% of international students worked while studying, with 74% in part-time, 9% in full-time and 3% in unpaid jobs as volunteers or interns, for example. Some students come with the expectation that they will be able to cover their living and tuition costs by working while studying. The pre-arrival package should make it clear that these are almost always low-paid jobs that can cover only part of their costs.

Yes, part-time	74%
Yes, full-time	9%
Unpaid work (Internship, volunteer, etc.)	3%
Did not work while studying	13%

Sample size: 3,584. *Respondents were asked: Have you worked while studying?*

More than 70% expressed satisfaction with their work experience.

Extremely satisfied	30%
Somewhat satisfied	41%
Neither satisfied nor dissatisfied	16%
Somewhat dissatisfied	8%
Extremely dissatisfied	4%

Sample size: 3,122. *Those in the sample who reported working while studying were asked: How satisfied you have been with your work experience while studying?*

Those who reported not working while studying revealed they had not enough time to work due to pressure of studies (56%); could not find appropriate jobs (31%); or were not interested in searching for a job (15%).

Not enough time to work due to the immense pressure of studies	56%
Could not find appropriate jobs to apply to	31%
Not interested in searching for jobs	15%
Other (please specify:)	13%
Insufficient work experience	12%
Most employers did not recognize my 20-hour part-time work eligibility	12%
I did not know I was eligible for a job	8%
Struggle to describe skills and abilities to the employers	4%

Sample size: 462. *Those in the sample reporting not working during studies were asked: What has been your reason for not working?*

Written reasons cited for not looking for a job included insufficient work experience, lack of employers' knowledge of their eligibility for a part-time job, and finding it difficult to describe their skills to employers.

Social interactions, accommodation and choice of institution

More than 70% of respondents said they were extremely or somewhat satisfied with their choice of institution, in their interactions with fellow domestic (Canadian) students, faculty and staff, and their cultural acceptance in the general community. However, with respect to accommodation, this was true only for only about half of the respondents. Some 30% were dissatisfied with their accommodation experience and close to one-fifth were neutral.

Some written responses indicated that it was easier to make friends with other international rather than domestic students as they tended to socialize together.

Experience with:	Extremely satisfied	Somewhat satisfied	Neither satisfied nor dissatisfied	Somewhat dissatisfied	Extremely dissatisfied
Interaction with domestic students	34%	35%	18%	8%	5%
Interaction with faculty and staff	47%	37%	9%	5%	2%
Interaction with general community	43%	38%	13%	4%	2%
Cultural acceptance in the general community	43%	35%	14%	5%	3%
Accommodation	22%	32%	17%	17%	13%
Choice of your post-secondary institution	45%	36%	11%	6%	3%

Sample size: 3,584. *Respondents were asked: How satisfied have you been with the following experiences in Atlantic Canada?*

About two-thirds lived off-campus and one-fifth lived both on and off-campus during their studies.

On-campus	12%
Off-campus	67%
Both	21%

Sample size: 3,584. *Respondents were asked: Where have you stayed during your studies in Atlantic Canada?*

About two-thirds found it very difficult, or difficult, to find accommodation.

Very difficult	26%
Difficult	41%
Easy	29%
Very easy	4%

Sample size: 3,584. *Respondents were asked: How has been your experience in finding accommodation during your studies in Atlantic Canada?*

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Most students either lived with fellow international students (41%) or a combination of international and domestic students (15%). Only 5% lived solely with other domestic students. The rest lived either alone or with family, relatives, or non-relatives.

Fellow domestic student(s)	5%
Fellow international student(s)	41%
Combination of domestic and international students	15%
Spouse or partner (marriage or common law)	15%
Parents	2%
Children 18 and under	2%
Children over 18	0%
Other relatives	5%
Other (non-relatives)	6%
Lived alone	10%

Sample size: 3,584. *Respondents were asked: Who have you mostly lived with during your studies in Atlantic Canada?*

Making friends with other students while studying was found to be easy or very easy by 65% of the respondents.

Very difficult	7%
Difficult	26%
Easy	49%
Very easy	16%
Other (please specify:)	2%

Sample size: 3,584. *Respondents were asked: What has been your experience in making friend with other students while studying?*

During their studies, 58% had a study group.

Yes	58%
No	42%

Sample size: 3,584. *Respondents were asked: As a student, did you have a study group?*

In those who had a study group, 60% reported their group had a combination of both international and domestic students and 37% had only domestic students in their study group.

International students only	37%
Domestic students (Canadian) only	3%
Combination of international and domestic students	60%

Sample size: 2,151. *Those reporting to have a study group were asked: what was the combination of other students in the group?*

About three quarters of the above also interacted socially, apart from academic interactions, for entertainment, sports, religious events, and maintained their contacts.

Yes	74%
No	26%

Sample size: 2,151. *Those reporting to have a study group were asked: Apart from academic interactions, does/did your group meet socially (for example: entertainment, sports, religious occasions, etc.)?*

More than 3/4th kept in touch with their study group members after finishing their studies.

Yes	77%
No	23%

Sample size: 2,151. *Respondents were asked: Are you still in touch with your study group members?*

The above findings indicate a good majority of international students find it easy to interact with other international and domestic students. However, about 35% of all students reported social isolation on campus.

Yes	35%
No	65%

Sample size: 3,584, *Respondents were asked: Have you experienced social isolation while studying on campus?*

Respondents were also asked to explain their reasons for social isolation on campus. About one-third wrote. These were grouped into eight categories. The top five categories included cultural learning and disconnection (20%), social dynamics and exclusion (35%), personal and interpersonal challenges (14%), mental health and well-being (10%).

Cultural and Language Disconnection	20%
Online Learning and Pandemic Restrictions	8%
Social Dynamics and Exclusion	35%
Personal and Interpersonal Challenges	14%
Financial and Logistical Barriers	6%
Mental Health and Well-being	10%
Don't know / No answer	3%
Miscellaneous / Uncategorized	4%

Sample size: 1,163. *Respondents who felt isolation were asked: Please explain in a few words what caused this isolation?*

Social and cultural barriers between international and domestic students are important to address if their eventual retention is a goal. In this regard, social events on campus could be encouraged by the administrations. Perhaps domestic students need to be reminded of the opportunities that mingling with international students can offer, in areas such as cultural exchanges or food-themed events.

Just under a quarter of the respondents reported having been hosted by a family off-campus and 57% of these respondents described their experience to be warm and welcoming.

Yes	23%
No	77%

Sample size: 3,584. *Respondents were asked: Have you been hosted by a local family outside campus?*

Descriptions of experiences with the host families were grouped into ten categories. While most (almost 60%) described their experience to be good, there were also some reports of exploitation, unfair treatment, lack of cultural understanding and limited interaction with host families.

Warm and Welcoming Hosts / Good	57%
Cultural Exchange and Learning	10%
Supportive and Assisting in Adaptation	5%
Long-lasting Relationships	6%
Exploitation or Unfair Treatment	2%
Cultural Misunderstandings and Isolation	1%
Mixed Experiences	3%
Limited Interaction	4%
Don't know / No answer	1%
Miscellaneous / Uncategorized	11%

Sample size: 836. *Those who were hosted by a family outside were asked: Please briefly describe your experience with the host family*

MENTAL STRESS DURING STUDIES

Mental stress can affect academic performance. Finances were the major source of mental stress during studies as living costs and tuition fees were a concern to many. Academic performance was also a major source of mental stress among students.

Bearing living costs	59%
Increase in tuition fees	44%
Academic performance	44%
Finding a balance between your work and academic pressure	39%
Interaction with fellow domestic students	21%
Interaction with faculty and staff	19%
Delays in study permit extension	15%
None of the above	15%
Elimination of scholarship owing to poor academic performance	6%
Other (please specify)	4%

Sample size: 3,584. *Respondents were asked: Have you experienced mental stress with any of the following during your studies?*

Half of the respondents sought mental health support during COVID and of these, half were extremely satisfied or somewhat satisfied with their experience. A possible reason for not accessing support could be cultural or not being aware of available support.

Extremely satisfied	10%
Somewhat satisfied	14%
Neither satisfied nor dissatisfied	14%
Somewhat dissatisfied	5%
Extremely dissatisfied	7%
Not applicable	50%

Sample size: 3,584. *Respondents were asked: If you studied in Atlantic Canada during COVID, how satisfied were you with the mental health support by your institute?*

International students can face barriers in getting the support they need for several reasons. Adjusting to a foreign culture and a new educational system can be very stressful. They may come with varying experiences and varying views on mental health services. There may also be concerned that mental health support may not be relatable or adapted to their community or experience. If this support lacks relatability, students can feel disconnected from the person supporting them, which can inhibit improvements in mental health. Talking about mental health and such topics is also hard to do in a second language, which can add an extra barrier to accessing effective care. Education institutions should accommodate the unique characteristics of international students who may want to access their services.

SATISFACTION WITH SERVICES PROVIDED BY EDUCATION INSTITUTIONS ON THEIR CAMPUSES

Settlement services provided by the institution attended

About 72% of international students in Atlantic Canada accessed some form of settlement service provided by their institution on campus. However, only the academic counseling is used by about half the population. All other services are used by less than 40 percent of the population. Mental health support services are utilized by less than a quarter. This finding of low utilization of mental health services by international students is corroborated by another Canadian study conducted at University of Waterloo.[12]

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[12] https://www.cbc.ca/news/canada/kitchener-waterloo/international-graduate-student-study-mental-health-services-laurier-1.7165076

Academic counselling	46%
Employment counselling	37%
Did not access any service	28%
Writing skills	28%
Mental health support	24%
Language training	13%
Entrepreneurship support	10%
Other (please specify:)	1%
Immigration services	1%

Sample size: 3,584. *Respondents were asked: Which of the following settlement services have you accessed at your institution while studying?*

Since the outbreak of Covid-19 resulted in online teaching, one would expect large changes in students' demand for campus services. To assess if this were true, the above data were divided into two periods, i.e., before and after the Covid-19 outbreak, and are reported in Appendix Table A13. It was observed that overall, there was only a moderate, 3 percent, rise in usage of campus services after the pandemic. Demand for mental health support rose the most – by about 8 percent while all other services had very low to slightly moderate changes in demand after the Covid-19 outbreak. The noticeable rise in mental health support after the Covid-19 outbreak could reflect anxiety and uncertainty about future, especially in the 2020-2022 cohort. Online accessibility of such support may have facilitated its usage after the Covid-19 outbreak.

Adjusting to a foreign culture, and a new educational system, can be stressful for international students. They may have language shortcomings and come from varying life experiences and views on mental health services. Some, especially female students, may be less likely to reach out for needed support due to traditional, cultural, social and religious values.

In recent years, although there has been an increasingly open and tolerant attitude towards discussing mental health in universities, international students can still find it hard to reach out when they need support. This is likely to happen if mental health support is not relatable to the students' culture and experiences. In such a case, students may feel disconnected from the support provider which can inhibit improvements in mental health. Hence, cultural training for service providers on campus is essential. Including fellow international students in service-providing teams could also be more effective.

In terms of their satisfaction with various services provided by their institution, 55% were satisfied or extremely satisfied with the academic counselling they received while for each of the other services they accessed, this was reported to be true by less than 45%. Only 36% expressed satisfaction with mental health support.

Campus service	Extremely satisfied	Somewhat satisfied	Neither satisfied nor dissatisfied	Somewhat dissatisfied	Extremely dissatisfied	Not applicable
Academic counselling	25%	30%	13%	4%	4%	24%
Employment counselling	18%	25%	16%	6%	7%	28%
Language training	14%	17%	15%	2%	3%	49%
Entrepreneurship support	11%	13%	18%	3%	4%	51%
Mental health support	16%	20%	16%	4%	5%	39%
Writing skills	19%	22%	14%	3%	2%	39%
Other services you mentioned	11%	14%	15%	2%	2%	57%

Sample size: 3,584. *Respondents were asked: How satisfied have you been with the following services provided by your current/last post-secondary institution?*

Respondents also expressed varying levels of satisfaction with specific features of the institution they attended. Except for employment rates of graduates and their salaries, work placement and online teaching, all other features were liked by 70% or more. As already noted, most international students would like to stay in Canada after graduation. Hence, improving the work placement service to enhance their employability can be a major attraction for them. The job search resources should be tailored to their unique needs and cultural nuances.[13]

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[13] According to the Canadian Bureau for International Education (CBIE), there has not been much national discussion on the need for appropriate service provision for international students. As they transition from post-secondary education to the world of work, the unique challenges and barriers they face require innovative and intentional supports. https://ceric.ca/2021/06/strategic-approaches-to-international-student-employment/

Feature of institution	Extremely satisfied	Somewhat satisfied	Neither satisfied nor dissatisfied	Somewhat dissatisfied	Extremely dissatisfied	Not applicable
Up-to-date technology	33%	42%	13%	7%	3%	1%
Teaching staff	39%	40%	11%	6%	3%	1%
Teaching quality	37%	38%	13%	7%	4%	0%
Ranking in independent ratings	25%	35%	23%	5%	3%	10%
Employment rate of graduates	18%	25%	21%	13%	13%	9%
Employment salaries of graduates	11%	22%	24%	17%	14%	12%
Help with work placements	16%	19%	20%	14%	19%	13%
Face-to-face teaching hours	35%	37%	15%	5%	4%	4%
Response time to my inquiries/emails	40%	38%	12%	6%	3%	2%
Online teaching	31%	32%	15%	6%	5%	11%

Sample size: 3,584. *Respondents were asked: How satisfied have you been with the following features of your current/last post-secondary institution?*

Regarding satisfaction with their teachers, it appears that the passion, clarity, and method of teaching carry more weight than external recognition of their research. Separate research could explore if this ranking differs between universities and colleges since universities are generally more research-oriented than colleges.

Characteristic of teacher	Extremely satisfied	Somewhat satisfied	Neither satisfied nor dissatisfied	Somewhat dissatisfied	Extremely dissatisfied
Their passion for teaching	49%	36%	10%	4%	2%
Their real-world experience	43%	36%	13%	6%	3%
Reputation for research	37%	34%	21%	6%	2%
Their use of multimedia	37%	39%	17%	5%	2%
Their interactive method of teaching	39%	38%	14%	6%	3%
Their clarity of what they expect of their students to pass the course	41%	38%	12%	6%	3%
They have won industry awards	23%	30%	38%	5%	5%

Sample size: 3,584. *Respondents were asked: How satisfied have you been with teachers at your current/last post-secondary institution in terms of the following?*

ACADEMIC PERFORMANCE

Nearly two-thirds of respondents reported the academic requirements of their program were very clearly conveyed to them while 30% found them to be only somewhat clear. Only a trickle, 4%, found them not clear at all.

Very clear	66%
Somewhat clear	30%
Not at all clear	4%

Sample size: 3,584. *Respondents were asked: How clearly the academic requirements of your program were conveyed to you?*

Clarity of academic requirements can have an impact on academic achievements. In terms of their academic achievements, 94% of those who had graduated did so with good to excellent grades. None were below satisfactory grades.

A- to A+ (Excellent)	56%

B- to B+ (Good)	38%
C- to C+ (Satisfactory)	6%
Below C- but not F (Marginal)	0%
F (Failure or Withdrawal)	0%

Sample size: 2,390. *Respondents who had graduated were asked: What was your CGPA in the last academic credential you obtained?*

Among those who were studying at the time of survey, about 77% had achieved good to excellent CGPA (over 3.0 B average or above).

Below 1.50	1%
1.50 - 2.00	3%
2.01 - 2.50	7%
2.51 - 3.00	11%
3.01 - 3.50	23%
3.51 - 4.00	31%
4.00 - 4.30	23%

Sample size: 1,194. *Respondents who had studies on-going were asked: what is your current CGPA?*

It is however important to note that the academic performance reported above may be subject to a reporting bias as those who do not perform well in their studies may either have chosen not to respond to the survey, abandoned their education program or left the country.

Factors affecting academic performance

No single factor, among the choices offered, emerged as a dominant factor affecting academic performance. Adapting to a colder climate and adjusting to a new academic structure were the top two reasons, each accounting for about one-third of responses as factors affecting their performance. Difficulty in finding accommodation affected 28% of students. One in five was affected by difficulty in making friends. Delay in study permit approval and low-quality academic material and resources were cited by 23% as affecting their performance. Among the factors that are likely to have positive effects on academic performance, quality of teaching, clearly communicated academic requirements, student cooperation, and valuable class discussion each were chosen by 26% of the respondents.

Adapting to colder climate	32%

Adjusting to the academic structure of a foreign university	31%
Difficulty finding accommodation	28%
High quality teaching	26%
Clearly communicated academic requirements	26%
Cooperation received from other international students	26%
Valuable academic discussions in the classroom	26%
High quality academic materials and resources	22%
Difficulty making friends	20%
High quality library and IT resources	19%
Cooperation received from domestic students	17%
Low quality teaching	16%
None of the above	13%
Delay in study permit approval	12%
Low quality academic materials and resources	11%
Other (please specify:)	6%
Low quality library and IT resources	5%
Financial challenges	1%
Health issues	1%

Sample size: 3,584. *Respondents were asked: What factors you think impacted your academic performance?*

POST GRADUATION EMPLOYMENT EXPERIENCE

Despite having studied in Canada, international students have cultural and language barriers as well as immigration needs that add challenges to their job search.

Among those who have finished their education (2,297), 64% found their first job in the same province where they studied. A quarter of them did not. Nearly 12% were unemployed. This finding coincides with a Conference Board of Canada study conducted in 2022 which showed that no less than 60% of international graduates who decided to remain in Canada when their first study permit expired, remained in the province where they had studied. Retention rates in Nova Scotia and Newfoundland and Labrador were between 70% and 80%. In Prince Edward Island and New Brunswick, retention rates were 60% to 70%. [14]

Yes	64%

[14] Conference Board of Canada. 2022. After School: Keeping international students in-province.

No	24%
Not applicable	12%

Sample size: 2,297. *Those who have finished their education, are not on study permit and living in Canada were asked: Did you find your first job in the same province where you studied?*

The Conference Board of Canada study believes that a post-secondary education system that aligns skill development with local labour market needs will aid retention of international students, as would continually strong provincial funding for these institutions because it would help them continue to provide high-quality education to students.

Dedicating a larger proportion of PNP slots to international students and improving the support provided through settlement services to international students could also persuade them to remain in the provinces where they pursue their education. Recruiting experienced and settled international students in support of these efforts could help.

Over half of international students surveyed were working in their field of study after graduation.

Yes	55%
No	38%
Not applicable	7%

Sample size: 2,297. *Those who have finished their education, are not on study permit and living in Canada were asked: Are you currently working in your field of study?*

A 2010 study which analyzed the 2006 Survey of Labour and Income Dynamics indicated that 23% of the workers aged 25 to 54 (immigrants and native-born) did not think there was any relationship at all between their job and education (Yuen, 2010).[15] The higher percentage (38%) found for international students in the current survey suggests a very small percentage of domestic students feel a mismatch of their job and education.

The above finding of this survey also corroborates with a 2016 paper that found a significant and persistent poor matching quality for foreign-educated immigrants but not for those who were educated in Canada and other English-speaking countries.[16]

After studies, two-thirds of former study permit holders were permanent employees at the time of survey, 17% were temporary or contractual employees while 12% were unemployed.

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[15] J. Yuen. 2010. Job-education match and mismatch: wage differentials. Perspectives (Statistics Canada — Catalogue no. 75-001-X, August).

[16] Aydede, Y., Dar, A. The cost of immigrants' occupational mismatch and the effectiveness of postarrival policies in Canada. IZA J Migration 5, 9 (2016). https://doi.org/10.1186/s40176-016-0057-z.

Permanent employee	66%
Temporary employee/Contractual employment	17%
Self-employed	2%
Unemployed, looking for a job	12%
Student	1%
Other (please specify:)	2%

Sample size: 2,297. *Those who have finished their education, are not on study permit and living in Canada were asked: Which of the following describes your current employment status?*

After finishing their education, 40% took less than a month to find a job and 22% took 1-3 months. About 28% took longer to find a job or were still unemployed at the time of survey.

Less than a month	40%
Between 1-3 months	22%
Between 3-6 months	15%
Between 6-12 months	8%
More than 12 months	5%
Still searching for a job	11%

Sample size: 2,297. Those who have finished their education, are not on study permit and living in Canada were asked: How long did it take you to find your first job after completion of study?

Under its latest funding agreement with universities for the 2024-25 academic year, the Nova Scotia government requires institutions to develop international student sustainability plans outlining how these students will be recruited, housed and connected to the labour market. This agreement recognizes the importance the institutions should place on putting more resources into their career services offices to enhance their placement efforts. Variations in employability by country of origin should also be investigated.

The survey data reveal that among those employed, 83% found their employers to be supportive and flexible while 14% found them to be strict and rigid.

Supportive and flexible	83%
Strict and rigid	14%
Other (please specify:)	3%

Sample size: 2,133. Those who have finished their education, are not on study permit, living in Canada, not still searching for first job and not unemployed were asked: How was your employer's attitude towards you when you began your first job with them?

International students are mostly a racialized population. Differential treatment by employers based on race, can have a demotivating effect on them. The current survey revealed that 17% felt employer discrimination or unfair treatment by their employer.

Yes	17%
No	83%

Sample size: 2,133. *Those who have finished their education, are not on study permit, living in Canada, not still searching for first job and not unemployed were asked: Did you feel employer discrimination or were treated unfairly by your employer?*

The result that only a small percentage felt discrimination should be viewed in the light of a new Statistics Canada report.[17] It investigated how Canadians viewed their prospects for career advancement. Responses varied among racialized populations with 86% of Japanese and 79% of Filipino employees agreeing that their main job offered good prospects for career advancement. These percentages were higher than for non-racialized and non-indigenous populations (67.7% and 59.3%, respectively). At the same time, however, fewer West Asians (59.3%) and Latin Americans (58.9%) employees agreed that they had good prospects.

Given a choice, 70% of the respondents would like to stay in the province where they studied. This outcome is a positive news for immigrant-retention initiatives and policies. A higher international student population can result in future immigrants who are likely to stay in the region.

Yes	70%
No	12%
Uncertain	18%

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[17] Statistics Canada. 2024. Assessing career prospects: Insights into Canadians' perceptions of job advancement. (https://www.statcan.gc.ca/o1/en/plus/6296-assessing-career-prospects-insights-canadians-perceptions-job-advancement)

Sample size: 3,584. *Respondents were asked: Given a choice, would you like to have the opportunity to stay in the province where you studied?*

When asked about their preferred province upon graduation, Nova Scotia was ranked among the top three and top five provinces by 60% and 80% of the respondents respectively, followed by New Brunswick, Ontario, Alberta and British Columbia.

Ranking:	First	Second	Third	Top 3	Top 5
Nova Scotia	32%	22%	18%	60%	81%
New Brunswick	16%	18%	18%	56%	77%
Ontario	15%	16%	17%	45%	74%
Alberta	11%	16%	11%	43%	73%
British Columbia	10%	10%	10%	34%	53%
Newfoundland & Labrador	7%	9%	8%	23%	47%
Quebec	4%	4%	6%	14%	29%
Prince Edward Island	4%	3%	5%	14%	25%
Manitoba	0%	2%	3%	5%	21%
Northwest Territories	0%	1%	2%	3%	11%
Saskatchewan	0%	0%	1%	1%	3%
Yukon	0%	0%	0%	1%	3%
Nunavut	0%	0%	0%	1%	2%

Sample size: 3,584. *Respondents were asked: Given a choice, where would you have preferred to stay upon graduating from the program?*

Survey respondents were asked to explain what would influence them the most to stay in Atlantic Canada. Economic factors, including employment and career opportunities, were cited by one-third of respondents; and cost of living was chosen by one-fifth of the respondents. Non-economic factors were chosen by 82% of respondents, one-fifth of which included community and social connections. Other non-economic responses were distributed thinly across several factors. Hence, it is important to note that while economics plays an important role in retention, non-economic factors should not be ignored.

Employment and Career Opportunities	34%
Community and Social Connections	22%
Cost of Living	20%

Quality of Life	12%
Immigration and Residency Pathways	8%
Natural Beauty and Outdoor Lifestyle	8%
Lifestyle and Cultural Richness	8%
Weather and Climate Preferences	7%
Miscellaneous / Uncategorized	5%
Education and Academic Opportunities	5%
Concerns About Economic and Infrastructure Development	4%
Don't know / No answer	3%

Sample size: 3,584. *Respondents were asked (in a descriptive question): What would influence you the most to stay in Atlantic Canada?*

What affects the chance that an international student will stay in the province of graduation?

The introduction to this report noted that one of the goals of provincial initiatives to attract international students is to fill the demand for skilled workers by overcoming the barrier of credential recognition new permanent residents face, lacking Canadian academic credentials. Microdata collected in the present survey help answer the question as to what factors affect the chance that a student will stay in the Atlantic province where they obtained their educational credentials. A probit analysis was conducted to consider the impact of various possible factors affecting this outcome. Results of this estimation are presented in Appendix 4. Based on these results, following conclusions can be drawn.

An average international student's chance of staying in their province of study upon graduation
- is higher by
  - 24.7% for males than for females;[18]
- is improved by:
  - 8.1% if they feel cultural acceptance in their province of study[19]; and

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[18] This result could be due to: 1) cultural reasons among students coming from certain countries because of which women's mobility decision may be dependent on the male head of the family, and 2) a possible combined negative impact of gender and place of birth on immigrant women's motivation to participate actively in the labor market. Beach and Worswick (1993) found that this effect was quite marked on earning of highly educated immigrant women. Beech, C. and C. Worswick. 1993. Is there a Double-Negative Effect on the Earnings of Immigrant Women? Canadian Public Policy 19(1): 36-53.

- - 0.5% if they were able to make friends during study
  - is lowered by:
    - 19% if they feel mentally stressed due to financial concerns;
    - 14.4% due to accommodation experiences[20]
  - is:
    - the same in the three Maritime Provinces as it is in Newfoundland and Labrador[21]
    - unaffected by their interactions with domestic students, faculty and staff and general community.[22]

CONCLUSIONS AND RECOMMENDATIONS

The objective of this research was to survey the experiences of international students with respect to immigration; their choice of Atlantic Canada as a place of study; choice of academic institution; and academic, social, cultural and employment experiences. The information obtained is important for institutional strategies and regional policies to attract and retain international students who are viewed as a potential pool of future talent needed in Atlantic Canada and are also important source of revenue for colleges and universities in the region. Results obtained from the survey are also generalizable for Canada.

The survey identified six top source countries of international students in Atlantic Canada to be India, Nigeria, China, Bangladesh, Philippines and Cameroon. While results are presented for students from all countries, these six are considered for intercountry comparisons.

Overall, about a quarter of international students encounter delays in their studies due to processing delays of their visas. As data in Appendix 1 show, students from Cameroon and China encounter longer visa delays. These variations may be attributed to varying amounts of Canadian visa processing resources across countries relative to the number of applications they receive (Table A1.1.1)

A quarter of those who experienced student visa application process of other countries found Canadian application process to be more complex and stressful.

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[19] Cultural acceptance means understanding of diverse cultural practices in the mainstream population. This can be a source of retaining newcomers of different cultural origin.

[20] For international students, their period of study in Canada is also a period of their adjustment to the new way of life including staying away from family and friends, new social and cultural climate. Any negative experiences during this period can have long-term scarring effect influencing their desire to stay in the host region.

[21] Atlantic provinces provide almost similar economic opportunities and cultural experiences and hence locating in any single province may not affect retention.

[22] This result is contrary to expectation and needs further investigation to pursue in a future study.

Recommendation: Given that Atlantic Canada receives fewer international students than rest of Canada, and that it strives to attract more, visa delays and complexity of process should be addressed at the policy level. An exit survey at the time of completion of the application process could provide input necessary to address complexity of applications.

Most students learn about their institution through family and friends. When analyzing data for the top six countries, it was found that in finding an institution, the use of social media and recruitment agencies varies across countries (Table A1.1.2 in Appendix 1).

Recommendation*:* To reach out to potential international students, educational institutions should combine their current third-party recruitment efforts, especially the one through agents, with the engagement of alumni networks. Country-specific social media campaigns should also be considered.

On December 17, 2023, the federal government announced some changes to the requirements for international students to come to Canada. One such requirement is for them to show they have access to $20,635 instead of the $10,000 requirement that has been in place for two decades, in addition to paying for travel and tuition. In Nova Scotia, the provincial government has put an additional requirement on post-secondary institution to increase the tuition fee of international students by a minimum of 9% in the 2024-25 academic year. Colleges and universities have shown concerns that these requirements will have an adverse effect on international student enrolments.

This study has concluded that in their choice of an institution in Atlantic Canada, financial factors such as cost of living and tuition fee are the top-most factors for international students. However, they also consider other factors such as academic reputation, value of qualification from Canada, flexibility and duration of programs and the reputation of qualifications from the institution they attended. This finding is instructive for academic institutions in Atlantic Canada. They can mitigate some of the effects of higher cost of study borne by international students by paying attention to improving their experiences with the factors that attract them. A recent U.K. study found that students' satisfaction with some factors in choosing an institution reduces the adverse effects associated with increases in tuition fees.[23] Under this approach, while students as consumers are concerned about the price, they also worry about the quality of other factors which matters when they enter the labour market to reap the benefit of their educational investment.

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[23] Khan, Jashim and Jane Hemsley-Brown. 2024. "Student satisfaction: the role of expectations in mitigating the pain of paying fees." Journal of Marketing for Higher Education Vol 34 (1): 178-200. The choice factors considered by these authors included social life on campus, up-to-date courses, a high reputation, and high service quality.

Recommendation: In the light of expected increase in cost of education to international students, institutions should devote more resources in meeting student expectations of the non-financial factors that attract them towards an institution. Some of these factors include social life on campus, up-to-date courses, a high reputation, and high service quality.

Less than a quarter were satisfied with the information they received prior to arrival in Canada, although they were satisfied with the overall environment of study or quality of education. Concerns about accommodation and cultural barriers when interacting with domestic students and general community were also expressed.

Recommendation*:* It is important for the institutions to provide complete information about these challenges prior to their arrival to mitigate any disappointments that can affect academic performance.

Although generally international students find it easy to interact with domestic students, they find it easier to make friends with fellow international students, largely due to cultural and language barriers. This leads many to feel isolated on campus.

Recommendation*:* Cultural and language barriers that prevent interactions between international and domestic students should be addressed by faculty by encouraging classroom interactions. One way could be to encourage inclusivity in students' group formation for assignments. International students' centres could also work collaboratively with the faculty. Faculty and staff can be provided knowledge of different cultural practices through formal training.

Access to essential services available on campus, such as mental health support, was also low. This finding could be attributed to cultural factors as discussed in the report.

Recommendation: Given that international students are entering a strange living and educational environment, institutions should improve the quality of, and access to, campus settlement services and counselling. They should be accommodative of the unique cultural characteristics of international students who may want to access their mental health support and other services.

One major finding of the study is that a large percentage of students want to stay in the province where they pursued their studies. The probability of their staying in their province of study is is affected by their cultural acceptance, housing experience during study and financial stress during study. These findings have important implications for policies aimed at their retention after studies.

Recommendation: Dedicating a larger proportion of PNP slots to international students and improving the support provided through settlement services to them, off campus, could further persuade them to remain in the provinces where they pursue their education. Provinces should consider allocating more PNP slots for international students. To widen their social experience which is essential for their successful integration in Canadian society, institutions should enhance efforts to introduce international students to wider segments of Canadian society, including domestic student groups and off-campus.

The analysis presented in this report pertains to the overall population of international students. For the benefit of readers, some data are disaggregated for countries of origin, institution types and pre- and post-Covid19 period. This disaggregation and the corresponding analyses are presented in Appendix 1 that follows.

Appendix 1:

In this Appendix, some survey data are analyzed for:

- Top six source countries of international students
- Pre- and post-Covid-19 period
- Types of institutions (Colleges and universities)

A1.1: Classifying some data by top six source countries

This Appendix includes classification of some data presented in the main report by the top six source countries of international students in Atlantic Canada. These are organized according to the rank of each country in the top six list (India, 1; Nigeria, 2; China, 3; Bangladesh, 4; Philippines, 5; Cameroon, 6).

About 65% of study permit holders from Bangladesh and 60% of those from India and Philippines waited three months or less to get their applications processed while this was true for only 43% of those from Nigeria, 47% from Cameroon and 56% from China (Table A1.1.1). These variations may be attributed to varying amounts of Canadian visa processing resources across countries.

Table A1.1.1: Duration of visa processing by country of citizenship

Duration	India	Nigeria	China	Bangladesh	Philippines	Cameroon
Less than a month	11.7%	3.8%	7.5%	11.4%	10.2%	6.3%
1-3 months	50.5%	38.4%	49.6%	53.1%	54.1%	36.5%
4-6 months	24.3%	36.4%	24.6%	24.0%	21.7%	24.0%
More than 6 months, but less than a year	9.5%	14.7%	6.3%	7.4%	10.8%	21.9%
A year or more	4.0%	6.7%	9.7%	4.0%	3.2%	10.4%

Family and friends stand out as the topmost information source for students about Atlantic Canada as a place to study although in some countries, such as China and India, there is a wider distribution of information sources. Recruitment agencies are more important in China and India while social media is more important in Bangladesh and Philippines. For Chinese, a representative from the host institution plays a greater role than in other countries (Table A1.1.2). These findings suggest a more country specific approach to promotion of institutions.

Table A1.1.2: Finding out about Atlantic Canada as a place to study

Source of information	India	Nigeria	China	Bangladesh	Philippines	Cameroon
Family or friend	44.4%	61.6%	34.0%	54.3%	47.9%	91.5%
Social media	16.7%	18.7%	14.6%	23.1%	31.3%	16.1%
Other online marketing	5.3%	5.3%	9.6%	7.0%	7.1%	0.0%
A university or college representative	12.4%	7.2%	18.0%	15.2%	6.3%	2.0%
My former school's education advisor	2.9%	3.1%	16.5%	3.0%	2.5%	1.3%
An event held in my home country	4.1%	2.0%	5.7%	7.7%	5.5%	1.1%
Recruitment agency in my home country/Education fair	25.5%	7.7%	20.8%	16.8%	20.4%	4.7%
Permanent resident program information	6.2%	3.4%	12.5%	4.1%	16.2%	1.7%
Internet search	8.6%	9.5%	3.5%	11.9%	6.9%	1.7%

Only about 55% of students from China worked for pay during their studies while this was true for 90% or more of students from other countries. (Table A1.1.3)

Table A1.1.3:   Employment status while studying

Employment status	India	Nigeria	China	Bangladesh	Philippines	Cameroon
Part-Time	77.7%	75.7%	48.7%	80.1%	87.9%	81.3%
Full-Time	13.6%	13.2%	5.2%	13.6%	5.7%	8.3%
Unpaid work (Internship, volunteer, etc.)	2.1%	2.9%	13.5%	1.1%	0.00%	0.00%
Did not work while studying	6.5%	8.2%	32.6%	5.1%	6.4%	10.4%

Chinese students are more likely than others to report their insufficient work experience or not having enough time to work due to study pressures as reasons for not working during studies. (Table A1.1.4).

Table A1.1.4: Reason for not working while studying

Reason	India	Nigeria	China	Bangladesh	Philippines	Cameroon
Insufficient work experience	12.5%	4.6%	26.9%	28.8%	0.00%	26.4%
Could not find appropriate jobs to apply to	39.8%	46.1%	33.8%	57.0%	36.1%	83.1%
Not enough time to work due to the immense pressure of studies	59.9%	31.7%	72.8%	81.7%	88.7%	26.4%
Struggle to describe skills and abilities to the employers	3.3%	0.0%	2.2%	28.8%	22.2%	26.4%
Most employers did not recognize my 20-hour part-time work eligibility	12.0%	33.1%	4.9%	47.1%	4.9%	30.3%
Not interested in searching for jobs	8.9%	14.9%	17.1%	0.00%	25.5%	0.0%
I did not know I was eligible for a job	3.3%	0.00%	16.3%	0.00%	0.00%	0.00%

More than 30% from Bangladesh, China and India reported social isolation on campus, and about a quarter from Cameroon and Nigeria expressed the same. Only 10% of students from Philippines reported social isolation (Table A1.1.5).

Table A1.1.5: Feeling social isolation on campus

	India	Nigeria	China	Bangladesh	Philippines	Cameroon
Felt social isolation	32.7%	29.6%	36.0%	38.6%	12.1%	26.0%
Did not feel social isolation	67.3%	70.4%	64.0%	61.4%	87.9%	74.0%

Cultural and language disconnection was chosen by 44% of Chinese and 39% of Philippines students as their reason for feeling social isolation while this reason was given by less than 20% of the rest. Social dynamics and exclusion were the least concern among Chinese and Philippines students while it was a dominant reason among others, followed by personal and interpersonal challenges. Chinese students reported the least incidence of financial concerns and mental health and well-being as reasons for their social isolation (Table A1.1.6).

Table A1.1.6: Reasons for social isolation on campus

Reason for social isolation	India	Nigeria	China	Bangladesh	Philippines	Cameroon
Cultural and Language Disconnection	11.7%	12.9%	44.3%	14.7%	33.3%	8.7%
Online Learning and Pandemic Restrictions	8.4%	6.9%	6.2%	2.9%	5.6%	4.3%
Social Dynamics and Exclusion	38.6%	34.7%	29.9%	38.2%	27.8%	52.2%
Personal and Interpersonal Challenges	16.2%	17.8%	7.2%	17.6%	16.7%	8.7%
Financial and Logistical Barriers	5.8%	12.9%	5.2%	4.4%	0.0%	8.7%
Mental Health and Well-being	10.1%	9.9%	3.1%	13.2%	16.7%	8.7%
Don't know / No answer	5.2%	2.0%	2.1%	2.9%	0.0%	4.3%
Miscellaneous / Uncategorized	3.9%	3.0%	2.1%	5.9%	0.0%	4.3%

Employment counselling was accessed by the highest percentage of students in all six countries, followed by academic counselling. This finding is reversed from the finding reported for the overall population in the main report. Identical percentages of Bangladeshi students accessed employment and academic counseling. Except for students from Cameroon and China, more than a quarter of from other four countries did not access any settlement services. (Table A1.1.7)

Table A1.1.7: Campus settlement services accessed

Service accessed	India	Nigeria	China	Bangladesh	Philippines	Cameroon
Employment counselling	34.5%	40.3%	45.4%	32.6%	30.5%	65.5%
Academic counselling	43.7%	48.1%	55.2%	57.4%	35.0%	64.9%
Language training	8.1%	5.4%	40.6%	9.4%	8.2%	39.9%
Entrepreneurship support	8.7%	11.1%	5.8%	11.2%	6.8%	18.7%
Mental health support	19.6%	19.6%	16.5%	27.8%	17.5%	47.2%
Writing skills	29.7%	32.8%	53.0%	28.7%	13.9%	22.4%
Immigration services	0.3%	0.6%	1.9%	0.00%	2.9%	0.0%
Other (please specify:)	1.2%	1.3%	2.2%	0.00%	0.3%	0.7%
Did not access any service	33.0%	22.5%	10.6%	27.1%	44.0%	9.8%

The highest percentage of students from Nigeria (69%) achieved excellent grades (A- to A+) while the lowest from Cameroon were able to achieve this result. Percentage of Chinese students were also below the overall average (54% versus 56%) (Table A1.1.8).

Table A1.1.8: Cumulative Grade Point Average (CGPA) of graduates

CGPA	India	Nigeria	China	Bangladesh	Philippines	Cameroon
A- to A+ (Excellent)	58.3%	62.7%	52.9%	58.3%	59.6%	34.7%
B- to B+ (Good)	38.3%	30.4%	40.4%	34.7%	35.8%	55.1%
C- to C+ (Satisfactory)	3.2%	7.0%	5.8%	6.9%	4.6%	8.2%
F (Failure or Withdrawal)	0.2%	0.00%	0.9%	0.00%	0.00%	2.0%

About 88% of former study permit holders from Philippines were permanent employees and only
0.67% were unemployed. The lowest percentage of permanent employees was among Chinese
students, at only 60%. They also had the highest percentage of unemployed, about 15%, matched
by the Nigerians. Unemployment percentages exceeded 10% for all six top source countries.
(Table A1.1.9).

Table A1.1.9: Current employment status of graduates

Employment status	India	Nigeria	China	Bangladesh	Philippines	Cameroon
Permanent employee	72.6%	62.1%	59.8%	62.1%	88.3%	65.3%
Temporary employee/Contractual employment	12.2%	18.6%	15.3%	21.2%	8.7%	20.4%
Self-employed	1.5%	0.0%	3.8%	0.00%	1.0%	0.00%
Unemployed, looking for a job	11.7%	15.9%	17.7%	13.6%	0.00%	12.2%
Student	0.4%	0.0%	1.9%	0.0%	0.0%	0.0%
Other (please specify:)	1.6%	3.4%	1.4%	3.0%	1.9%	2.0%

About 69% students from Philippines found a job within a month of completing their study
leading 48% of those from Cameroon, 43% from India, 41% from Nigeria, 37% of Bangladeshis
and only 27% of Chinese students (Table A1.1.10).

Table A1.1.10: Time taken to find the first job after study

Time taken	India	Nigeria	China	Bangladesh	Philippines	Cameroon
Less than a month	41.0%	38.6%	23.8%	37.3%	68.3%	46.9%
Between 1-3 months	21.1%	28.3%	30.0%	14.9%	18.3%	28.6%
Between 3-6 months	15.8%	9.0%	17.1%	10.4%	5.8%	14.3%
Between 6-12 months	7.8%	9.0%	13.3%	10.4%	2.9%	4.1%
More than 12 months	4.7%	2.1%	3.8%	7.5%	1.9%	2.0%
Still searching for a job	9.5%	13.1%	11.9%	19.4%	2.9%	4.1%

More than 80% from each of the top six countries found their employer's attitude to be supportive and flexible towards them when in their first job. However, one-fifth of Bangladeshis found them to be strict and rigid (Table A1.1.11).

Table A1.1.11: Employer's attitude on the first job after graduation

Employer's attitude	India	Nigeria	China	Bangladesh	Philippines	Cameroon
Supportive and flexible	82.8%	88.3%	80.5%	79.3%	93.3%	83.0%
Strict and rigid	16.0%	7.8%	15.8%	20.7%	3.8%	12.8%
Other (please specify:)	1.2%	3.9%	3.7%	0.00%	2.9%	4.3%

More than 70% from all six top source countries did not feel any discrimination or unfair treatment by their employers. However, this percentage varies across countries. About one-fifth or more students from Bangladesh, Cameroon and China felt they were unfairly treated by their employers (Table A1.1.12).

Table A1.1.12: Felt discrimination/unfair treatment by employer on first job after graduation

Felt discrimination	India	Nigeria	China	Bangladesh	Philippines	Cameroon
Yes	17.7%	13.3%	18.4%	29.3%	11.7%	21.7%
No	82.3%	86.7%	81.6%	70.7%	88.3%	78.3%

A1.2: Classifying some data for pre- and post-Covid 19 period

Before the outbreak of Covid pandemic, about 31 percent students had not accessed any campus settlement service. After the outbreak, this percentage dropped to about 28 percent, indicating that there was a moderate rise (3 percent) in the usage of campus settlement services by international students. Demand for mental health support rose the most – by about 8 percent. Other changes were minor to moderate.

Table A1.2.1: Campus Settlement Services Accessed by Students (Before and after Covid outbreak)

Service accessed	Before Covid outbreak*	After Covid outbreak**
Employment counselling	36.6%	37.5%
Academic counselling	42.6%	46.1%
Language training	15.5%	13.2%
Entrepreneurship support	9.3%	9.9%
Mental health support	16.8%	24.5%
Writing skills	30.0%	27.1%
Immigration services	0.5%	0.9%
Other (please specify:)	1.1%	1.3%
Did not access any service	30.8%	27.8%

*For those who graduated before 2020. **For those who graduated in 2020 and after.

A1.3: Classifying some data by institution type:

Distribution of campus services accessed by institution type shows a higher percentage of college students, more than one-third, did not use campus settlement services than do university students. University students are more likely to use academic counselling and writing skills support. Employment counselling, mental health support and immigration services were used by almost similar percentages across the two institution types (Table A1.3.1).

Table A1.3.1: Campus Services Accessed by Institution type*:

Service Accessed	College	University
Employment counselling	39.4%	39.9%
Academic counselling	35.1%	45.3%
Language training	17.3%	12.2%
Entrepreneurship support	9.1%	9.3%
Mental health support	22.8%	22.4%
Writing skills	17.9%	31.5%
Immigration services	1.1%	1.1%
Other services	1.7%	1.1%
Did not access any	36.5	25.4%

*Less than a percentage of the overall target population had graduated from an Academy and not included in the data reported in this Table. (None were currently pursuing studies).

The level of satisfaction with each service was higher for college students than the university students.

Table A1.3.2: Satisfaction with Campus Settlement Services by Institution type*

Service	College		University	
	Satisfied**	Dissatisfied***	Satisfied**	Dissatisfied***
Employment counselling	51.3%	8.1%	40.6%	16.0%
Academic counselling	54.1%	4.7%	51.7%	10.2%
Language training	36.4%	4.9%	27.3%	5.2%
Entrepreneurship support	29.7%	5.6%	21.0%	8.3%
Mental health support	39.7%	6.9%	32.3%	9.7%
Writing skills	42.4%	3.3%	40.4%	6.5%
Other services	30.5%	2.0%	22.9%	3.9%

*Less than a percentage of the overall target population had graduated from an Academy and not included in the data reported in this Table. (None were currently pursuing studies).
**Includes those who were satisfied to extremely satisfied with the services offered.
***Includes those who were dissatisfied to extremely dissatisfied with the services offered.

Appendix 2: Technical Appendix

A 2.1: Survey methodology:

An online survey questionnaire was designed with input obtained from various stakeholders and business operators. The services of a survey company were contracted for survey design and implementation. The survey was mostly quantitative but also allowed some qualitative responses. A focus group with international students was also held. The survey population included all international students who arrived in Atlantic Canada during 2017-2023 with intention to pursue their education from a post-secondary institution, are currently studying at a post-secondary institution in Atlantic Canada or have finished their studies and currently living in the region or have left to live in a non-Atlantic Canadian province. Immigration, Refugee and Citizenship (IRCC) provided access to the survey population under a formal agreement reached between Saint Mary's University (SMU) and IRCC. Before launching the survey, clearance was obtained from SMU's Research Ethics Board. The SMU Research Ethics Board reviewed and provided clearance as determined by the federal *Tri-Council Policy Statement: Ethical Conduct for Research Involving Humans, (TCPS 2, 2022).*

A description of survey population
The online survey was administered nationwide between December 13, 2023, and February 4, 2024. Survey responses were compiled as microdata, readable in SPSSX format. They are analyzed in this report using descriptive tools of analysis. Some preliminary results were presented in a public outreach event held by ARGEIAD on March 8, 2024, on SMU's campus and on April 11, 2024, at a meeting of Atlantic university presidents in St. John's held under the auspices of Association of Atlantic Universities (AAU). All results were subject to two-sided test at 0.05 level of significance.

Over the period 2017-2023, a total of 68,825 international students entered the post-secondary institutions in Atlantic Canada. A random sample of 41,001 of them were contacted by IRCC using the electronic mail addresses they have on file. Of these emails, 1,046 were undelivered and 8 were duplicates which left a total of 40,947 valid addresses. Three reminders were sent. Selected characteristics of the total population, including the province they entered, gender, age distribution, spoken language (French, non-French), and top seven countries of citizenship are provided in Table 1.

Table 1: Selected characteristics of international students entering Atlantic Canada (2017-2023)					
	Population N= 68,825 (1)	% (2)	Selected Sample N= 40,947 (3)	% (4)	Difference (2-3) % pts (5)
New Brunswick	17470	25.38%	10172	24.84%	0.542
Newfoundland & Labrador	10005	14.54%	6095	14.89%	0.347
Nova Scotia	35980	52.28%	21508	52.53%	0.248
Prince Edward Island	5370	7.80%	3172	7.75%	0.053
Female	29200	42.43%	17300	42.25%	0.178
Male	39625	57.57%	23647	57.75%	0.178
18-24	25975	37.74%	15272	37.30%	0.445
25-34	34240	49.75%	20491	50.04%	0.297
35+	8610	12.51%	5184	12.66%	0.148
French speaking	9560	13.89%	5740	14.02%	0.131
Non- French speaking	59270	86.11%	35207	85.98%	0.131
Cameroon, Federal Republic of	1170	1.70%	689	1.68%	0.014
Algeria	1070	1.56%	645	1.58%	0.018
Nigeria	4845	7.04%	2930	7.16%	0.119
Iran	1580	2.30%	976	2.38%	0.085
India	18230	26.49%	11255	27.49%	1.000
China, People's Republic of	10620	15.43%	5832	14.24%	1.189
Bahama Islands, The	1435	2.08%	874	2.13%	0.049
Bangladesh	2915	4.23%	1832	4.47%	0.240
Other	26960	39.17%	15914	38.86%	0.308

Source: IRCC.

As can be seen, percentage variation according to characteristics between the two groups is in the range of 0.014 to 1.189 percentage points. A test of significance shows this difference not to be statistically significantly different from zero with 95% confidence.[24]

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[24] The test of significance is performed by calculating the t-statistic using the formula: $t = (X - \bar{X})/\sigma$ Where X is the calculated value of mean difference in the last column, found to be 0.286, $\bar{X}$ is its hypothesized value and σ is the standard deviation. This t-value is compared to its critical value of 1.96 at 0.05 level of significance.

Sample weights.

To represent the entire target population of 68,825 international students, the sample was weighted to avoid any sample representation bias. The research team was mindful of adequate representation in terms of gender, age and province of study. Gender distribution in the sample was close enough to the population and was not weighted. Hence, a two-dimensional weight variable was created based on age and province of study to bring these two variables in line with population. To do this, we applied the province weight and got a crosstab of age and then weighted age , then multiplied the two weights together to get the final weight.

Margin of error

A total of 3,584 valid responses were received (8.75% of the 40,947 who were contacted successfully by IRCC).[25]
A margin of error calculation shows all results to be valid within the interval of ± 1.59% with 95% confidence. All percentages reported in the analyses are based on the weighted sample.

A2.2: Coding of survey responses

There were two types of coding for the survey results. **Open-ended questions** and **closed-ended questions with "other (specify)" as an option** in the list of possible answers provided.
Open-ended questions

An open-ended question to be coded follows the steps below.

a. Generate a codebook based on the range of answers provided. This is about creating categories to classify the different answers. The number of categories depends on the variety of responses given.
b. Assign responses to categories. Here, we assign each response to the created categories. An other/miscellaneous category is usually added for responses that do not fall in the defined categories.
c. Count. In this last phase, we count the number of responses in each category to determine the percentage of responses falling within a specific category.

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[25] In all, 3,609 responses were received from which 25 provided names of institutions that were not in Atlantic Canada. These may be students who had initially intended to attend an institution in Atlantic Canada but later on decided not to do so. Their data are not included in the analysis.

Closed-ended question with "other (specify)"

These questions already have defined categories, so we follow a slightly different process.

   a. Classify answers within pre-existing categories. Many of the answers in the "other" category usually fit within the pre-defined categories. We, therefore, place answers to the categories they belong to.

Code remaining answers. For the remaining answers, we code them as described above to provide further categories within which they belong.

Appendix 3: Some Key Respondent Remarks

Qn Explain if and why you have been satisfied or dissatisfied with the accuracy of the information you received about the post-secondary education and school before joining it.

1 I was dissatisfied when they change the payment dates.

2 I am somehow dissatisfied because there was little to no preparation in regards with accommodations. Students will travel very far away from their families and yet it is expected that they will be responsible for their own lodging. It should be mandatory for schools to require proof of accommodation before they pay tuition fees. Not only will it ensure students to have proper lodging when they arrive, but also help to control overpopulation in a location.

3 Somewhat dissatisfied because the school didn't manage the number of students they could cater for which led to students taking lecturers at the cinema hall. Also the accommodation shortage led to the death of a student involved in a fire accident. Again the school billed for student medical for additional 8 months after I had completed my program and all attempt to get the school make this adjustment were unsuccessful as existing and past student did complain but all fell on deaf ears. I am satisfied with the mode of teaching and also the internship opportunity offered by the school which enable me gain practical knowledge i needed due to slight change in my career path.

4 I was dissatisfied that information regarding job scarcity and housing crisis was not accurately available before joining my university in the Atlantic province which cost me great difficulty in settling in.

Qn What has been your experience in making friends with other students while studying?

1 Très facile avec des gens de mon pays et d'autres nationalité que canadien, absolument impossible avec les Canadiens.

2 easy making friends who don't contact each other after program, which means the relationship is not strong

3 It's easy to communicate with local students but difficult to mingle with them as they all have their own small social circles.
4 In fact, It was very different to find a real and sincere friend group in Canada. People are always friendly but not too closely with each other. I guess it may caused by my culture barrier, or professional reason(Nutrition and diet).

Qn Please explain in a few words what caused isolation.
1 I guess the language and cultural barrier
2 I took some courses that my friends from the study group did not take, and it mostly comprised domestic students graduate level and undergrads. I found it difficult to get study/project partners to discuss with.
3 Comme je le disais, le bon vouloir était de m'intégrer auprès des étudiants Canadien mais le soucis ce qu'il n'acceptait pas ou leurs attitudes n'était pas correct, ce qui fait que dans les soirées jeux ou des rencontres entre étudiants, y a fait des groupes ou divisions qui se faisait.
4 language and culture difference
5 The attitude of domestics towards connectivity that probably influenced the attitudes of international students as well

Qn Please briefly describe your experience with the host family.
1 It was my worst experience ever . I felt like I was a prisoner I live in the basement with no proper ventilation No kitchen I had to go out side of the house to access a fridge that was inside the garage next door
2 A family had offered me a place to stay when i initially didn't got any home to stay. They even offer a place without any pay. Still I'm in touch with them a warm welcoming family and felt more welcoming than i expected
4 Had really bad experience with the landlord. He asked tenants to clean the house look after the furnace also help him in kitchen which took an advantage and he barged into girls room drunken. One day he changed the door lock number we all were standing outside in snow later we called the cops.
5 Was ok Friendly first but things changed when i wanted to cook vegetarian meals. Also overcharged me in the name of accommodation crisis.
6 living in a local home stay was a nightmare. I had informed the leaving day prior four months. However, the landlord took my luggage away saying that I needed to let her know 6 months in advance. I was forced to pay extra 2 months rent fee. I lived there for one year, all payments were required by cash. She never pay the taxes.

Qn   Which of the following settlement services have you accessed at your institution while studying? Select all that apply

1   International center for students on campus and health services
2   Health support, finding a family doctor was difficult. So I used campus doctor while I was pregnant until I was referred to an OBGYN
3   ISANS (Immigrate Services Association of Nova Scotia). Personal speaking, they provide more practical suggestions than any other settlement services my university provided.
4   Services that would connect me to food banks, free clothes, hot meals etc. which was mostly done through the international student center.
5   Immigration- lawyer appointment Accommodation help
6   Doctor on campus.

Qn   Have you experienced mental stress with any of the following during your studies? Select all that apply
1   Processing times for my husband's and daughter's visas. That is the most stressful thing I've ever experienced.
2   Older men approaching me when I was shopping groceries in markets.
3   The currency of home country depreciated so much that the money I had for fees became woefully inadequate
4   Coût d'assurance élevés, obligatoires et redondant avec ma propre assurance qui m'assurait au Canada.
5   Public transportation in Halifax is like it is 1992, very difficult to get around and extremely time consuming to attend to all things one needs to attend during their day, especially while studying and working and trying to have a life outside of those two.
6   Waiting for the work permit after graduation
7   I did not factor in the large cost of textbooks before college attendance. We had classes where even if we could have bought preowned textbooks we were not allowed because there is a key to do activities that made up a significant portion of grades. With courses lasting a single semester having to spend such a huge portion on textbooks for majority of courses was hard.
8   Delays in visitor visa renewal.
9   Changing temporary public policies that negatively affect students who are already here in Canada studying. For example, the non-extension of PGWP past Dec 31st, 2023.
10 Difficulty In Finding an appropriate job which is related to our past experience give us lots of stress and financial breakdown as well as increasing cost of living such as rent, food etc and housing crisis create mental stress
11 Un certain about life . Felt like stuck in desert. Whil don't even know where to seek help

Qn   What factors do you think impacted your academic performance?Select all that apply

1   Family united is greatly help maintain my mental state
2   Group work with people who were not strong accademically
3   I don't live close to school and the buses have specific times that's are not always convenient. I spend soo much time doing nothing in school waiting for a bus.
4   Les attentes éducatives obsolètes, si ce n'est vétuste, qui ne permette en aucun cas un apprentissage concret mais uniquement une théorie du genre m'ont empêché de compléter mes études. Les données réel n'étant pas traité, les textes de cours/loi étant la seule valeur vraie considéré, aucun doute de l'obsolescence des attentes éducative.
5   Medical needs are not fully covered so I spend a portion of the academic year physically unable to perform
6   I experienced to much sexual encounters with men of different cultures.lt was like they was just so comfortable approaching me in a sexual way or even touching me without consent getting to much in my personal space. There was a teacher at my school I was afraid to be alone with in class. That was my big issue while schooling.
7   The professors who were great teachers were let go because they did not have important research or a greater social presence. The ones who were bad teachers were kept because of this and it was impossible to learn from them as they are great researchers not teachers.
8   Attending classes at Cineplex
9   Balancing work and studies in a new country with different climate and social conditions had a big impact. The burden of the financial crisis that arose as a result of becoming an international student was a stress bomb.

Qn   If you plan to pursue further education, how likely are you to attend a post secondary institution...

1   Australia (Sydney), as I experienced it for an internship and the living conidtions, salaries, and amenities are much better
2   If I decide to go for a PhD again it will most likely be back in the United States or in Toronto where the institutions are better funded
3   Too expensive; get more degrees but still can't get a job due to so called entry-level jobs requiring existing experience in the field. Such requirements automatically qualify the job as a Junior position, not an entry-level one, which means 0 years of experience in the field
4   I have moved home to the US to pursue a PhD. I would have loved to stay in Atlantic Canada, but the pay was very bad making it difficult to live and my family lives home in the US
5   Anywhere that actually cares about merit than it does regarding your citizenship

Qn If planning to pursue further education in Atlantic Canada, how likely are you to choose... - An educational institution you already attended
1 I would not like to study in Atlantic Canada. There are no employment opportunities
2 I will likely never start another program with my current learning institution. They promised "classrooms you have never seen before" on their website and online content, but in the end, we are sitting between 4 white walls with a malfunctioning projector. The classroom resembles an average high-school classroom with a few electric outlets built into the desks. I am also afraid that the academic content won't be relevant in my field and that none of the contents covered during class will matter to any of my future employers. Some classes and chapters covered are easily and quite literally a waste of time.
3 Canada has long been known to be a backwards backwater. Less well-known is that it is a slave camp, with all the manner of slave teachings and slave behavior. A truly disappointing and shameful hovel is Canada.
4 L'éducation théorique canadienne n'a de valeur à mes yeux que le nom, la réalité du monde est tout autre et la formation des étudiants est plus que médiocre, en preuve les canadiens avec lesquels j'ai pu travailler après cela.
5 Racist and expensive. Greedy businesses and greedy government with high taxes, low quality of life, zero safety. Horrible infrastructure in for any climate
6 Canada already took all the money I had in my life and did not give me anything in return
7 Unfortunately, it does not matter what Canadain qualifications you have as an international student of a visible minority, as Canadians prefer to hire Canadians for management level positions, which means that the majority of international students can only get entry level positions with most employers in Atlantic Canada. So there is no point in furthering my studies.
8 I decided to study to find a better employment opportunity and to immigrate to Canada with my family but I could not get either of them.
9 It's hard to find a job in the area. You need to have references working inside the organization and if there is references inside the chances are very slim because of competition. And the kind of accommodation that I am getting is below my expectation.

Qn Which of the following best describes your current employment status?
1 I had to leave Canada after my coop was done because I wanted to switch school and I did my student visa extension and I never received it and school was starting
2 Came back to India due to unavailability of suitable employment and not able to get a job from India inspite of having a valid status
3 a company wants to hire me but the work permit is taking long
4 Unemployed and have been waiting for 6 months for work permit application to be approved.

5 odd jobs, not at all related to the academic studies and expertise I had

6 Presently working in a warehouse and also doing a school job. Presently searching for a better job

7 I have left Canada and moved back to Israel where I have been fully employed from the point I came back.

Qn How was your employers' attitude towards you when you began your first job with them?

1 I didnt even get to start work in my field of study (but worked as General labour) because my Post-Graduate Working permit was refused, and I was without Status, due to my error in documents submission online around covid situations. I had to leave Nova Scotia and come to Ontarior to seek legal aid. My status was restored and started working in Ontario.

2 I left my job after 4.5 years, my boss took advantage of the fact I was an immigrant and harrased me to the point of mental health breakdown, whe I got my Permanent residency I was able to leave 2 months later

3 They tried to use me by hostessing permanent residence opportunity.

4 I am female in tech start up. I got sexually harassed by my local male colleagues but I kept it silence

5 Accueillants au début mais après beaucoup de problèmes avec d'incompréhension.

Qn What would influence you the most to stay in Atlantic Canada?

1 Greater opportunities for career advancement that I would not receive in my own country. The cost of living in Canada and whether or not I would be able to comfortably support myself plays a big role in my decision to stay.

2 culture of community in Halifax & nearby territories, the diversity of the Canadian society

3 Getting provincial nomination

4 The serene landscapes, deep-rooted sense of belonging, profound connections with nature, and the opportunity for inner peace and fulfillment could inspire me to stay in Atlantic Canada.Amen

5 Because of my course of study in supply chain and logistics, getting a well-paying job that will enable me to afford my basic amenities without struggling with my mental health is the goal. Finding a well-paying job in New Brunswick is a hassle. Better options for job opportunities with reasonable wages.

6 I started my life from a scratch here, found work and friends. Can't go home because of the war and starting to feel like home here.

7 Atlantic Canada is developing and it gives opportunities to grow and learn more.

8 I don't like NS and never have, It is one of the most racist places in Canada, they are kind on the surface but genuinely give the opportunities to the locals. I have had many

bad and traumatic experiences here, I stayed after studying because I didn't have any other choice and I have no money to move for now

9   The pay here is an embarrassment. How do Finance and Accounting majors not get a salary that is sufficient to live independently with? It's not feasible to live in downtown Halifax, near my office, with my salary unless I have a partner I can share rent with. If that's the life I was going to have, why bother with an education?

10 Upon doing some research on Atlantic Canada, Statistics Canada pointed out that in terms of labour geography, Atlantic Canada has one of the has out migration rates of new international student graduates because of limited decent work opportunities compared to larger provinces like Ontario, Toronto, British Colombia. What influenced me to stay was the fact that I found a job in my field upon a month after completing my major research paper in December 2019 (working as Policy Officer at the Inter Council Network, Atlantic Council for International Cooperation from Jan to October 2020).

11 The low crime rates does contribute well in my decision to stay at the Atlantic Canada, it is less and less now a days to see a place where the crime rate is relatively low. Apart from this, the friendly people and laidback way of living is in existence

12 Pouvoir trouver du travail qui correspond à notre niveau de scolarité et ne pas avoir à faire une autre job que celui pour lequel on a étudié car pas de travaille

Qn   Which of the following best describes your status in Canada?

1   I applied for study permit extension five months ago and still waiting for it.
2   First work permit application refused,on an implied status waiting for response on my second work permit application.
3   Didn't approve my application since my education is not matching with job designation.
4   Je suis toujours en attente de mon permis de travail ça fait plus d'un an

Qn   Which of the Immigration stream do you intend to/did you apply for?Select all that apply
1   I like to apply through my work but I applied over 250 job positions and yet nothing!
2   Returned home during Covid and had difficulties returning to Canada. When I eventually could , we had a family crisis and I stayed. My work permit eventually expired.
3   If the living cost and all other odds doesn't subside maybe I will move back to my home country or any other country where the housing crisis is not like in Canada .
4   I am still searching and trying to figure out for the best way to become a PR . Please help me out if you have a chance to contact me. :)
5   My PGWP was wasted due to COVID, so I pursued a PhD. PGWP can be applied once per lifetime, so I do not have the chance to live in Canada after completing my PhD. This rule needs to be revised!

6   If I do not get a job in the health sector, I am planning to leave Canada.

Qn   Please explain why you do not intend to or did not apply for permanent residency status.
 1   Canada itself has become a dystopian nightmare with a housing/ healthcare crisis and rapidly declining quality of life.
 2   I left the countery and did my PhD in New Zealand. After having a horrific experience with my supervisors and an enabling institution that allowed such terrible behavior I decided to leave and I'm glad I did I have completed my PhD and have a great job in NZ!
 3   Le Canada Atlantique ne m'intéressait pas et ne permettait pas d'évoluer à mon niveau, il faudrait beaucoup trop d'argent pour me faire rester.
 4   I've been deceive by immigration and treated unfairly

Qn   Considering all your experience as an international student in Atlantic Canada, is there anything else you would like to add that is not covered in this questionnaire?
 1   The immigration process is very stressful, it is expensive, and obtaining Canadian certification does not mean we get employment with it despite government claims.
 2   Challenges of international students in accessing health care even with private/ school insurance. Almost all health facilities I have visited have asked me to pay upfront and claim back from the insurance my school provides. I think this is highly unreasonable considering the high cost of medical services in this country. It provides additional burdens to us as students given that our tuition fees are already exerburant. Also, it's rather unfair that international students are not paid for Coop programs while domestic students are paid.
 3   Yes, I feel like the government isn't supporting the international student much and it is very difficult to survive on jobs that pay minimum wages
 4   Students should be given some real practical experience related to studies. There should be more focus on current real life or real business discussions, not on theory. There is less focus on assignments but more focus on giving real examples or experience to the international students.
 5   Postgraduate Work permit process is very slow. It's been around 6 months since I've applied and I'm still waiting
 6   Government should have any policy over house owners about rent (may be by size of the room / apartment) so that they don't keep increasing the rent based on high demand
 7   Provincial government should work on creating employment and salaries at par with other provinces
 8   I think improving public transportation would improve the experience of international students during their time in the province, and exploring further job options that have competitive salaries
 9   Rent should be more regulated. Landlords ask tenants to vacate properties during summer to make the places AirBnB. Many students are forced to leave during summer

because they can't find accommodations.

10 why education system in canada trying to (deleted unacceptable language) international students? why canada hands out free drugs on streets? why seemingly most happy and wealthy country have so much theft and homeless in their cities?

11 Canada should work on reducing cost of groceries. But with a good job, I won't have to worry about that anymore.

12 There needs to be more industries in Atlantic Canada. Though I want to stay in this beautiful place, career opportunities will make me move to bigger city.

13 L'importance de déceler les talents parmi les étudiants, et les potentiels réel pour les différentes industries de la région.

14 L'augmentation de la scolarité mais je ne peux rien dire vu que la décision vient depuis les dirigeants…on paye pratiquement 3fois le prix que les canadiens paient et c'est pas comme ci on a des avantages on paye aussi nos taxes …et comme ça ne suffit pas ils ont encore doubler les montants…nos parents souffrent afin de nous offrir un avenir meilleur ici… si chez nous il y avait autant d'opportunités nous ne serions définitivement pas ici.. c'est à croire que vous pensez qu'on dort sur l'argent en Afrique…tout le monde n'est pas aisé

15 Stop treating international students as cash cows. We plan to pay more in tuition, however, when you add all the extra fees and expenses from the university and community it is frustrating. I became very disappointed in the greed of (university name deleted) and Nova Scotia. We are there to study and possibly stay to contribute to society and raise families, not be financially frisked

16 Navigating IRCC website and keeping abreast of all things immigration whilst balancing school demands can be very overwhelming for international students. The international student office on campus was not a welcoming environment. Particularly for African students. The International student advisor was one of the most stoic, unfriendly staff members I had the displeasure of meeting at …(name of institution deletd). As international students we all pay the same amount in fees and as such, should all be awarded equal treatment from that office.

Qn Do you have any further comments?

1 My suggestion is that the rules of Immigration Programs be studied according to the area in demand (health, business, education, technology). In my case, as I work in the health sector, we had a situation where the immigration program required a full-time job after finishing College, but the Hospitals only hire casual/part-time employees, so some meetings were held between the IRCC and XXX, to ensure that our casual contract had at least 30 hours per week to be accepted into the program. This was stressful, as they only discovered this information halfway through the ongoing program.

2 Sur la base des expériences de mon entourage également, je pense qu'il est important de travailler sur la publicité excessive voir presque mensongère sur les études et

l'immigration au Canada et qui pousse certains étudiants et immigrants à trop de sacrifices souvent inutiles ou qui n'en valent pas la peine.

3   Nova Scotia has a serious labour shortage in the trades. I could quit my job tomorrow and find a new one in 48hrs. Every trades person I know has done it at least twice. Plenty of people graduate trade school but many leave the trades after a year or so due to the hard manual labour. There is no shortage of university graduates. No one in the western world from my generation wants to do manual labour for a living. I am a Red Seal Automotive Technician and one of the few under 35's who enjoy the trades. Nova Scotia (and probably the entire western world) needs to start opening up their immigration programs and streamline entry for qualified trades people. White collar industries are over saturated with labour, driving down wages. Blue collar industries are dying for workers but cant find any from the domestic population. No matter how 'service based' or 'white collar' an economy becomes, at the end of the day it is underpinned by the physical world. Buildings and houses, roads and powerlines, trucks and buses. Infrastructure. Without labour to build and maintain all of that, an economy will remain stagnant. Or at best, struggle to expand.

4   I am hesitant to make any comments. I kindly urge against misleading foreign students by enticing them to come to Canada with promises of a better life and future. It's important to provide accurate information and avoid manipulating data solely for publication purposes.

5   Is there a way IRCC can look at the terms for review and extending the Study Visa if it is issued late and doesn't cover the study period if was intended for without having to pay extension fees.

6   Thanks for doing the research. I think students in Atlantic Canada need to have more benefits for staying here such as pathways for residency, and better access to healthcare (I've been waiting for 14 months to get a family doctor, been relaying on walk-in clinics every time I'm sick).

Appendix 4: Probit regression

Dependent variable is, stayed in the same province where studied.

Independent variable	Coef.
Interaction with Domestic Students	.028
Interaction with Faculty	-.009
Interaction with General Community	-.049
Cultural Acceptance	-.081**
Accommodation Experience	.144***
Experience with making Friends	-.005**
Experience With Study Group	-.027
Gender	.247***
NS	-.025
NB	-.202
PE	.107
Financial concerns	.192*
Academic performance concerns	.118
Delays in study permit concern	-.096
Constant	.437**

***significance at 0.01 level; ** significance at 0.05 level, * significance at 0.1 level.
Note: Mean dependent var: 0.829, SD dependent var: 0.376; Pseudo r-squared: 0.034; Sample size: 2656; Chi-square: 83.279; Prob > chi2: 0.000; Akaike crit. (AIC): 2373.076; Bayesian crit. (BIC): 2461.345