## **TRENDS**

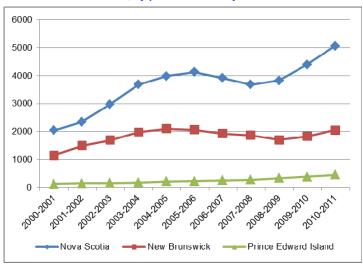
## IN MARITIME HIGHER EDUCATION

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### **International Students in Maritime Universities**

The number of international students enrolled in Maritime universities has more than doubled over the last ten years. In the 1980s and 1990s international enrolment ranged from 2000 to 3000 students. Between 2000-01 and 2003-04, the numbers increased 20% year-over-year (Fig. 1). The numbers continued to increase in Prince Edward Island, but decreased in Nova Scotia and New Brunswick between 2005-06 and 2008-09. In the last two years, there has been a renewed growth in international student numbers, increasing 14% year-over-year. Preliminary enrolment numbers indicate another 14% increase in international students in 2011-12.

Figure 1. International student enrolment in Maritime universities from 2000-01 to 2010-11, by province of study



The enrolment growth of international students has been strongest at the undergraduate level. The number of international undergraduate students increased 138% over the last ten years and the number of international graduate students increased 101% over the same period. In 2000-01, 78% of international students were enrolled at the undergraduate level, increasing 3 percentage points to 81% in 2010-11.

The share of enrolment accounted for by international students doubled between 2000-01 and 2010-11. International students now represent 10.9% of all students in Maritime universities, compared to 5.2%, 10 years ago (Table 1). In 2000-01, the share of international students in Maritime universities was just below the national average of 5.4%. According to 2008 national statistics<sup>2</sup> the share of international students in New Brunswick<sup>3</sup> (11.4%) and Nova Scotia (10.6%) surpassed the National Average of 8%. The 2008 numbers for Prince Edward Island (7.9%) were just below the national average.

Table 1. International student enrolment in Maritime universities in 2000-01 and 2010-11, 10 year change and as a share of total enrolment by province

	Enrolment			Share of Total Enrolment	
	2000-01	2010-11	10 year change	2000-01	2010-11
NS	2039	5066	+148%	5.4%	11.8%
NB	1144	2057	+80%	5.1%	9.2%
PE	120	452	+277%	3.6%	10.2%
Maritimes	3303	7575	+129%	5.2%	10.9%

International students are more likely to enrol in Commerce and Administration at the undergraduate level, and Engineering and Applied Sciences at the graduate level. In 2010-11, 27% of students enrolled in undergraduate Commerce and Administration programs were international students. At the graduate level, international students represented 44% of students enrolled in Engineering and Applied sciences programs and 37% of students in Mathematics and Physical Sciences.

Men represent the majority of international students. In 2010 -11, 58% of international students were male. This proportion has increased by five percentage points since 2000-01. Much of this increase has been at the undergraduate level, where male international enrolments increased by 166%, while female international student enrolments increased by 109%. Among Canadian students the gender ratio has remained stable with women representing around 61% of enrolments over the last ten years.

International students represent a growing proportion of university graduates. The number of degrees granted to international students increased from 371 degrees in 2000, to 1286 in 2010. In 2000, 3% of undergraduate degrees were awarded to international students. This percentage increased to 8% of all undergraduate degrees granted in 2010. The proportion of Master's degrees awarded to international students increased from 11% in 2000 to 15% in 2010. In contrast, international students represented a smaller proportion of PhD graduates, decreasing from 23% in 2000 to 10% in 2010. The number of PhDs granted to international students was 23 in 2000 and 18 in 2010 (ranging between 12 to 33 degrees a year), while the number of PhDs granted to Canadian students more than doubled between 2000 and 2010.

#### INTERNATIONAL STUDENTS IN MARITIME UNIVERSITIES

International students come from over 160 countries. China has been the top country of origin since 2000-01 (Table 2). The number of students from China has increased by 480% over 10 years. The number of American citizens enrolled in Maritime universities has increased 60% over the last 10 years, but in 2010-11 was surpassed by students from Saudi Arabia (in 2000-01 only 40 students were from Saudi Arabia).

In 2000-01, the proportion of students from Asia was 40%, increasing to 56% of international students in 2010-11. Students from Asia represented the largest share of international students in all three Maritime provinces (49% in NB, 58% in NS, 53% in PEI). North American students represented the second largest share of international students in Nova Scotia (17%) and in Prince Edward Island (29%), while African students accounted for the second largest share in New Brunswick (27%).

Table 2. The top 10 countries of origin: Number of international students enrolled in Maritime universities in 2000-01 and 2010-11, by citizenship

	2000-01		2010-11
China*	405	China	2344
United States	344	Saudi Arabia	645
Bermuda	225	<b>United States</b>	554
Malaysia	161	India	288
Bahamas	125	Bermuda	210
India	99	Bahamas	162
Pakistan	97	Nigeria	126
Hong Kong SAR	77	Germany	119
Jamaica	76	South Korea	110
Japan	74	Iran	108

<sup>\*</sup>China excludes Hong Kong Special Administrative Region (SAR), Macao SAR and Taiwan.

Note: The regional level list of countries may differ from that of particular institutions.

#### **Summary and Implications**

The number of international students has more than doubled in the last decade. In 2000-01 international students accounted for one in twenty students, and they now represent one in ten. It should be noted that the number of Maritimers enrolled in university decreased over the same period, accounting for part of the change in student composition. The increase has not been uniform across the sending countries, highlighting the unpredictability of international student enrolment. For example, just five years ago, Saudi Arabia was ranked 13<sup>th</sup> among sending countries, but today it ranks second behind China, with the number of students increasing from 75 to 645 over that period. The introduction of a government program in Saudi Arabia supporting studies abroad likely explains the jump.

The findings also show that the proportion of international students is not uniform across the disciplines; at the undergraduate level, international students represent more than one in four students enrolled in Commerce and Administration programs, and, at the graduate level, almost half of the students enrolled in Engineering and Applied Sciences programs.

Given that students in Maritime universities come from over 160 countries, and that there are a multitude of factors at play on a global level that affect study abroad, institutions in the region are likely faced with many related challenges, such as in recruitment, enrolment management and the design of student services and support. The higher tuition fees paid by these students help to offset the costs of delivering these services. In addition, the global perspective and diversity of culture brought to Maritime classrooms by international students help to enrich the education of students in the region.

#### **Additional Resources:**

More information on the enrolment of international students with a breakdown by Maritime university is available from the MPHEC website at <a href="http://www.mphec.ca/research/enrolment.aspx">http://www.mphec.ca/research/enrolment.aspx</a>

- <u>Table 5: Enrolment of International Students by Province, Institution, Registration Status, and as a Percentage of Total Enrolment</u>
- Microsoft Excel downloadable database: Enrolments aggregated by registration status, level of study, major field of study, gender, age group (5 year intervals) and immigration status

A breakdown of tuition fees by institution, including international students fees, is available at <a href="http://www.mphec.ca/research/tuitionsurvey.aspx">http://www.mphec.ca/research/tuitionsurvey.aspx</a>

Table A: Undergraduate Arts and Sciences Full-time Tuition Fees and Provincial Tuition Rebates/Bursaries.

#### INTERNATIONAL STUDENTS IN MARITIME UNIVERSITIES

Additional tables with data on country of origin, including an interactive table providing information on the top 20 countries, are available here http://www.mphec.ca/research/trendsmaritimehighereducation.aspx

- Table A: Number of international students enrolled in Maritime universities by country of citizenship: Top 20 countries in 2000-01, 2005-06 and 2010-11
- <u>Table B: Number of international students enrolled in Maritime university by province of study and country of citizenship,</u> 2010-11

#### Notes:

Data source: The Enrolment and credentials granted data are obtained from the MPHEC Postsecondary Student Information System (PSIS) database, which contains detailed information on student demographics, programs and courses for all students enrolled at 16 publicly-funded Maritime universities.

International student definition: Student studying in Canada who is not a Canadian citizen or a permanent resident. Code 2, 3 and 4 as reported at the element "immigration status" PSIS; Excludes students studying offshore (code 5 in PSIS).

- 1. Association of Atlantic Universities 2011-12 Preliminary Survey of Enrolments (October 14, 2011). http://www.atlanticuniversities.ca/facts-figures/aau-survey-preliminary-enrolments
- McMullen, Kathryn and Angelo Elias. 2011. "A Changing Portrait of International Students in Canadian Universities." Education Matters: Insights on Education, Learning and Training in Canada. Vol. 7 no. 6. Statistics Canada Catalogue no. 81-004-XIE. http://www.statcan.gc.ca/pub/81-004x/2010006/article/11405-eng.htm (accessed October 13, 2011).
- 3. The University of New Brunswick offers offshore programs in Egypt, Trinidad and Tobago, and Singapore. In 2010, 1250 off-shore students were reported through PSIS, but not included in the international student numbers.

An electronic copy of this report can be downloaded from http://www.mphec.ca/resources/TrendsV9N3 2012.pdf

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