# Maritime Provinces Higher Education Commission Shaping the Future of the Maritime University Graduate Survey Program A Discussion Paper

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# The Reason for this Paper

On January 18, 2011, the Commission released its eighth report on Maritime university graduate outcomes. Through its graduate survey program, the Commission has been providing a wealth of knowledge about how graduates of the region's universities make the transition from education to the work world, how they regard the quality and transformative power of their education and how they cope with financing their education.

Over fifteen years and five graduating cohorts, we have observed important changes in the region in student patterns of financing, the amount of debt accumulated, the demographic composition of the graduating class and the impact of changing economic conditions on employment success. Yet remaining constant throughout has been the high level of satisfaction of graduates with their education, with the quality of teaching and the time they invested. The regular provision of information and in-depth analysis on graduate outcomes provides stakeholders with reliable evidence on which to base important decisions. By identifying important trends and key factors, it also raises other questions for stakeholders, and provides 'food for thought'.

The Commission is currently engaged in a review of its graduate survey program, to ensure that the program continues to provide valuable information about the effectiveness of university education in the region, and that its deliverables (e.g., reports, custom statistical tables, presentations) continue to provide stakeholders with insights and information.

We ask that you read this paper, consider its questions (highlighted in the 'What do you think?' sections) and discuss it with your colleagues. A series of roundtables will be convened with key stakeholder groups to discuss this paper and solicit input on the future of the Commission's graduate survey program.

# 1. Introduction

The graduate survey program was initiated to address the growing interest, among governments and institutions, in issues such as the value-added from university education, the school-to-work transition, and the relationship between university education and employment. Over the years, student debt and migration patterns have also emerged as important issues that the survey findings inform. Although the National Graduate Survey existed as a potential source of this information, findings were not supplied on a timely basis, nor did they explore issues at the regional level. In addition, the national program's continued operation has been intermittently threatened, and its future is uncertain.

The graduate survey program also helps the Commission to fulfill its legislated mandate – its primary orientation in carrying out its duties is to give first consideration to improving and maintaining the best possible service to students as life-long learners. Among other things, this includes promoting smooth transitions between learning and work.

The MPHEC Act further states (excerpt):

The Commission's principal duties are:

- (b) to ensure that data and information is collected, maintained and made available for assuring the public accountability of institutions, and to assist institutions and the Provinces in their work, which without limiting the generality of the foregoing may include
  - (i) establishing data and system standards.
  - (ii) establishing public reporting requirements and producing public reports, and
  - (iii) carrying out studies in regard to public policy, institutional concerns and issues related to post-secondary education, and providing advice to institutions and the Provinces on these matters (Paragraph 11, NB and PEI; Paragraph 12 NS)

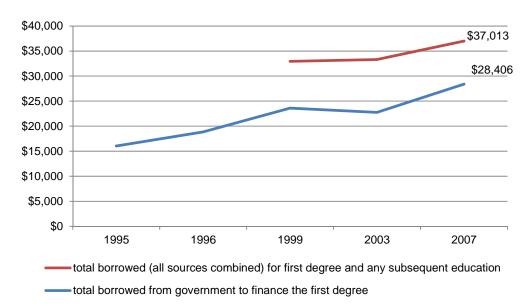
# 2. 15 years of Maritime University Graduate Outcomes – What Have We Learned?

The Commission's reports<sup>1</sup> have evolved over time from providing descriptive statistics to looking behind the averages and providing in-depth analysis and elucidating key factors determining graduate outcomes. This section illustrates just a few key observations (previously unpublished) about first degree holders,<sup>2</sup> and some questions that emerge, considering trends over the last 15 years.

### 2.1 Financing Education

# Figure 1

Mean amount borrowed from government sources (among borrowers) to fund the first degree, and mean total amount borrowed (all sources combined), for the first degree and/or any subsequent education (taken within two years of graduating), expressed in 2009 constant dollars, by graduating class.



- Borrowing from government sources to fund the first degree has increased by \$14,000 (in 2009 dollars) over 12 years.
- Combining *all* loan sources, 70% of Class of 2007 first degree holders borrowed an average of \$37,013 to finance the first degree, and/or any further education (taken within two years of graduating), up 13 percentage points compared to the Class of 1999; 22% now borrow \$45,000 or more. In addition, Maritimers borrow more than their counterparts from outside the region.
- The cost of education continues to rise, and for most, one degree is not enough (59% return for further studies), meaning additional debt for many.
- What debt levels will we see among Class of 2015 or 2019? What will the pattern of financing look like? How much more debt can be borne by graduates?

<sup>&</sup>lt;sup>1</sup> All reports are available here: <a href="http://www.mphec.ca/research/graduatefollowupsurveys.aspx">http://www.mphec.ca/research/graduatefollowupsurveys.aspx</a> It should be noted that the first follow-up surveys were conducted one year after graduation for the Classes of 1995 and 1996, and two years after graduation for the Classes of 1999, 2003 and 2007.

<sup>&</sup>lt;sup>2</sup> First degree holders enrolled in their bachelor's degree without prior postsecondary education.

# 2.2 Employment Outcomes

Table 1

Employment rate (based on number in the labour force) by graduating class

1995	1996	1999	2003	2007
85%	86%	91%	95%	86%

Table 2

Average earnings of employed graduates two years after completing the first degree (2009 constant dollars), by graduating class

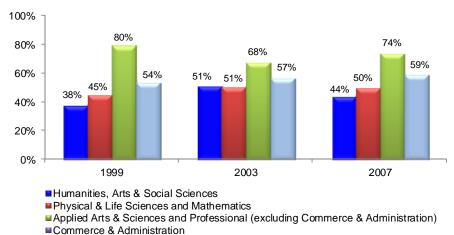
1999	2003	2007
\$35,209	\$36,204	\$37,669

- The employment rate of first degree holders was highest for the Class of 2003 at 95%. The Classes of 1995, 1996 and 2007 were undoubtedly affected by the poorer economic conditions they faced on graduation.
- Between the 1999 and 2003 cohorts, average earnings (in constant dollars) among first degree holders increased 3%; between the 2003 and 2007 cohorts, earnings increased 4%. Between the 2003 and 2007 graduating cohorts, the proportion of graduates obtaining skilled employment has remained steady.
- Class of 2007 first degree holders, who were on average 26 years old, earned about the same as the general population (ranged between \$35,881 and \$38,875 for the Maritime provinces).
- How will the availability of good jobs affect graduates' ability to cope with rising debt? What is the
  acceptable relationship between earnings and debt in the first 5-10 years following completion of the
  first degree?

### 2.3 Discipline of the First Degree is a Key Factor Influencing Graduate Outcomes

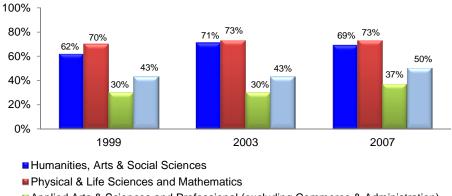
Figure 2

Percent of employed graduates whose job is in management or requires university education, measured two years after graduation, by discipline cluster, and graduating class



- The discipline of the first degree is a key determinant of graduate employment outcomes: for example. it is linked to the skill level required of their job, measured two years after graduation.
- Graduates of Applied Arts & Sciences/Professional programs are the most likely (68% or more over three graduating cohorts) to be employed in jobs in management or requiring a university education, while graduates of Humanities, Arts & Social Sciences are the least likely to have jobs of this skill level (51% or less over three graduating cohorts).
- Graduates of applied and professional programs (including Applied Arts & Sciences/Professional and Commerce & Administration) also tend to earn more than their peers who graduated from Humanities Arts & Social Sciences and Physical and Life Sciences & Mathematics programs. For example, among Class of 2007 graduates working full-time, graduates of Applied Arts & Sciences/Professional programs earned on average \$13,094 more than Humanities. Arts & Social Sciences graduates and \$10,480 more than Physical and Life Sciences & Mathematics graduates.
- The differences noted are linked to the orientation of the program, with applied and professional programs having a direct link to the labour market.

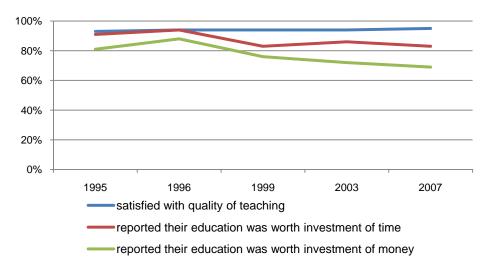
Figure 3 Percent of graduates who returned for further study within two years of completing their first degree, by discipline of first degree and graduating class



- Applied Arts & Sciences and Professional (excluding Commerce & Administration)
- Commerce & Administration
- Looking at rates of returning for further study, those who completed Applied Arts & Sciences/Professional programs (30%-37%), are much less likely to return than graduates of Humanities, Arts & Social Sciences (62%-71%) and Physical and Life Sciences & Mathematics (70%-73%). This means that for most liberal arts and sciences graduates, that first degree is a stepping stone to the terminal degree and their pathway to the workforce is longer. This is manifested in the differences observed in employment outcomes two years after graduation illustrated above.
- Compared to the Classes of 1999 and 2007, there has been an increase (7%) in the percentage of Applied Arts & Sciences/Professional and Commerce & Administration graduates returning for further study within two years of graduation; what might explain this shift?

## 2.4 Graduates' Perception of the Value of their Education

Figure 4
Percent of first degree holders...



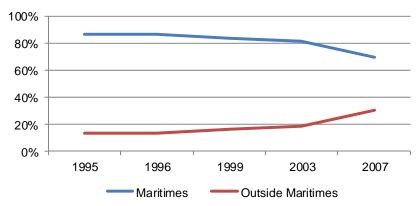
Note: Graduates reported using a scale of 1 to 5, where 1= not at all worth it, and 5= well worth it. The percentage reporting 4 or 5 are combined to express the percentage reporting it was worth their investment.

- The high level of satisfaction with the quality of teaching at Maritime universities has remained steady over fifteen years.
- However, graduates' perceptions on whether that education is worth the money have shifted, declining 12 percentage points from 81% (Class of 1995) to 69% (Class of 2007). Looking only at those who thought their education was well worth the money invested, among Class of 2007 graduates, 22% of those who borrowed \$45,000 or more thought their education was well worth the money invested, compared to 47% of those who did not borrow.
- The proportion agreeing their education was worth their personal investment of time, although it also decreased, has stabilized in recent years and remains above 80%.
- What will this trend look like in 5 or 10 years? How do/will these perceptions impact participation and retention rates?

# 2.5 Graduate Demographics

Figure 5

Distribution of first degree holders, by residence 12 months prior to enrolling, by graduating year



- The proportion of graduates who came to study from outside the region increased 17 percentage points over the five cohorts, to 31%. The latest increase (between Class of 2003 and 2007) coincides with the Ontario double cohort phenomenon<sup>3</sup>.
- Graduates from outside the region are more likely to come from the most highly educated families (66% vs 48% of Maritimers) and to leave the Maritimes (81% have left within two years (vs. 21% of Maritimers)).
- As the enrolment of Maritimers declines, many universities are ramping up recruitment of students from outside the region, and internationally.
- What will the graduating Class of 2015 or 2019 look like? How will the outcomes of Maritimers compare to non-Maritimers?

# What do you think?

- When considering the key observations above, past reports, and the recent report on the Class of 2007 in 2009, what other questions and observations come to mind? What are the key trends that need to be monitored in the coming years?
- Are there any aspects of graduate outcomes that are missed by the current survey program?

# 3. Sustainability

The Commission's graduate survey program has been funded on a per-project basis, but securing funding has been a challenge over the last few years. This has resulted in delays in completing reports, and now threatens the future of the survey program.

## What do you think?

What would be lost if the survey program were discontinued?

<sup>&</sup>lt;sup>3</sup> The double cohort was created when grade 13 was eliminated in Ontario in 2003-04.

# 4. Program Structure

The current structure of the program consists of surveying every fourth cohort, at two and five (a longitudinal survey) years after graduation. The questionnaires are fairly complex<sup>4</sup> and the average phone interview now lasts 30 minutes. Graduates of all levels are surveyed; about half the sample comprises those who graduated with a first bachelor's degree, the other half comprises graduates who completed a second (or more) credential, for example: graduate-level degree, professional program, second bachelor's degree. It also includes graduates who completed a diploma or certificate. Graduates of all levels are surveyed, but reporting focuses on first degree holders.

# What do you think?

- · Could graduates be surveyed only once?
- At what point after graduation?
- Should a different interval be considered (e.g. three years after graduation? One and four years after graduation? Ten years after graduation?)?
- Would it be sufficient to survey every fifth or sixth cohort? Or should cohorts be surveyed more frequently?
- Could the future survey program focus only on collecting data from first degree holders (reducing the sample size in half)?
- What do you need to know about graduates of second degrees (e.g., masters, PhD, BEd, professional programs)? What priority should be assigned to including this group in the future survey program?

# 5. Deliverables

With each survey a report is produced describing the main findings and implications. The Commission also releases the findings at a public presentation, and offers presentations to institutions and the Provinces. Each participating institution and Province is provided with custom statistical tables and raw data files are also available (files containing only the responses of graduates from the institution or Province) through data sharing agreements with the Commission. The Commission also provides the provincial governments with custom statistical analyses on request, and assists institutions in analysing their data.

## What do you think?

- How do you use the information?
- What format(s) would be most useful to you in your work?
- Would you like to see a series of shorter articles focused on a particular issue? How can the Commission further add value to its deliverables to provide you with the information you need in your work?

# 6. Expanding the Scope of the Survey Program

Assuming a secure funding stream, and in the interest of assisting stakeholders, we can also explore the possibility of expanding our current scope to include surveys of students. Described below are two possible options; we are interested in hearing other ideas.

<sup>&</sup>lt;sup>4</sup> Copies of the questionnaire are available here: http://www.mphec.ca/research/surveyinstruments.aspx

In the proposed survey activities, the Commission would take on a coordination role and the work would depend on active involvement of participating institutions in the design and execution of the surveys. The value-adding research produced from the compiled findings would enable institutions to benchmark themselves against the regional average. Institutions would retain their own custom data files with which to conduct institutional-level research.

### a) Survey of first-year students

Many institutions, in addition to participating in national/ third party surveys of students, conduct a survey of new or first-year students in-house. The proposal to be developed would involve the synchronization of these survey efforts across participating institutions and the introduction of a common core set of questions to enable provincial/regional level analysis and to increase the value of the findings. In addition, students could be asked for their permission to link their responses to their administrative data (PSIS) to add further value to the research – e.g., exploring the relationship between first year expectations and subsequent pathways (switching programs or institutions, time-to-degree, etc.).

Objectives of such a survey could include (but would not be limited to) examination of:

- Students' expectations for a university education preparation for career, knowledge acquisition; interaction with professors, peers; social aspect
- Students' residence patterns on campus, off-campus or at home
- Patterns in credit transfer: previous institution(s), reasons for transferring; ease of transferring credits
- Extent to which high school prepares students for university
- b) Survey of university applicants

This proposed survey would see the development of a common core set of questions to enable provincial/regional level analysis with latitude for institutions to add custom questions.

Objectives of such a survey could include (but would not be limited to) examination of:

- Demographics and detailed geographic origin of applicants what is the relationship to the student profile?
- What other institution types prospective students apply to (e.g., other universities, college, private training)?
- Where more than one application is made, how applicants will decide which institution, and/or which type of institution, to attend
- Perceived barriers to admission
- Expectations for a university education

# What do you think?

- Do you think the student surveys described above would provide information useful to you in your work?
- Would a survey of students who leave without completing a credential be useful?
- What other suggestions do you have for Commission-led survey research?

# 7. Conclusion

The Commission's graduate survey program is a valuable tool, providing timely and region-focused analysis of key trends in graduate outcomes. With this review and consultation process, we will design a plan for future surveys and research that will continue to be relevant and useful to you. Your contribution to the discussion will help ensure we are successful in meeting that goal.