



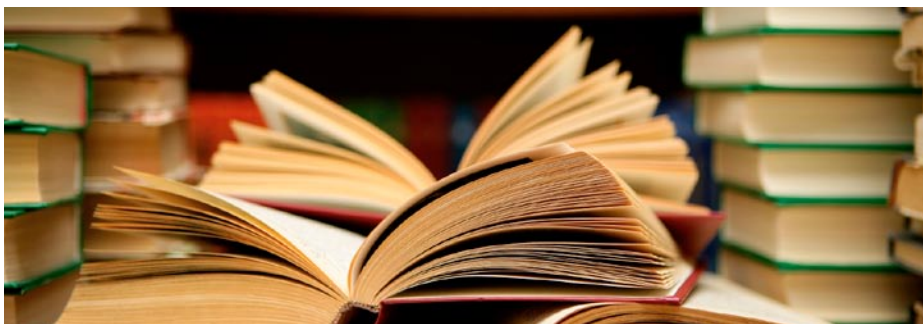
Moving Education *Forward*

Making Post-Secondary Education a New Brunswick Priority



*Recommendations
to the Commission on
Post-Secondary Education
in New Brunswick*

APRIL 2007





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Executive Summary

New Brunswick is home to four publicly funded universities, four religiously-affiliated private universities and a college system that has campuses all over the province. As a unique province with a deep history of consensus politics and a Francophone culture, it is one of two provinces in Canada to have a Francophone and Anglophone secondary school system. New Brunswick ranks eighth out of ten provinces in its contribution to the national gross domestic product and has one of the highest rural populations in Canada.¹

The Atlantic Provinces lead the way in terms of post-secondary education participation. New Brunswick has a participation rate of over 30 percent, which is well above the national average of 20 percent.² That said, it must also be noted that Atlantic Canada remains well below the Canadian average in terms of people with university degrees.³ Demographic trends also indicate that enrollment will change this situation and continue to be a significant challenge in Atlantic Canada over the next decade.⁴

The NBSA's vision is that New Brunswick will lead Canada in providing all students with access to post-secondary education, regardless of socio-economic background. The NBSA's goal is that all students find their belonging in New Brunswick. We believe that the province of New Brunswick has the potential to be an innovative leader in providing access to affordable and quality post secondary education in Canada.

It is necessary that the problems facing students in New Brunswick are brought to the public's attention without delay. This commission has initiated dialogue between all stakeholders in the post secondary system. This collaboration must be maintained to successfully address the needs presented. Serious cut-backs in funding to universities in the last decade have severely paralyzed the system and have halted the province's development.

NBSA is thankful to have the opportunity to submit this briefing document to the Commission on Post-Secondary Education in New Brunswick for review and consideration.



Key Themes & Recommendations

Participation Depends on the Real Cost of Education

Financial Costs: The Need for Sustainable PSE Funding and Reasonable Tuition

- ❖ Ensure that New Brunswick tuition not continue to rise, but instead bring it below the current national average of \$4,347;
- ❖ Regulate tuition in New Brunswick to ensure affordability and predictability;
- ❖ Create funding agreements between the provincial government and all public PSE institutions that will be honored and accountable to the public through a legislative act;
- ❖ Develop an accurate assessment of total student educational costs in New Brunswick;
- ❖ Readjust the loan assessment criteria to include total educational cost variables, resources available to students and the expected parental contribution;
- ❖ Extend student loan interest subsidization to students post-graduation;
- ❖ Lower provincial loan interest rates to government cost of borrowing;
- ❖ Encourage the Canada Student Loans Program to decrease interest rates to government cost of borrowing;
- ❖ Create an independent student financial aid agency to negotiate loan repayment and facilitate the transition period from studying to the labor market;
- ❖ Create a targeted debt reduction plan for students who meet specific social-economic or geographical criteria;
- ❖ Make loan remission an automatic process upon student graduation.

The Need to Create a Successful PSE Experience for the Student: Address Emotional and Psychological Costs

- ❖ Re-evaluate the current transfer credit and learning credit system in New Brunswick to accommodate students, especially non-traditional students with options to find the program most suitable for their needs;
- ❖ Encourage a minimum standard of student support in each institution;

- ❖ Increase the amount of funding to institutions dedicated to student services.

Participation Requires Access

Access to a Quality Education

- ❖ Create and implement a *New Brunswick Universities Act* by which universities will be accountable for any rises in tuition percentage or other practices that limit access, as well as being accountable for the amount of bursaries that are available to students;
- ❖ Increase student membership with voting authority on each institution's board of governors and to recognize this in the *New Brunswick Universities Act*;
- ❖ Explore the option of expanding and creating an undergraduate research program that will benefit New Brunswick's comprehensive undergraduate universities;
- ❖ Collaborate with institutions to identify potential areas of research at each institution that would benefit from undergraduate research;
- ❖ Entice the New Brunswick Government and all institutions to lobby for federal research funding for indirect costs of research;
- ❖ Allocate and transfer specific PSE infrastructure funding to the institutions immediately;
- ❖ Encourage the government, institutions and colleges to work together in mapping out potential institutional expansion in New Brunswick without jeopardizing the quality of current existing institutions.

Access to Grants for Those Most in Need

- ❖ Expand the New Brunswick Bursary to target non-traditional students, specifically students from rural areas;
- ❖ Expand the New Brunswick Bursary to fund tuition fees for students who come from low-income families.

Access to Institutions through Transferable and Learning Merit Credits

- ❖ Collaboration between all institutions to make a comprehensive audit of all credits available and identifying those in which could be applied a transfer credits status;
- ❖ Identify all specific programs that would benefit from the dual system of a college and university education;
- ❖ Focus on specific programs that could have benefits to those living in rural regions of New Brunswick and look into the possibility of implementing pilot programs, such as distance learning and exchange programs;
- ❖ Revamp the transfer and learning merit credit program by centralizing all information and have it be made user friendly and available online.

Access to Helpful PSE information

- ❖ Invest and strategically plan early intervention programs through partnerships with the federal government and institutions including

setting a minimum standard of useful PSE information applicable to New Brunswick;

- ❖ Target non-traditional groups with useful PSE information including options for financing PSE for their child.

Translating PSE Participation to Provincial Participation

Understanding the Value of New Brunswick Graduates

- ❖ Investigate which incentives, financial or other, that will encourage graduates to stay in New Brunswick.

Being Able to Tell and Sell Our Story

- ❖ Focus on an aggressive public relations and marketing strategy to promote PSE provincially, nationally and internationally;
- ❖ Examine the untapped potential of rural New Brunswick and the opportunities for PSE in rural areas.

Prioritizing PSE and Providing Leadership

- ❖ Make PSE a top priority in New Brunswick;
- ❖ Bring together government, institutions and students to formulate a *New Brunswick University Act*;
- ❖ Encourage other provinces, territories and federal government to create a Pan-Canadian Accord on post-secondary education with a dedicated PSE transfer to the provinces and territories.



Participation Depends on the Real Cost of Education

As potential students and their parents consider post-secondary education, several questions are inevitably being asked: Will it be worthwhile to pursue a post-secondary education?⁵ What will be the opportunities lost if one chooses to pursue higher education? The anticipation of a quality education that will be received in addition to knowing the real cost of an education will be of greater net value than if one were not to pursue it. NBSA has identified two aspects of cost that a student will have to encounter if a post-secondary education is to be pursued. NBSA believes that addressing these two costs will also address the questions of participation of post-secondary education in New Brunswick. They are:

- ❖ *Financial costs:* The need for sustainable PSE funding and reasonable tuition.
- ❖ *The Need to Create a Successful PSE Experience for the Student:* Address Emotional and Psychological Costs.

Financial Costs: The Need for Sustainable PSE Funding and Reasonable Tuition

Current reality: Increased Tuition and Decreased Provincial Funding

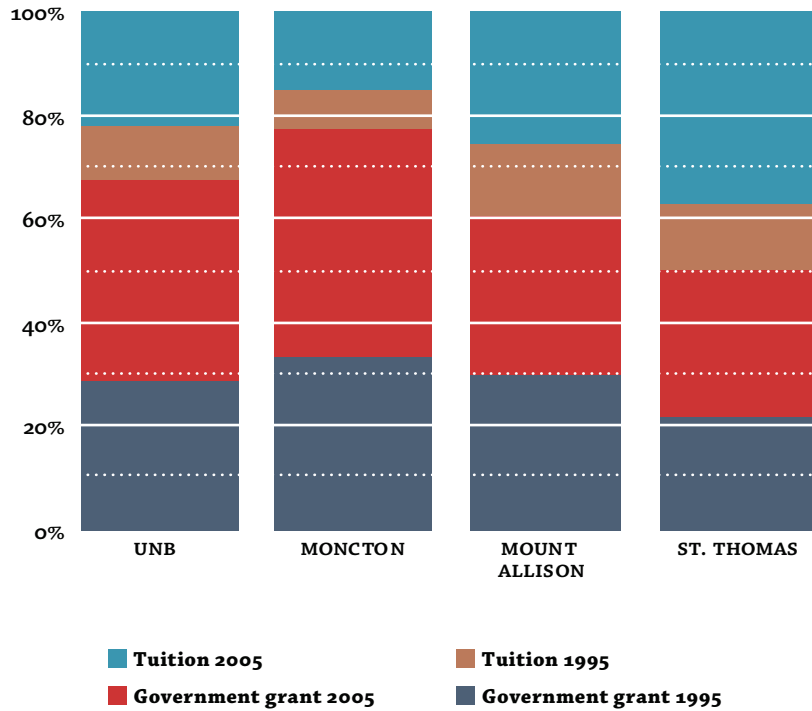
In 2006–2007, tuition in New Brunswick grew to an average of \$5,328. This was a 5.8 percent increase from the previous year, in which New Brunswick saw the second highest tuition increase in Canada. The national tuition average cost is \$4,347.⁶ This current reality is a stark contrast to tuition rates back in 1995–1996 when New Brunswick students were paying an average of only \$3,131 in tuition.⁷

At the same time, New Brunswick failed to make strong investments into its institutions as provincial transfers (as a percent of provincial gross domestic product) decreased from 1.80 percent to 1.50 percent.⁸ This represented a funding decrease in per student funding from \$7,653 in 1993–1994 to \$5,562 in 2004–2005.⁹ In comparison, the province of Quebec, during the same period, decreased investments into its institutions from 2.18 percent to 1.50 percent, but increased funding per student from \$10,913 in 1993–1994 to \$11,584 in 2004–2005.¹⁰

Between 1995 and 2005 total tuition as a percentage of university operating revenue in New Brunswick increased from 20 percent to 29 percent compared to a decrease in total government grant funding of 59 percent to 49 percent

In addition, a comparison of the share of operating revenues received through tuition and revenues received as government grants demonstrates that students are paying a much higher portion of university operating costs. Between 1995 and 2005, total tuition as a percentage of university operating revenue in New Brunswick increased from 20 percent to 29 percent while total government grant funding decreased from 59 percent to 49 percent¹¹ (See Figure 1).

Figure 1: New Brunswick Universities Total Percentage of Revenue from Tuition and Government Grants 1995, 2005



Source: Association of Atlantic Universities, 2006 Compiled by NBSA

The increase in tuition costs have affected student enrollment in the past decade. In fact, between 1989–1990 and 2003–2004, participation rates in New Brunswick, for students between the ages of 18–21, have increased from 23% to 32%.¹² The value and quality of education that the students are receiving in proportion to the increasing dollar amount of tuition that a student pays is questionable. With enrollment demand also comes increased costs. As tuition has been steadily increasing over the last ten plus years, the benefits that students and society are receiving from the degree programs are decreasing due to its decreased value. The decline in public funding has shifted the higher educational cost burden to the individual students and their families.

The NBSA believes that tuition in New Brunswick should be maintained at or below the national average. The NBSA accepts reasonable tuition fees if it can be justified in accordance to the quality and services received at the institutions. That said, the provincial government must maintain its

funding commitment to post secondary institutions and sustain funding that rises at a rate that covers institutional inflation.

The government must regulate tuition and ensure stable funding to institutions so that students can adequately predict their costs. It needs to be taken into consideration that students in the midst of their studies face further increased tuition costs. With tuition increasing upwards of a thousand dollars over the course of a four year degree, students are often forced to leave the post secondary system mid degree for financial reasons. This trend could force their withdrawal from the PSE system if they have not already done so.

Reducing tuition and regulating future increases will not only help to bring more people from diverse socio- economic backgrounds into the postsecondary system but will ensure that they are not forced to leave mid degree because of significantly increased costs. Tuition regulation means to control cost. It is a useful way for the provincial government to help manage one of the financial barriers to higher education and also to ensure equitable access to system.

Recommendations

- ❖ Ensure that New Brunswick tuition not continue to rise, but instead bring it below the current national average of \$4,347.
- ❖ Regulate tuition in New Brunswick to ensure affordability and predictability.
- ❖ Create funding agreements between the provincial government and all public PSE institutions, making them accountable to the public through a legislative act.

Current Reality: Student Loans with an Unacceptable Rate of Borrowing

The high cost of a university education is amplified by interest payments on loans. Students are concerned by the fact that the current interest on student loans is greater than the government's cost of borrowing for the Canada Student Loans program (CSLP) and the New Brunswick Financial Assistance Program (NBFAP).

The NBSA is supportive of the provincial government covering the cost of student loan interest charges while the students are in-study, but believe that since government student financial aid is not administered for-profit that there is no justification, other than for administrative cost recovery, to charge an interest rate greater than the government cost of borrowing. Taking into consideration the Canada Student Loan and the New Brunswick student loan interests, the total amount of interest required from a student is currently at an unacceptably high level. Currently, the CSLP portion of the loan is set at a floating interest rate of prime + 2.5 per

cent. This rate is much higher than the government cost of borrowing and it is unreasonable to ask new graduates to reimburse loans at this rate.

Additionally, there is a need to recognize that there are financial costs that go above and beyond educational costs (tuition, ancillary fees, books and equipment). The system needs take into account all the costs involved in order to provide adequate and appropriate financial support for the students.

The NBSA suggests that a more accurate assessment of student costs should include living costs. Currently, New Brunswick Financial Aid calculates student assessments based on a 'living allowance'. NBSA believes the following expenses should be accounted for: tuition, additional (ancillary) fees, books, educational equipment, amortized cost of a personal computer, food (adjusted by region), rent (adjusted by region), household maintenance (utilities, phone, internet, adjusted by region), transportation, dependent spouse/children and additional costs incurred by students who must travel over 40 km to attend university.¹³

It was recently announced in August 1, 2007 that an estimated \$7 million will be spent by the provincial government by removing parental and spousal income from the assessment of New Brunswick student loans. The NBSA is not convinced that this policy is the most efficient and equitable method of improving the loan program.¹⁴ The focus should be on increasing bursary funding for those most in need while minimizing the interest rates for those borrowing.

Any policy decisions on bursaries need to also consider its sustainability and follow through beyond the first year of funding to ensure consistent enrollment.

Recommendations

- ❖ Develop an accurate assessment of total student educational costs and needs.
- ❖ Readjust the loan assessment criteria to include total educational cost variables, resources available to students and the expected parental contribution.
- ❖ Extend student loan interest subsidization to students post-graduation.
- ❖ Lower provincial loan program interest rates to government cost of borrowing.
- ❖ Encourage the Canada Student Loans Program to decrease interest rates to government cost of borrowing.

Current Reality: Unacceptable Rising Student Debt

Student debt affects 59 percent of PSE graduates.¹⁵ Currently, the average debt of a New Brunswick graduate is \$32,132,¹⁶ which is \$8,085 above the average national average debt of \$24,047.¹⁷ This is not taking into account

the amount of private debt a student may likely incur while studying.¹⁸ If one takes into consideration the average number of university degrees, diplomas and certificates granted in New Brunswick on a yearly basis and the average amount of PSE graduates with debt, this translates to a student debt total of \$90,065,996 in New Brunswick.

Debt is not a back-end issue that only graduates have to face. It is a front-end issue that deters those wanting to pursue PSE, especially those coming from lower socio-economic backgrounds. A MPHEC study that looked at the familial education background of post-secondary participants found that participants in the Maritimes tend to come from higher educated families. The study also found that those who come from less educated families carry higher debt loads than those from higher educated families. As family educational background is correlated to family income levels, the study found that these trends continue the implications of growing debt aversion and may result in further decreases in participation by students from lower socio-economic backgrounds.¹⁹

Currently loan remission in New Brunswick mirrors the Canadian Student Loan Process. A minimum debt threshold needs to be reached before loan remission applies and the amount of reduction is up to 15 percent of the outstanding balance. With an average debt of \$32,132, it translates to a loan remission of \$4819 which still leaves a student with a debt of \$27,313 (\$3266 above the national average).²⁰

The process of dealing with debt is currently not efficient and NBSA believes that there has been a crucial information barrier to students. Debt is reduced only during the time of graduation and it is not an automatic process. In contrast, in post-Rae Review Ontario, the province has increased loan remission spending to ensure that anyone with over \$7,000 per year in loans would see any extra borrowing is automatically forgiven.²¹

Dealing with debt with minimal support does not compel students to stay in a province with sparse post-graduation opportunities. High debt limits career and life choices. Worse still are the financial consequences that graduates will have to incur if they have to default on their loans. Instead, students will be attracted to more lucrative opportunities elsewhere that will help solve their debt crisis. New Brunswick needs to give incentives for debt-laden graduates to stay in the province.

In addition, New Brunswick currently has no targeted debt reduction plan. NBSA feels that this is an area that has room for improvement as it helps government recognize specific needs and could be used as a method of attracting graduates to stay in the province. Some examples include:

- ❖ *Newfoundland*: students with extenuating circumstances (i.e. single parent who has completed full time studies) are eligible to have entire portion of provincial loan forgiven; early childhood educators may be eligible for debt reduction;

Currently, the average debt of a New Brunswick graduate is \$32,132, which is \$8,085 above the average national average debt of \$24,047.

- ❖ *Nova Scotia*: loan remission available for those working full time in Nova Scotia for 50 weeks within three years post graduation;
- ❖ *Saskatchewan*: loan remission available for students with special needs including single parents, non-status Indians/Métis as well as for professionals working in underserved communities (debt reduction for $\frac{1}{3}$ of year worked).²²

Dealing with debt with minimal support does not compel students to stay in a province with sparse post-graduation opportunities.

Recommendations

- ❖ Create an independent student financial aid agency to negotiate loan repayment and facilitate the transition period from studying to the labor market.
- ❖ Create a targeted debt reduction plan for students who meet specific socio-economic or geographical criteria.
- ❖ Make loan remission an automatic process upon student graduation.

The Need to Create a Successful PSE Experience for the Student: Address Emotional and Psychological Costs

Beginning the PSE journey is a period of steep transition for a majority of students. Students not only need to take into consideration the financial costs of PSE, but are also dealing with emotional and psychological costs.²³ Appropriate advice and guidance are essential to sustain enrollment. In a recent study from Statistics Canada, it has been suggested that over 80 percent of the difference in university access rates between those of high income and low income could be attributed to social and academic factors.²⁴ The goal, then, is to assist the student in finding the right PSE niche that they are content with and feel confident in having the ability to see it to completion. Ultimately, what is needed is for students to know that they are not abandoned while they are in the system. The goal will be to maintain support within the PSE system.

Retaining students within the PSE system until the completion of their studies is a serious issue in New Brunswick and it is an issue that will affect the province's future. We know that those aged 25–29 years old with less than a high school education will be faced with an unemployment rate of 15 percent compared with 7 percent for a university graduate.²⁵ A follow up question would be to ask what would the unemployment rate of those who have dropped out of PSE system be if they were also accounted. In March 2007, the overall employment participation rate in New Brunswick was the second lowest in Canada.²⁶ It is certainly in New Brunswick's best interest to encourage those who are in the system to stay and those who are considering it as an option to enroll.

Table 1: University Enrollment, First Year Entrance Averages, Retention Rates					
	Enrollment According to Category UG, Graduate, PT²⁷	Total Enrollment numbers UG, Graduate, PT²⁸	First Year Entrance Averages (%)²⁹	Student Retention from first to second year (%)³⁰	Approximate decline in enrollment numbers from first – second Year³¹
Université de Moncton	4817 393 1269	6479	78.5	80.6 (19.4)	233
University of New Brunswick	10748 992 1591	13331	81.8	87.2 (12.8)	344
Mount Allison University	2089 5 241	2335	84.9	83.4 (16.6)	87
St. Thomas University	2855 N/A 262	3117	82.9	73.4 (26.6)	190
NB Average/ Total	20,509—undergraduates 1390—graduates 3363—parttime	25262	82.0	81.15 (18.85)	Approximate number of drop outs : 854
National Average			82.97	86.59	

Source: Association of Atlantic Universities, Maclean's

In a recent study from the Canadian Millennium Scholarship Foundation, the top three barriers to resistance for those who have decided to discontinue with PSE included: lack of interest (29%), “Program not what they expected” (27%), and financial issues (22%).³² Institutions have a large role and huge incentives to contribute to minimizing this negative cost to students. We know that in 2006, New Brunswick lost approximately 854 first year students who chose not to continue on with their studies (See Table 1). This lost will eventually translate into a loss in tuition revenue off \$13,650,336, assuming a typical undergraduate degree takes four years to complete.³³

Retention issues can also be seen in the graduate rates (See page 23, table 5), where the average graduation rate in New Brunswick is 75%. This roughly translates to 1024 potential graduate students³⁴ who could have been added to the 4751 degrees awarded yearly.

While there may be many reasons for a student not wanting to pursue PSE, one also needs to question the preparedness of New Brunswick students before entering into university, as well as the perception of how prepared one needs to be. While institutions need to maintain the academic integrity of their programs, it is interesting to note that 49 percent of students who do not expect to go to PSE listed “having poor school marks” as a significant anticipated barrier compared to 20 percent who did expect to go to PSE.³⁵

NBSA recognizes that there is a very important and vital role for university student services in minimizing the emotional and psychological issues for students. Ongoing education counseling and mentorship within the

Ongoing education counseling and mentorship within the PSE system as well as providing information for students to find the right PSE niche for them is vital in minimizing drop out rates.

PSE system as well as providing information for students to find the right PSE niche for them is vital in minimizing drop out rates.

In an analysis of how much of a percentage a university's total operating expenditure is devoted to student services, we find that the number greatly varies from each province and institution. In general, the Canadian percentage spent in "support to students" translates to \$1,111,258, which is about 3.4 percent of total operating expenditures. New Brunswick comes up short of the national average and spends only 2.3 percent on support to students, which is below Nova Scotia and Newfoundland. (See Table 2)

On an individual institutional basis, student services as a percentage of their operating budget varied from school to school. St. Thomas spends 9.16 percent while UNB spends 3.77 percent (Table 3). If New Brunswick is going to begin to address retention issues, NBSA advocates for a re-evaluation of all student services funding from each institution and for the government to recognize this as a vital need in the institutions.

Table 2: Provincial University Operating Expenditures and Support to Students

Province	Total Operating Expenditure (\$ thousands)	Support to Student (\$ thousands)	Percentage of student services as part of total operating expenditure
Canada	31,842,146	1,111,258	3.4
New Brunswick	444,302	10,657	2.3
Nova Scotia	971,143	35,286	3.6
PEI	144,258	2237	1.6
Newfoundland	544,353	17,634	3.2
Saskatchewan	1,245,584	30,916	2.5
Manitoba	946,624	12,091	1.3
Ontario	12,549,279	617,910	4.9
Quebec	7,261,714	169,969	2.3
Alberta	3,702,134	117,596	3.1
British Columbia	3,969,043	96,962	2.4

Source : Statistics Canada³⁶

Table 3: New Brunswick University Operating Budget and Percentage spent on Student Services

University	Operating Budget (\$ thousands)	Student Services (per cent)
UNB	8328	3.77
UdeM	9719	4.42
Mount Allison	12392	6.13
St.Thomas	8948	9.16
Totals :	39387	23.48

Source : Maclean's

Recommendations

- ❖ Re-evaluate the current transfer credit and learning credit system in New Brunswick to accommodate students, especially non-traditional students with options in regards to finding the most suitable program for their needs.
- ❖ Encourage a minimum standard of student support in each institution.
- ❖ Increase the amount of funding to institutions dedicated to student services.



Participation Requires Access

Not only does a student need to know the realities of the real cost of an education, but being able to have access is vital to participation. NBSA focuses on four areas of access:

- ❖ Access to a Quality Education
 - The need for increased accountability to ensure quality
 - Striving for better quality teaching and research
 - The need for quality facilities: new, improved and maintained
- ❖ Access to Grants for Those Most in Need
- ❖ Access to Institutions through Transferable and Learning Merit Credits
- ❖ Access to Useful PSE Information

Access to a Quality Education

Many students choose to attend a school in New Brunswick because of the diversity it offers. A prime example of this is the composition of Mount Allison University, with 57 percent of its student body hailing from out of province. This represents the highest out of province student body in the country.³⁷ Post secondary education should not only be seen as a method to mend gaps in the economy, but also as a tool that contributes to a more knowledgeable population that will engage itself in civic and social participation. It is integral that student interests remain paramount to any PSE policy as they are the main consumer as and supporter of the system.

It is through consistent and willing dialogue by all parties that the appropriate balance of regulatory control and institutional autonomy may be found.

When one discusses the quality of post-secondary education, one will also need to speak about accountability. Quality and accountability are interrelated concepts; in order to assure quality, both governments and institutions must be accountable to each other and to students. Alex Usher and Andrew Potter in their “State of Review of Post-Secondary Education,” explain the meaning of accountability in PSE: “Governments want to know if public money is being spent effectively, the public wants to know if universities are engaging in research that serves the public interest and students and their parents want to know which university is going to give them the best value for their time and tuition dollar.”³⁸ On the other side is quality, which is difficult to measure in strictly a quantitative (i.e. reputation and resources) or qualitative (i.e. educational practices, learning outcomes) sense. Ross Finnie and Usher tend to think of quality as

a relationship between the beginning talents (what the student brings), learning inputs (elements contributed by the university), learning outputs (cognitive outcomes) and final outcomes (income, career satisfaction, life happiness).³⁹

Accountability

Decisions made by a university's administration are overseen by their board of governors. It is important that students have a direct role on their board of governors as they are the primary stakeholders in their institutions. Currently in New Brunswick, there sits anywhere from two to three student representatives on the university Board of Governors. (See Table 4) NBSA feels that increasing student representation on the highest decision making bodies of the universities will be an effective method of accounting for the quality of teaching and oversight of university spending. The NBSA also feels that there should be a degree of public accountability in the appointment process of new board members.

Table 4: Student Representation on University Board of Governors and Senate

University	Enrollment	Board of Governors	BoG Student Representation	Percentage	Senate	Senate Student Representation	Approximate Percentage
Mount Allison University	2335	24	SU President (1) Elected Student (1) Total votes: 2	8.3	60 voting 5 non-voting	Students by faculty (6) SU President (non voting) SU VP Academic (non-voting)	10 (voting) 12.3 (voting and non voting)
University of New Brunswick	13331	34 voting 10 non-voting	Elected by Students Fredericton (2) Saint John (1) Total votes: 3	8.82 (voting) 6.8 (voting and non voting)	Fredericton 67 Saint John 35	Fredericton Elected at large students (6) Elected Part time (1) Elected Graduate (1) Saint John Elected at large students (3)	11.94 - Fredericton 8.57 - Saint John
St. Thomas University	3117	23 2 non-voting	SU President (non-voting) Elected Students (2) Total votes: 2	8.69 (voting) 12 (voting and non voting)	30	Elected students (4)	13.3
Université de Moncton	6479	Conseil des Gouverneurs	1 étudiant par campus donc 3 étudiants (les 3 présidents) Total votes: 3		Sénat Académique	5 étudiant. e.s dont 3 de Moncton - VP académique, 1 rep de 1er cycle et 1 rep du 2ième cycle)	

Source: NBSA Members

Although students have some oversight over financial matters at the institutions, there are still gaps in accountability.

In Alberta, under the *Statutory Post-secondary Learning Act* (S.A. 2003, C. P-19.5)⁴⁰ there is a compulsory amount of student represen-

tation with voting authority on each of the institutions' boards. This includes 4 representatives for the student association and 1 representative from the graduate association, all with voting authority. Furthermore, 9 members of the public are appointed by the minister. NBSA strongly believes that by involving the stakeholders, the universities will be more accountable.

Recommendations

- ❖ Create and implement a *New Brunswick Universities Act* by which universities will be accountable for any rises in tuition percentage or other practices that limit access, as well as being accountable for the amount of bursaries that are available to students.
- ❖ Increase student membership with voting authority on each institution's board of governors and to recognize this in the *New Brunswick Universities Act*.

Quality Teaching and Research

Quality teaching and the ability to conduct relevant research contributes to the quality of education and will always be a cornerstone of PSE. Often it is difficult in the academic world for a professor to find a suitable balance between teaching and research. The NBSA suggests that both are integral in increasing the quality of education students receive. It is important to stress that the quality of learning inputs provided by the institutions is mainly dependant on the ability to obtain consistent government funding. It is also recognized that learning inputs may differ pending on the institution, where the emphasis on teaching and/or research may be weighted differently.

Currently, New Brunswick is not receiving any funds from the Indirect Costs Program (ICP), a federal program created to support the indirect costs of research. At smaller universities, this is a major constraint as funding is difficult to obtain, but the issue of indirect costs has a large affect on an institution's operational budget. ICP funding is linked to a university's previous granting council success and as a consequence the majority of the funds end up in the Atlantic Regions' larger research intensive universities. In 2002, Atlantic Canada received 1.8 percent of total ICP funding and all 1.8 percent was awarded to Memorial University in Newfoundland.⁴¹

Undergraduate research is something that exists at many universities in the United States,⁴² but is not common in Canada. The potential of developing undergraduate research in New Brunswick could be of great benefit to a province that houses primarily comprehensive undergraduate universities and has the capabilities to further carve out specialty niches

The New Brunswick University Act would enable the general public to be directly involved in maintaining the quality of education.

of study. The Canadian Alliance of Student Association (CASA) indicates their support for expanding the role of undergraduate research and has indicated the following rationale:

- ❖ Enhances the undergraduate quality and experience to students through experimental learning;
- ❖ Provides a university environment that would foster innovative enterprise and interest in graduate studies; and
- ❖ Provides employment opportunities that are convenient for students; allowing for earnings that are related to a student's academic studies.⁴³

Recommendations

- ❖ Explore the option of expanding and creating an undergraduate research program that will benefit New Brunswick's primarily comprehensive undergraduate universities.
- ❖ Collaborate with institutions to identify potential areas of research at each institution that would benefit from undergraduate research.
- ❖ New Brunswick Government and all institutions to lobby for federal research funding for indirect costs of research.

The potential of developing undergraduate research in New Brunswick could be of great benefit to a province that houses primarily comprehensive undergraduate universities and has the capabilities to further carve out specialty niches of study.

Quality Facilities: Addressing Accumulated Deferred Maintenance and Potential Expansion

Accumulated deferred maintenance negatively affects the quality and the price of post-secondary education. The negative impact affects the institutions' potential to provide the quality facilities they need to attract leading faculty, staff and alumni donations. The negative impact may also affect students' choice of school when viewing facilities in a comparative perspective with other schools.

The Canada wide cost to eliminate accumulated deferred maintenance at universities is an estimated \$3.6 billion, of which \$1.2 billion has been identified as urgent.⁴⁴ The situation for Atlantic Canadian universities is further compounded by the fact that some of the oldest institutions in Canada are located in this region. In New Brunswick, the cost to eliminate accumulated deferred maintenance at universities is nearing \$200 million. For each New Brunswick University, especially the University of New Brunswick in Fredericton, this is a serious issue that needs to be addressed.⁴⁵

The NBSA voiced its disappointment that the March 2007 Budget did not mention any specific money for university infrastructure.⁴⁶ This is an issue that will affect the quality of education for all students, and more funding from the federal and provincial government is urgently needed. The NBSA does not take the position that further supplementary fees be added onto student tuition to address this issue as it is a precedent that

does not need to be set. Quality facilities are an inherent part of a quality experience that students should expect when they are participating in the system.

University participation is also affected by the notion that distance poses a financial barrier. Students who are unable to access a local university are far less likely to go on to university than students who grew up near a university. This is mainly because of the added costs of moving away. However, when students are faced with a local option, the probability of attendance substantially increases.⁴⁷

Geographical differences in cost of living are also significant for public policy. This is keeping in mind that students from low income families seem likely to have greater difficulty than others managing any given debt burden. Asking low income students to move further from their community only fuels costs.⁴⁸ New Brunswick can bridge the distance gap by increasing capacities to outlying areas. This is wholly consistent with the goals of increasing human capital and economic development in the province and building strong communities through regional cooperation.

The NBSA sees the potential for the expansion of PSE institutions in the province to include satellite institutions that would enable those who live in outlying areas to be able to access an institution or a program. At the same time, New Brunswick should build upon the bases of universities that currently exist and strengthen their respective roles in their communities. The current economic impact that universities have on the New Brunswick economy levels near \$511.8 million and there is ample room for growth. PSE institutions are one of the key providers of stable employment in the province, currently employing 5,683 full-time personnel; this is an area in which New Brunswick must prioritize.⁴⁹

Recommendations

- ❖ Allocate and transfer specific PSE infrastructure funding to the institutions immediately.
- ❖ Encourage the government, institutions and colleges to work together in mapping out potential institutional expansion in New Brunswick without jeopardizing the quality of current existing institutions.

Access to Grants for Those Most in Need

The NBSA believes that anyone who is academically qualified with the desire to pursue post-secondary education should not be prevented from pursuing post-secondary education due to a financial barrier—perceived or otherwise.

In 2003, Statistics Canada reported that young people from high-income families are 2.5 times more likely as those from low-income families to attend university.⁵⁰ Moreover, a 1998 report found that only 19 percent of the post-secondary education participants were from low-income families.⁵¹ Financial issues, mainly due to escalating tuition costs, constitute one key barrier to post-secondary education. 33 percent of individuals who completed high school but did not continue on to post-secondary studies reported that their decision was due, in part, to financial barriers.⁵² It is essential in a province in which there is a low retention rate that there is a direct connection between the availability of student aid and increasing persistence. It has been shown that grant and loan recipients with the highest level of financial need were almost five times more likely to earn a degree as those who only received loans.⁵³

There are two types of grants available to students in New Brunswick, a general needs based grant and targeted grants. Targeted grants are made available through the Canada Study Grants Program and it includes students who have dependants, high need students with a disability, female doctoral students and students with a permanent disability and high need part time students. At the provincial level, there are New Brunswick Bursaries available only to full-time students who are single with or without dependants. Students are eligible for up to \$90 per week up to a maximum of \$3600/40 weeks.⁵⁴

The NBSA believes that there is a need to recognize that there are a number of students who come from rural areas and face many PSE barriers that are not faced by urban students. The CMSF has indicated that on average, students who have a rural background have lower literacy scores than students from urban areas. The 2001 Program for International Student Assessment (PISA) found that New Brunswick scored the lowest of all provinces in for both rural and urban reading scores.⁵⁵ The NBSA takes the position that it is much more beneficial to target high need students than to implement blanket tuition programs such as the New Brunswick Tuition Tax Cash Back Credit.

It is important to note that although the NBSA advocates for the lowering of tuition below the national average, it does not support any concurrent policy calling for the reduction of low-income grants by an equivalent amount. Any policy decisions on bursaries need to also consider the full length of a degree and must follow through beyond the first year of funding to ensure consistent enrollment.

The learning merit credits system is also a positive initiative for students who have gained invaluable experience after high school in any field of work and could therefore receive credits if they wish to return to university.

Recommendations

- ❖ Expand the New Brunswick Bursary to target non-traditional students, specifically students from rural areas.
- ❖ Expand the New Brunswick Bursary to fund tuition fees for students who come from low-income families.

It is not unreasonable to imagine a mix of incentives to increase the attractiveness of New Brunswick and to minimize the impact of out-migration

Access to Institutions through Transferable and Learning Merit Credits

The NBSA continues to recognize the value of university degrees, college diplomas and apprenticeships separately for its own distinct role within higher education. Academic autonomy within each institution in which the integrity of the university programs including program design and delivery is an integral part of being able to present students with a choice. However, the NBSA also recognizes that there are benefits in seeing the collaboration between colleges and universities in identifying specific programs and any overlapping elements that would be beneficial to identify in both systems.

During the Pan-Canadian Protocol on the Transferability of University Credits at the Council of Ministers of Education Canada, it was identified that there are educational advantages in giving students the ability to have greater mobility through the recognition of transfer credits.⁵⁶

There is a real need to recognize that the diversity of learners is increasing and that they all deserve to have access to learning. This diverse range of learners includes the 'traditional' student that enters university upon graduation from secondary school, and the 'non-traditional' student whom may be a mature student or parent. This range of learners can also be defined by their socio-economic background. The Canadian College Student Survey indicates that Atlantic Canada has the second highest percentage of students enrolled in career or technical programming. It also indicated that college students in Atlantic Canada (the regions with high proportions of mature students and/or students in access/upgrading programming) are least likely to live with their parents, the most likely live off-campus (47%), have their own residence (18%) and the most likely to have dependants (59%).⁵⁷

By enhancing and improving the transfer credit and learning merit credit system in New Brunswick, first year students who are not content with their program, and often in the process of figuring out career paths, could be given additional options to scope out alternatives that will continually encourage their participation in the system. Additionally, the learning merit credits system is also a positive initiative for students who have gained invaluable experience after high school in any field of work and could therefore receive credits if they wish to return to univer-

sity. This will provide an avenue for more mature students to access the system. A working transfer credit and learning merit credit system will accommodate students living in rural or peripheral regions by enhancing access to PSE.

The current transfer credit system in New Brunswick and Prior Learning Assessment and Recognition (PLAR) is ineffective in its function. The online system is not user-friendly and institutions have not been able to come together and assess programs and credits for all departments and faculties. The system is also convoluted and is discouraging for students who need to access the information. Moreover, the system is not centralized to coordinate all information and inquires.

Recommendations

- ❖ Collaboration between all institutions to make a comprehensive audit of all credits available and identifying those in which could be applied a transfer credits status.
- ❖ Identify all specific programs that would benefit from the dual system of a college and university education.
- ❖ Focus on specific programs that could have benefits to those living in rural regions of New Brunswick and look into the possibility of implementing pilot programs, such as distance learning and exchange programs.
- ❖ Revamp the transfer and learning merit credit program by centralizing all information and have it be made user friendly and available online.

Access to Useful PSE information

Students need useful and instructive information on PSE before beginning the process of applying to university or college. The lack of access to helpful PSE information becomes a barrier for potential students when wrong perceptions are spread.

In a secondary school survey done by the Canadian Millennium Scholarship Foundation, it found that 34 percent of high school students who plan to go on to PSE said they did not know how much tuition and fees would cost. Moreover, of those providing an estimate, 59 percent said tuition and fees exceeded \$8,000, including 20 percent who said they exceeded \$16,000. In a public opinion poll done by Ipsos-Reid, it found that the average Canadian also overestimates the cost of a degree and under estimates the benefits of a degree, to the point where a substantial amount of lower income Canadians believe that university graduates make less than a high school graduate.⁵⁸

There is an urgent need to provide the proper information to plan and to save for a future student's education.

In New Brunswick, there is evidence to suggest that those from lower income families, with parents who have minimal amounts of education, and/or living in an area with a high illiteracy rate⁵⁹ will be less likely to attempt, think or save for their children's PSE.⁶⁰ There is a need to recognize that socio-economic factors of families play a role and there is an urgent need to provide the proper information to plan and to save for a future student's education.

Preparedness is crucial when there is a considerable amount of fiscal planning needed for one's educational future. Financial education is strongly related to attitudes about savings, and also subsequent saving behavior. Kevin Milligan's paper on *Who uses RESPs (Registered Education Savings Plans) and Why* indicates that parental participation of RESPs and the Canadian Education Savings Grant (CESG) are concentrated among high-income, high parental educated households and suggests that a lack of awareness with the program details may hinder the decision to participate.⁶¹

The NBSA strongly feels that the information has been lacking in regards to parental and student education about the knowledge of the costs of PSE. Concepts of fiscal planning and saving need to be developed as an early intervention strategy to get useful information out to potential students and their families. More specifically to low-income families who are less susceptible of receiving and fostering PSE information. The Canadian Alliance of Student Associations has indicated in their policies some early intervention strategies that could provide as models in promoting access and opportunity through academic support, mentorship and campus exposure programs.⁶²

Recommendations

- ❖ Invest and strategically plan early intervention programs through partnerships with the federal government and institutions including setting a minimum standard of useful PSE information applicable to New Brunswick.
- ❖ Target low-income families with useful PSE information including options of financing PSE for their child.



Translating PSE Participation To Provincial Participation

- ❖ Understanding the Value of New Brunswick Graduates
- ❖ Being Able to Tell and Sell Our Story
- ❖ Prioritizing PSE and Providing Leadership

Understanding the Value of New Brunswick Graduates

Of the 4751 degrees that are granted per year in New Brunswick, approximately 2033 (55 percent) of graduates will choose to leave the province. Often education and skilled labor recruitment are the heart of any strategy that aims at facilitating a knowledge based economy. Graduates should be intentionally targeted as part of any strategy convening the future outlook of the province.

Table 5: New Brunswick PSE Outlook at Graduation

	Proportion who graduate (%) ⁶³	Approximate number of degrees granted per year	Graduates who stay in New Brunswick (%)	Approximate Number of students who leave New Brunswick	Approximate Number of potential degrees not earned from those dropped out
UNB	83.9 (16.1)	2600+	50	1300	416
Mount Allison	74.1 (25.9)	480+	30	336	124
Moncton	67.5 (32.5)	1100+	70-80	330 - 220	358
St.Thomas	77.9 (22.1)	571	69	177	126
New Brunswick Total/Average	76	4751	54-75	2143 - 2033	1024

Source: Association of Atlantic Universities/MacLean's

It is unreasonable to expect that public policy will reverse the predicted trend of out migration. However, it is not unreasonable to imagine a mix of incentives to increase the attractiveness of New Brunswick and to minimize the impact of out-migration such as:

1. Tuition or debt relief for university graduates
2. Scholarships for graduates or post graduates

3. Targeted tax relief for university graduates in post secondary institutions
4. The creation of more research chairs⁶⁴

Being Able to Tell and Sell Our Story

Atlantic Canada's decline in population seems to be inevitable as indicated by the Commission report, suggesting a dramatic decline in post secondary enrollment with an expected further decline of about 20 percent in the next decade.⁶⁵ The same trends can be seen in the Statistics Canada Census for 2007 which indicated that New Brunswick's population virtually remained unchanged since 2001.⁶⁶ One area of significance was the change in international immigration in New Brunswick which doubled between 2001 and 2006.⁶⁷

New Brunswick needs to devise a plan for a consistent, aggressive public relations and marketing strategy both at the governmental and institutional level. It needs to tell the story of New Brunswick. The NBSA feels that the New Brunswick government should strive to communicate the quality and the caliber of their institutions.

Institutions need to strategically plan and identify what special edge they bring to the New Brunswick collective. A few areas that deserve a closer analysis include New Brunswick's bilingual identity as well as specializations in specific industries. The ease of inter-provincial mobility can also be developed in marketing New Brunswick as a province that is able to suit the needs of each individual student. As well, the goal should be to attract those who have graduated and left for opportunities outside the province. It is necessary to reach out to those from out-of-province, specifically international students; it is also an opportunity to communicate the ethos to those within the province who have traditionally not considered PSE.

New Brunswick's population is fifty percent rural, and bearing in mind the potential of a rural population connected to PSE is a worthwhile strategy. Although there is evidence to suggest that educational attainment tends to be higher in urban areas, it has been suggested that those from rural areas, if given the opportunity to gain a university degree, would significantly increase the aggregate level of rural civic engagement and would build positive implications for community capacity building in the rural areas.⁶⁸

Recommendations

- ❖ Study which incentives, financial or other, will encourage graduates to stay in New Brunswick.
- ❖ Focus on an aggressive public relations and marketing strategy to promote PSE provincially, nationally and internationally.
- ❖ Examine the untapped potential of rural New Brunswick and the opportunities for PSE in rural areas.

Prioritizing PSE and Providing Leadership

Present and future needs of post-secondary education must be a key priority with the New Brunswick Government regardless of political stripe. There is an immediate need for all levels of government and institutions to reprioritize the goal of an affordable, accessible and quality system of PSE in the province of New Brunswick.

The NBSA strongly urges the Commission to make it clear that any initiatives or reforms that will affect PSE in New Brunswick should be looked at holistically and provide defined objectives. Any recommendations put forth cannot be made in isolation, especially when they are decisions regarding PSE funding, tuition and financial aid.

One method that would accentuate communication to the public is the creation of a New Brunswick University Act in which universities will be publicly accountable. This act would enable the general public to be directly involved in maintaining the quality of education.

Leadership can be exemplified by the current provincial government by taking the initiative to foster dialogue around PSE at the institutional, provincial and federal level. Although each institution has their own mission which guidesthem in shaping the direction of their schools, the importance and benefit of collaboration must also be recognized. NBSA's desire is for an increased amount of collaboration and communication between the universities, colleges and provincial government. It is through consistent and willing dialogue by all parties that the appropriate balance of regulatory control and institutional autonomy may be found.

The dialogue between the New Brunswick government and the federal government needs to remain open and consistent. The NBSA, along with eight provincial and national student organizations representing 600,000 post-secondary students in Canada⁶⁹ are asking for a Pan-Canadian accord on post secondary education and a dedicated post-secondary education transfer to the provinces and territories. It is our hope that the New Brunswick Government will be an integral leader in advocating for an accord that will articulate a vision, goals and objectives for post-secondary education at the national level. NBSA believes

that New Brunswick has special, unique characteristics such as bilingualism, geographic location and history that will enable the New Brunswick Government to take the lead in preparing other provinces and territories in entering PSE discussions with the federal government.

Recommendations

- ❖ Make PSE a top priority in New Brunswick.
- ❖ Bring together institutions, government and students to create a *New Brunswick University Act*.
- ❖ Encourage other provinces, territories and federal government to create a Pan-Canadian Accord on post-secondary education with a dedicated PSE transfer to the provinces and territories.

About the NBSA

The New Brunswick Student Alliance (NBSA) is a lobby group which represents over 20,000 students in six campuses across the province. It has been defending, promoting and campaigning for the issues that are fundamental to the students of New Brunswick for the last 20 years.

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References

- 1 Statistics Canada. Gross Domestic Product, Expenditure Based by Province and Territory. November 2006. Available: <http://www40.statcan.ca/lo1/cst01/econ15.htm>. In New Brunswick, 50 per cent of total population lives in rural areas and 50 percent lives in urban areas. Statistics Canada. Population urban and rural, by province and territory New Brunswick. 2001 Census. Available : <http://www40.statcan.ca/lo1/cst01/demo62e.htm>
- 2 Alex Usher and Sean Junor. The Price of Knowledge: Access and Student Finance in Canada. Canadian Millennium Scholarship Foundation, 2002, 49.
- 3 Association of Atlantic Universities. The Economic Impact of Universities in the Atlantic Provinces, for the Association of Atlantic Universities. Gardner Pinfold Consulting Economists Ltd. February 2006, ii.
- 4 Commission on Post-Secondary Education in New Brunswick. Discussion Paper. March 2007, 3-4
- 5 Notable Grade 12 perceptions of barriers to education after high school include: Financial Issues (33%), Career Undecided (31%) Currently employed (20%), Not interested (13%), Personal/Family reasons (11%), Entrance Requirements (8%). Joseph Berger, Anne Motte, and Andrew Parkin. The Price of Knowledge: Chapter 2 Barriers to Post Secondary Education. Canadian Millennium Scholarship Foundation, March 2007.
- 6 Statistics Canada. « University Tuition Fees. » The Daily. September 1, 2006. Available: <http://www.statcan.ca/Daily/English/060901/d060901a.htm>
- 7 Alex Usher. Beyond the Sticker Price, Educational Policy Institute, 2006.
- 8 Canadian Association of University Teachers. Almanac of Post-Secondary Education Section 1: Finance, 2007. Available: http://www.caut.ca/en/publications/almanac/2007_1_Finance.pdf
- 9 Ibid.
- 10 Ibid.
- 11 Economic impact compiled by author
- 12 Alex Usher and Sean Junor. The Price of Knowledge: Access and Student Finance in Canada. Canadian Millennium Scholarship Foundation, 2002, 49.
- 13 Graeme Stewart. Discussion Paper Funding, Tuition and Student Financial Assistance. Ontario Undergraduate Student Alliance. 2004.
- 14 Government of New Brunswick. Financial challenge addressed leading to balanced 2007-2008 Budget, News Release. March 13, 2007. Available: <http://www.gnb.ca/cnb/news/fin/2007e0324fn.htm>
- 15 Joseph Berger, Anne Motte, Andrew Parkin. The Price of Knowledge 2006 Student Debt Trends and Consequences. Canadian Millennium Scholarship Foundation. November 2006, 3.
- 16 Correspondence with NBSA and New Brunswick Financial Student Aid Department, February 2007.
- 17 Joseph Berger, Anne Motte, Andrew Parkin. The Price of Knowledge 2006 Student Debt Trends and Consequences. Canadian Millennium Scholarship Foundation. November 2006, 3.
- 18 One third of the respondents in the 2002 National Student Loan Survey in the United States reported paying \$1000 a month or more on credit cards, personal loans and car payments. Baum and Schwartz indicate that student loans are only one aspect of the total debt burden students have Sandy Baum and Saul Schwartz. How Much Debt is too much? Defining Benchmarks for Manageable Student Debt. New York: The College Board, 2006.
- 19 Maritime Provinces Higher Education Commission. A Lasting Legacy: the impact of family educational background on graduate outcomes. September 2004.
- 20 Government of New Brunswick. Post Secondary Education, Training and Labour. Available : <http://www.studentaid.gnb.ca>
- 21 Bob Rae. Ontario A Leader in Learning Report and Recommendations. Government of Ontario, Department of Training, Colleges and Universities, February 2005.
- 22 Canadian Alliance Student Association Policy Briefings, 2006.
- 23 There has been work done by CMSF that suggests additional 'costs' such as social, cultural, spiritual and physical. For the purposes of this paper, we have chosen to focus on the psychological and emotional cost. Alex Usher and Sean Junor. The Price of Knowledge: Access and Student Finance in Canada. Canadian Millennium Scholarship Foundation, 2002, 110.
- 24 Marc Frenette. Why Are Youth from Lower-income Families Less Likely to Attend University? Evidence from Academic Abilities, Parental Influences, and Financial Constraints. Statistics Canada, February 8, 2007.
- 25 Statistics Canada. Report on the Pan-Canadian Education Indicators Program 2005. As found on : <http://www.statcan.ca/english/freepub/81-582-XIE/2006001/highlights.htm#D>
- 26 The employment participation rate as of March 2007 in New Brunswick is 63.2 percent, which is the second lowest in Canada, with Newfoundland at 59.8 percent and Alberta being the highest at 74.1 percent. The national average is 66.87 percent. Statistics Canada. Labour Force Survey. March 7, 2007. Available: <http://www.statcan.ca/english/Subjects/Labour/LFS/lfs-en.htm>
- 27 Association of Atlantic Universities. Preliminary Enrollment as of October 2, 2006. Available: <http://www.atlanticuniversities.ca/AbsPage.aspx?siteid=1&lang=1&id=1086>
- 28 Ibid.
- 29 Reflects the average final grade of first year students entering from high school. MacLean's. Guide to Canadian Universities 2007, 46.
- 30 Reflects the percentage of first year students who return in second year either full time or part time. MacLean's. Guide to Canadian Universities 2007, 48.
- 31 Calculated by author assuming a typical undergraduate degree takes 4 years to complete. Formula: Divide undergraduate enrollment by 4 multiplied with retention percentage lost.
- 32 Joseph Berger, Anne Motte, and Andrew Parkin. The Price of Knowledge: Chapter 2 Barriers to Post Secondary Education. Canadian Millennium Scholarship Foundation, March 2007, 7.

- 33 Calculated by author by taking the average New Brunswick tuition, multiplied by the number of drop outs multiplied by three years assuming a typical 4 year undergraduate degree.
- 34 Calculated by author by taking approximate number of degrees granted and multiplying with the percentage of proportion of students who do not graduate.
- 35 Joseph Berger, Anne Motte, and Andrew Parkin. *The Price of Knowledge: Chapter 2 Barriers to Post Secondary Education*. Canadian Millennium Scholarship Foundation, March 2007, 5-6.
- 36 Statistics Canada. *Universities and colleges revenue and expenditures, by province and territory*. Available : <http://www40.statcan.ca/101/cst01/govt41c.htm>
- 37 MacLean's. *Guide to Canadian Universities 2007*, 48.
- 38 Alex Usher and Andrew Potter. *A State of the Field Review of Post-Secondary Education*. Educational Policy Institute for Canadian Council on Learning. October, 2006, 14.
- 39 *Ibid.*, 18.
- 40 Government of Alberta. *Post Secondary Learning Act*. Available: <http://www.qp.gov.ab.ca/documents/Acts/P19P5.cfm>
- 41 Canadian Association of University Business Officers (CAUBO) as reported in MPHEC Research and Development Funding in Atlantic Universities, 2005
- 42 Examples of undergraduate research development best practices:
- National Science Foundation—United States, available: http://www.nsf.gov/funding/pgm_summ.jsp?pims_id=5517&from=fund
 - Hopkins Undergraduate Research Journal—United States, available: <http://www.jhu.edu/hurj/index.html>
 - McMaster University Faculty of Engineering—Canada, available: <http://sil.mcmaster.ca/archives/030403/news/030403eng.html>
- 43 Canadian Alliance of Student Associations. *Policy on Developing Undergraduate Research November 15, 2002*. Available : <http://www.casa.ca/documents/DEVELOPING%20UNDERGRADUATE%20RESEARCH%20Colour.pdf>
- 44 Currently, urgently identified deferred maintenance in Canada amounts to \$1.2 billion. New Brunswick as a total of \$200 million. (UNB \$100 million, Moncton \$50 Million, Mount Allison \$35 million). Canadian Association of University Business Officers. *A Point of No Return: the Urgent Need for Infrastructure Renewal at Canadian Universities, 2002*, 22.
- 45 Deferred maintenance can be measured by using a 'Facilities Condition Index' (FCI) which takes the total amount of accumulated deferred maintenance divided by the current replacement value. Under the FCI, a ratio above '10' is considered unacceptable. In Canada, the average FCI rating is 11.3, in Atlantic Canada is 17.3 and at the University of New Brunswick is at an astounding 22 points. University of New Brunswick. Vice President Finance Office. *Infrastructure Backgrounder and Presentation*. January 2005 Available : <http://www.unb.ca/vpfin/infrastructure.pdf> / <http://www.unb.ca/vpfin/background.pdf>
- 46 During the provincial March 2007 budget announcement there was mention of a \$7.9 million investment for NBCC for capital improvements, repairs and renovations but nothing for university infrastructure.
- 47 Marc Frenette. *Do Universities Benefit Local Youth? Evidence from University and College Participation, and Graduate Earnings Following the Creation of a New University*. Statistics Canada January 2007.
- 48 Sandy Baum and Saul Schwartz. *How Much Debt is too Much Debt?* New York: The College Board, 2006.
- 49 Association of Atlantic Universities. *The Economic Impact of Universities in the Atlantic Provinces*. Gardner Pinfold Consulting Economists. February 2006, 21.
- 50 Corak, Miles, Garth Lippas & John Zhao. *Family Income and Participation in Post-Secondary Education*. Ottawa: Statistics Canada Family and Labour Studies Division, October 2003, 11.
- 51 Statistics Canada, 1998.
- 52 Joseph Berger, Anne Motte, and Andrew Parkin. *The Price of Knowledge: Chapter 2 Barriers to Post Secondary Education*. Canadian Millennium Scholarship Foundation, March 2007.
- 53 Canadian Millennium Scholarship Foundation. *The Impact of Debt and Student Persistence in Post-Secondary Education*, Millennium Research Note.
- 54 Government of New Brunswick. *Post Secondary Education, Training and Labour*. Available : <http://www.studentaid.gnb.ca>
- 55 Alex Usher and Sean Junor. *The Price of Knowledge: Access and Student Finance in Canada*. Canadian Millennium Scholarship Foundation, 2002, 71.
- 56 Council of Ministers of Education Canada. *Pan-Canadian Protocol on the Transferability of University Credits*. February 2005. Available : <http://www.cmec.ca/postsec/transferabilit.en.stm>
- 57 Saskatchewan Institute of Applied Science and Technology. *Canadian College Student Survey March, 2004*, 6.
- 58 Alex Usher and Sean Junor. *The Price of Knowledge: Access and Student Finance in Canada*. Canadian Millennium Scholarship Foundation, 2002, 109.
- 59 Out of 10 provinces, New Brunswick obtained the lowest average score in reading.
- 60 Barriers for low income families include: being substantially less likely to have any savings set aside for education, having fewer conversations about planning for PSE, less aware of their cost of higher education and what is available though student aid programs and less likely to have earned the grades to enter a post-secondary program Joseph Berger, Anne Motte, and Andrew Parkin. *The Price of Knowledge: Chapter 2 Barriers to Post Secondary Education*. Canadian Millennium Scholarship Foundation, March 2007.
- 61 Kevin Milligan identifies low-income households are unlikely to use RESPs in funding future PSE. Kevin Milligan. *Who Uses RESPs and Why*. Discussion Paper. Department of Economics the University of British Columbia. March 2005, 17.
- 62 Examples of early intervention strategies provided by the Canadian Alliance of Student Association.
- TRIO—Available: <http://www.trioprograms.org/abouttrio.html>

- GEAR UP—Available: <http://www.ed.gov/programs/gearup/index.html>
 - IHAD—Available: <http://www.ihad.org>
- 63 Parameters: percentage of full time undergraduates who completed their degree within one year of their expected graduation date. MacLean's. Guide to Canadian Universities 2007, 48.
- 64 Mario Polèse and Richard Shearmur et. al. The Periphery in the Knowledge Economy. The Canadian Institute for Research on Regional Development and Institut national de la recherche scientifique. 2002, 206.
- 65 Commission on Post-Secondary Education in New Brunswick Discussion Paper. March 2007, 3-4.
- 66 Statistics Canada. Portrait of the Canadian Population 2006 Findings. March 13, 2007 Available: <http://www12.statcan.ca/english/censuso6/analysis/popdwell/index.cfm>
- 67 Ibid.
- 68 Neil Rothwell and Martin Turcotte. Statistics Canada. The Influence of Education on Civic Engagement: Differences Across Canada's Rural-Urban Spectrum. Rural and Small Town Canada Analysis Bulletin Vol. 7, No. 1, July 2006
- 69 The Education Generation: a Blueprint for an Economically Competitive and Socially Just Canada. February 6, 2007. Available: http://www.casa.ca/documents/Education%20Generation%20%20February%206,%202007_Final.pdf